UNIVERSITY FOR DEVELOPMENT STUDIES, TAMALE

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ASSESSING THE KNOWLEDGE, ACCESS AND UTILIZATION OF ADOLESCENT FRIENDLY HEALTH SERVICES IN KUMBUNGU DISTRICT, GHANA

BY

FRANCIS KRONZU CUDJOE

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FRANCIS KRONZU CUDJOE (B. Ed Health Science)

(UDS/CHD/0253/16)

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OCTOBER, 2018

DECLARATION

Student

I hereby declare that this thesis is the result of my own original work and that no part of it has been presented for another degree in this University or elsewhere:

Candidate's Signature: ……. Date: ……

Name: FRANCIS KRONZU CUDJOE

Supervisor

I hereby declare that the preparation and presentation of the thesis was supervised in accordance with the guidelines on supervision laid down by the University for Development Studies.

Supervisor's Signature: ……. Date: …….

Name: Dr. MARTIN NYAABA ADOKIYA

ABSTRACT

The period of adolescence is a critical one where adolescents are vulnerable to many health risks including those related to their sexual and reproductive life. With the availability of adolescent friendly health services (AFHS), it is expected that adolescents will go through their developmental stages with minimal or no health challenges. However, health challenges of adolescents rather seem to be on the increase and this may be attributed to many factors. The purpose of this study was to assess adolescents' knowledge, access and utilization of adolescent friendly health services in Kumbungu, Ghana. A descriptive cross-sectional survey was conducted among 416 adolescents using both quantitative and qualitative techniques. A semi-structured questionnaire was used for data collection through interviews and analysed using Statistical Package for Social Scientists (SPSS) version 22. The Pearson chi-square analysis was used to test for associations between categorical variables (at a significance level of $p < 0.05$). In all, 207 representing 49.8% of adolescents had knowledge about AFHS; there was a significant association between sex and knowledge about AFHS ($\chi^2 = 8.119$, $p = 0.004$). In terms of access and utilization, AFHS was fairly utilized as 54.2% was recorded. Adolescents' religion, educational status, employment status, knowledge on AFHS and receiving of needed services were all ($p < 0.01$) found to be factors associated with access and utilization of the AFHS. Adolescents' knowledge was low but access and utilization of AFHS was slightly higher than 50%. Therefore, to improve the prevailing situation, Kumbungu district health directorate should intensify education on AFHS in schools and communities. The establishment of more adolescent corners at heath facilities as well as training of health care providers on AFHS are urgently needed to enhance or probably maintain the current states of knowledge, access and utilization of AFHS.

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Finally, I wish to sincerely acknowledge my family, course mates, those that supported me in my data collection especially Esther Asinye Bonye, and friends whose names are not mentioned here but contributed immensely toward the production of this document.

DEDICATION

I dedicate this work “In memory of my father Mr. Patrick B. A. Cudjoe” my mother Mary Mbulale Adwo, Dr. Vida N. Yakong, Madam Jeanette Vinek, my brother Michael Kodjo and my sister Theresa Cudjoe for their support, encouragement and prayers throughout my academic life.

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ACRONYMS/ ABBREVIATIONS

A/YFRHS – Adolescent/Youth Friendly Reproductive Health Service

ADHD - Adolescent Health and Development Programme

AFCS – Adolescent Friendly Contraceptive Services

AFHS - Adolescent Friendly Health Services

AIDS - Acchired Immuno Suppressive Syndrome

ANC - Antenatal Clinic

ASRH – Adolescent Sexual and Reproductive Health

DALYS – Disability Adjusted Life Years

DHS – District Health Survey

EC – Emergency Contraceptive

FGD - Focus Group Discussion

FGDs - Focus Group Discussants

GDHS – Ghana Demographic and Health Survey

GHS - Ghana Health Service

GSS - Ghana Statistical Service

GYTS -Global Youth Tobacco Survey

HIV - Human Immune Virus

HIV/AIDS - Human Immuno – deficiency Virus/Acchired Immune Deficiency Syndrome

HSPs – Health Service Personnel

HW – Health Worker

JHS - Junior High School

MoH - Ministry of Health

NGO - Non-Governmental Organization

PNDC – Provisional National Defense Council

RCH - Reproductive and Child Health

SHS – Senior High School

SPSS - Statistical Package for Social Sciences

SRH – Sexual Reproductive Health

SBHC- School Based Health Care

STDs - Sexually Transmitted Diseases

STIs - Sexually Transmitted Infections

UNAID – United Nations Agency for International Development

UNAIDS – United Nations Programme on HIV/AIDS

UNFPA – United Nations Fund for Population Activities

UNICEF – United Nations International Children's Emergency Fund

VCT - Voluntary counselling and testing

WHO - World Health Organization

YFS – Youth Friendly Service

OPERATIONAL DEFINITION OF TERMS

Adolescents: People between the ages of 10 and 19 years.

Adolescent health: The physical, mental and social well-being and not merely the absence of disease or infirmity during the period of adolescence.

Adolescent Friendly Health Services: Services that are made available to adolescents to meet their individual health needs in a manner and environment to attract interest and sustain their motivation to utilize the services rendered to them. (e.g. Contraceptive services, STI management, maternal health services HIV related services nutritional, dietary and eating disorders management general counselling and recreational services).

Knowledge on Adolescent Friendly Health Services: What the adolescents know about the services available, where they are available and their importance to them.

Utilization: Whether the adolescents have ever visited and used the AFHS.

Access: Adolescents are able to obtain the health services that are available.

CHAPTER ONE

INTRODUCTION

1.0 Background

According to World Health Organization, adolescents are young people between the ages of ten (10) and nineteen (19) years (WHO, 2013). “Adolescence” is a dynamically evolving theoretical construct informed through physiological, psychosocial, temporal and cultural lenses. This critical developmental period is conventionally understood as the years between the onset of puberty and the establishment of social independence (Curtis, 2015). Globally, 1.2 billion adolescents aged 10-19 years make up 16% of the world's population (UNICEF 2016). Adolescents are young, curious and still developing physically tend to be sexually active. This is because the period of adolescence is characterized by physical, psychosocial and emotional changes as they transform from childhood into adulthood and these changes are found to be associated with sexual maturity (United Nations Population Fund and Pediatrics board review, 2012).

Many adolescents make the transition to adulthood in good health while others do not and may face some of the health problems such as: injuries resulting from accidents or violence, mental health problems, problems resulting from substance use, sexual and reproductive health problems (e.g. too-early pregnancy, mortality and morbidity during pregnancy and child birth, unsafe abortion, sexually transmitted infections including HIV, harmful traditional practices as female genital mutilation), problems resulting from under nutrition and over nutrition, and endemic diseases. Some of these health problems affect the individual during adolescence whiles others affect the individual later in life (WHO, 2012). Statistics indicates that, more than 1.2 million adolescents die every year from nearly all preventable disease (ICHC, 2017). In 2016, 610,000 young people between the ages of 15 and 24 were newly infected with HIV,

of whom 260,000 were adolescents between the ages of 15 and 19 (UNICEF, 2016). Most recent data indicate that only 13% of adolescent girls and 9% of adolescent boys aged 15 to 19 in sub-Saharan Africa (the region most affected by HIV) have been tested for HIV in the past 12 months and received the result of the last test. Unfortunately, data available indicates that proportion of males and females aged 15 to 24 with comprehensive correct knowledge of HIV/AIDS are 27.2 and 19.9 respectively (DHS, 2014 and World Health Statistics 2015-WHO). An estimated 2.0 to 4.4 million adolescents in developing countries undergo unsafe abortion each year (WHO, 2013).

Fact sheets from WHO 2014 on adolescent pregnancy reveals that, about 16 million girls aged 15 to 19 and some 1 million girls under 15 give birth every year mostly in-low and middle-income countries. This contributes to about 11% of all birth worldwide (WHO, 2012). Complications during pregnancy and childbirth are the second cause of death for 15 to 19 year-old girls globally. Whiles every year, 3 million girls aged 15 to 19 undergo unsafe abortions (WHO, 2014). The African Region continues to account for the highest disability adjusted life years (DALYs) in 2012, 300 (DALYs) per 1000 population in adolescents (Lancet, 2011).

Goicolea et al., (2014) defines adolescent friendly health services (AFHS) as those services that are accessible, acceptable equitable, appropriate and effective for different youth sub-populations. They should be found at the right places, affordable costs and sometimes free and delivered in the right styles to be acceptable to adolescents. AFHS are needed for adolescents to access and utilize because of their high vulnerability to both health and non-health related issues. These services are grouped into two categories - the first group involves health and lifestyle, which

includes general health services, referral system, and contraceptive services as well as counselling on importance, choice and correct use of contraceptives (e.g. STI management including testing, counselling, and treatment). Maternal health services including antenatal care, postnatal care, safe abortion services and post abortion care. HIV related services, management of sexual violence, nutritional, dietary and eating disorders management, anaemia, anorexia nervosa, and compulsive overeating.

The second type deals with recreational services which includes sport games (WHO, 2012). Young people, principally those in the developing world, suffer unreasonably from poor sexual and reproductive health outcomes, such as early and unintended pregnancies, criminal abortion, and sexually transmitted infections, including HIV/AIDS (Petroni, 2011). Adolescents' health in developing countries including Ghana is a big public health issue. Adolescents experience various health and behavioral challenges due to poor or wrong choice of food and negative patterns of eating and drinking, early initiation of sex, unprotected sexual practices and use of hard drugs (Asare, 2012). In Ghana, in 2009 for instance, the Ministry of Health (MOH) reported in its adolescent health and development report that 8,717 unsafe abortions were attempted by adolescents. The number increased to 10,785 in 2010. In 2011, the number of cases doubled to 16,182 compared with 2009 estimates. Global Youth Tobacco Survey (GYTS) report revealed that 11.6% of boys and 10.9% of girls in Ghana used a tobacco product, while 9.4% boys and 8.0% girls have ever smoked cigarettes (Global Youth Tobacco Survey, 2009). When it comes to nutrition, a study in 6 districts in the Upper East and Northern Regions revealed that 7 out of 10 adolescents are underweight (Body Mass Index <18.5) (Appiah-Mensah, 2016). Another study also showed that 19% of adolescents use tobacco and 5% smoke

cigarettes in Ghana (Appiah-Mensah, 2016). Those adolescents who are well tend to see no reason for visiting a health facility. But those who fall ill with commonly occurring conditions such as fevers, coughs and colds, may have no hesitation in seeking care. On the other hand, they may be less willing to do so for more sensitive matters especially when related to their reproductive health. They are likely to try to deal with the problem themselves, or with the help of friends or siblings whom they can trust to keep their secrets. To ensure that no one around them comes to learn about their problem, they tend to turn to service delivery points such as pharmacies and clinics at a safe distance from their homes, as well as to service providers who are as keen as they are to maintain secrecy (WHO, 2012).

The estimates of mortality, morbidity and DALYs provide a strong argument to shift thinking away from the assumption that adolescence is generally a healthy period and have knowledge, access and can make use of any health facility and their services so needs little attention. The reason being that, the decisions made by the adolescents during this period of life affect not only wellbeing, but also the wellbeing of entire societies (Taghizadeh, Bahreini & Ajilian, 2016).

This calls for the creation of a safe and supportive environment that ensures access to appropriate information and the provision of health services in relation to the health needs of these adolescents.

The above adolescents' challenges can be reduced if the adolescents have knowledge, access and make good use of special programs, places and laws that are put in place to guide them through their transitional period. WHO discovered that interventions can scale up young people's use of services contingent on the fact that service providers are well trained to ensure the health facilities are adolescent or youth-friendly, and

create demand and community backing through projects in the community, a decision based on findings of data analysis overtime and expert advice (WHO, 2013). Adolescents' sexual and reproductive health must therefore be supported by empowering young people to have enough information and exercise their rights – including the right to delay marriage and the right to refuse unwanted sexual advances (UNFPA, 2014). Therefore, this study seeks to assess the knowledge, access and utilization of the adolescent friendly health services in Kumbungu District, Ghana.

1.1 Problem statement

Existing health services often fail the world's adolescents (10 to 19 years old). Many adolescents who suffer from mental health disorders, substance use, poor nutrition, intentional injuries and chronic illness do not have access to critical prevention and care services (WHO and UNAIDS, 2015). Young people in the developing world are confronted with suffering stemming from preventable problems of early pregnancy, sexual violence, unsafe abortion, and sexually-transmitted infections (STIs), such as HIV/AIDS (WHO, 2013). These health concerns of adolescents if not addressed are likely to have severe consequences on their health later in life.

Despite the fact that guardians/parents and teachers often recognize these issues and advice the adolescents to seek health care, they do not seek the needed help because of the unfriendliness nature of services provided. Without the availability of health centers which provide more adolescent friendly health services, such as appropriate, acceptable, accessible, equitable, efficient and effective to meet the health and behavioral needs of these adolescents, they may never seek professional counselling and guidance in this critical period of life. Hence the rising of adolescents' health challenges worldwide. In view of these, governments and stakeholders are putting in efforts to improve on the health of adolescents. These efforts have led to the setting up

and implementing adolescent friendly health services at various health centers in both developed and developing countries including Ghana (Appiah-Mensah, 2016).

With the setting up of this program, providing adolescent friendly health services by trained personnel at various health facilities in the communities by Ghana Health Service (GHS) and various NGOs, it was expected that the rates of the adolescents' health challenges will reduce but that seems not to be the case when the program was evaluated in 2016. This led to the launched of Adolescent Health Service Policy and Strategy by GHS which contains a host of interventions and is expected to be a reference for the health of adolescents and young people for the next five years (2016-2020) to provide the framework within which health provision and other related interventions for adolescents and young people would be coordinated and implemented (GHS, 2015).

Despite the availability of these special services to create an environment which is very comfortable to the adolescents to meet their health needs, adolescents in developing countries including Ghana may not access and utilize the services at the various health centers as expected of them because they may not be very knowledgeable on the existence of such services or the services are not adolescent friendly enough. This study seeks to assess issues related to the knowledge, access and utilization of adolescent friendly health services in Kumbungu by all manner of adolescents residing in the District.

1.2 Research questions

i. What is the level of knowledge adolescents have on adolescent friendly health services (AFHS)?

ii. Do adolescents have access to AFHS?

iii. Are health workers willing to provide AFHS to adolescents?

iv. What strategies are available to improve the knowledge access and utilization of the AFHS?

1.3 Research objectives

1.3.1 Main Objective

To assessing the knowledge, access and utilization of adolescent friendly health services among adolescents in Kumbungu district, Ghana**.**

1.3.2 Specific Objectives

i. To determine the knowledge level of adolescents about adolescent friendly health services (AFHS).

ii. To identify adolescents' access and utilization of AFHS.

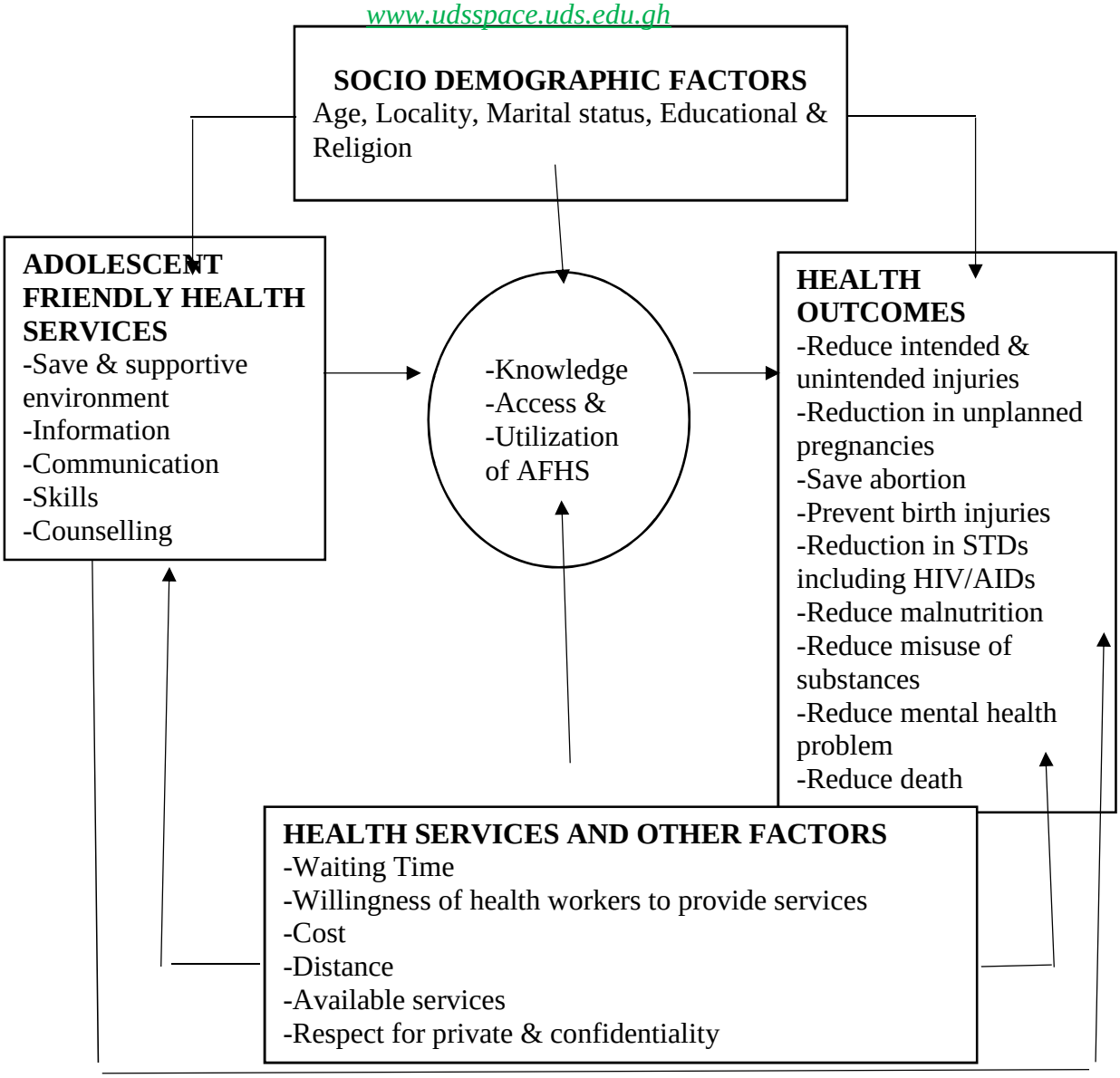
iii. To explore the perceptions of health workers and their willingness to provide friendly health services to adolescents.

iv. To identify strategies that will help improve the knowledge, access and utilization of AFHS.

1.4 Significance

Despite the fact that Ghana has made improvement in the provision of health services to all citizens, several challenges such as prevention and management of unsafe abortion as well as infertility, management of cancers of reproductive systems, teenage pregnancy, nutritional problems and low contraceptive usage still exist, particularly among adolescents. The ministry of health is making effort to improve some of these challenges through the provision of several services to adolescents. However, the adolescents seem not to have much knowledge and access to AFHS that are tailored to their health and non-health needs due to lack of information, counselling service and skills among others. Adolescent's knowledge, access and utilization of existing AFHS have the potential to significantly contribute in curbing their reproductive health problems.

The occurrence of these health problems for adolescents signify certain level of unmet AFHS needs which includes limited access to health information. However, for health workers to be able to provide the needed AFHS to the benefit of adolescents, they both must have the right information about the services. The use of the AFHS is essentially adolescent driven yet largely underutilized. An understanding of their knowledge level and access will be crucial in developing strategies to improve utilization. Thus, health authorities like Ghana Health Service (GHS), Ministry of Health (MOH) would use this data as a baseline to determine the issues surrounding adolescents to plan appropriately. Findings from this study would also inform and direct future plans and actions to help improve the overall reproductive health services needed by the adolescents. Knowledge and use of AFHS are also important for determining attitudes towards the use of services provided by the corner and also will create awareness on the risks associated with the health problems adolescents' face. Therefore, the results of this study provides information on the level of access to health service needed by adolescents.



Source: Authors Construct

Figure 1: Conceptual framework for assessing AFHS

1.5 Explanation of variables in the conceptual framework

Based on the available information, the conceptual framework shown above was used for this study. It was constructed on the basis that knowledge, access and utilization of AFHS can be influenced by a number of factors directly either in a positive or negative way. The framework therefore describes these factors that can contribute to the knowledge, access and utilization of AFHS.

1.5.1 Demographic Factors

Starting with age, it is important in every aspect of life and it informs decision in terms of reproductive health. Due to this, the study deems it necessary to determine the age structure of respondents that were involved in the study in order to determine the categories of ages among the adolescents that had knowledge and are accessing and utilizing the AFHS. It also informs whether their acquisition of knowledge and the usage of the services had any significant reduction on their health problems or not.

The locality of the respondents may or may not have influence on AFHS. The five sub-districts may have some similarities and differences as well but the study was interested in knowing whether knowledge, access and utilization of AFHS were similar or different across the sub-districts.

Marital status is also an important factor. A situation where a greater proportion of adolescents are unmarried yet sexually active calls for an adequate knowledge on AFHS available as well as its access and utilization to help reduce and probably avoid health problems.

Considering the critical role education plays in our development process, various programs have been initiated by government aim at creating equal opportunity for all children of school going age in Ghana. The study wishes to obtain the proportion of adolescents in and out of school and to document whether the educational status has an influence on knowledge, access and utilization of AFHS. It assisted to determine if there was any variation in terms of knowledge acquired, access and utilization of AFHS base on once level of education or even not educated.

Religion may also have influence on the use of AFHS. According to 2010 population census, Islam was the dominant religion (60.0%) in Northern region (Ghana Demographic and Health Survey, 2010). There was the need to find out their religious affiliations and whether or not it limits the adolescent's ability or opportunity of

obtaining knowledge as well as accessing and utilizing certain health services they are in need of.

1.5.2 Adolescent Friendly Health Services

The framework also establishes the relationship between various structures and institutions that should be involved in policy advocacy, formulating and implementation in empowering the adolescents on the access and utilization of AFHS. The model postulates that, (MOH) and Ghana Health Service (GHS) bear the responsibility in formulating and implementing policies that will aim at empowering adolescents to know, access and utilize AFHS. For adolescents who are well to stay well, and in helping ill adolescents get back to good health, these combined factors are important. The information, education and communication approach use in many AFHS are effective tools in providing knowledge to the adolescents. There should be educational as well as recreational materials at the facility. The provision of information, advice, counselling and clinical services aimed at promoting health and preventing health problems and problem behaviours, the diagnosis, detection and management of health problems and problem behaviours as well as referral to other health and social service providers when necessary. Therefore, the effectiveness of these tools can help adolescents have knowledge on the services and thereby accessing and utilizing them.

The location of the AFHS too is a very important factor in the utilization of the AFHS. First of all, the environment should be friendly enough and that can attract the adolescents to the place and through that, they are likely to learn, access and use the services provided to them. The AFHS should be situated in a quiet and safe environment where the adolescents will feel free to go. It should not be too close or

too far from the adolescents. There should be no stigma associated with the utilization of the services.

1.5.3 Health service and other factors

Cost: When the cost of the services is expensive, it will put the adolescents off from going to utilize the services even though they may be fully aware of the existence of such facilities. Most adolescents may not be working or earning much yet they have quite a number of things they deem very important to spend the little money they have or get from parents and other sources on. Seeking health care services may not be a priority to them because they believe they are at little or no risk of health problems.

Service provision: This comprises of the attitude of service providers and the services that are provided. Service providers are key determinants of the adolescents' use of the services. They are the people the adolescents meet when they go for the services. They are the people they confide in and share their problems with. Providers who are hostile to the adolescents automatically drive them away. The services provided should be simple and adolescent friendly and procedures must be explained to them to alley their anxieties. Adolescents may be scared of complex procedure and may think that those procedures may affect them later in life. If services are complex and time consuming, they may not return for services.

Timing: With respect to timing, clinics opened at times when adolescents can conveniently attend could be a very important determinant of the patronage level of the services. Such times include late afternoons when they had returned from school or work, weekends and holidays. When there are varieties of scheduled times to access services, the adolescents are likely to find the services more convenient to use

but when the time ranges are limited, the adolescents may not have the time to seek the services even though they have the desire to.

Privacy and confidentiality: It is interesting to know that, different groups of adolescents from various parts of the world identify two key common characteristics with respect to their health seeking behavior. They want to be treated with respect and to be sure that their confidential information is protected (WHO, 2012). Privacy and confidentiality rank extremely high among young people. A common fear expressed by young people is that the nurse or any person who sees them will tell their mothers that they came to the clinic for reproductive health care.

1.5.4 Health Outcomes

It is perceived that when adolescents are able to obtain the friendly health services they need such as information, counselling, skills among others, they are likely to obtain the needed knowledge concerning their health. This could further lead to reduction in unprotected sex, malnutrition, intended and unintended injuries among others. The health factors which includes positive attitude from health workers, short distances to facilities, respect for privacy and confidentiality if all are put in place, adolescents are more likely to access and utilize the services provided to them. Access and utilization of AFHS then could lead to access to family planning methods, reduction in unplanned pregnancies, save abortion, reduction in birth injuries, reduction in substance use and mental health problems among others.

1.5.5 Relationship between various components of the conceptual framework.

The socio-demographic characteristics tends to look out whether those variables such as age, marital status, education, religion and locality can influence the adolescents' ability to obtain or not certain services such as information, counselling skills among

others. In addition, look at how acquisition of those services can affect their ability to either obtain or not knowledge, access and finally utilize AFHS.

Another important relationship is to determine whether the acquisition of knowledge could in any way influence the adolescents to access and utilize AFHS.

Also, if they access and utilize AFHS because they have knowledge on it, can that help them improve upon their health problems such as unsafe abortions, intended and unintended injuries, malnutrition among others?

With regard to the association health service factors have with the other components, the study intends to establish how those variables like waiting time, cost, distance to facility, availability of service, respect for privacy among others could either or not make adolescents able to access and utilize services available to them. Lastly, the framework once more intends to establish if the acquisition of knowledge on AFHS by adolescents has any influence on how they access and utilize services.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter comprises of theoretical data in relation to the subject under study. The chapter reviews relevant literature related to the study from several sources including journals, articles, textbooks and internet sources. It provides an overview of adolescent health, adolescent friendly health services (AFHS) with reference to its definition, services offered, the need for those services and its effectiveness. The review was carried out under the following sub-titles which includes; "Adolescent friendly health services", "knowledge level of adolescents on AFHS," "Access and utilization of AFHS", "Factors affecting access and utilization of AFHS", "Adolescents satisfaction with services accessed", "Strategies to improve adolescent's knowledge and access and utilization of AFHS", "Health workers perception on AFHS and readiness to provide services" and "Community involvement and suggestions to improve AFHS".

2.1.1 Adolescence

Adolescence is a period of progressive change between childhood and adulthood involving biological, psychological, social and cognitive transformations (Katzman & Neinstein, 2012). The transformation between childhood to adulthood may be described as confusing and ongoing tide and flow among all areas of human development. Adolescents are living in a period between being a dependent child and being an independent adult (Davis, 2017).

2.1.2 Adolescent health challenges and needs

Adolescent health can be defined as the physical, mental and social well-being and not merely the absence of disease or infirmity during the period of adolescence (GHS

et al., 2012). Many are the health challenges adolescents face as they grow. Some which include; STIs including HIV, early pregnancy and childbirth, violence and injuries, malnutrition and obesity among others.

2.1.3 Adolescent Friendly Health Services

The importance of adolescent health education has gained more attention over the recent years, however few resources linking developmental stages with particular practices strategies are available (Meschke et al., 2011). Adolescents need healthcare services that help support the transitions between childhood and adolescence as well as between adolescence and adulthood (NRC/IOM, 2009). Health concerns and behaviors that remain unaddressed during adolescence can lead to preventable illness in adulthood including cancer, heart disease, physical and mental disability as well as diabetes (Curtis et al., 2010). Preventable chronic illnesses can vastly reduce the quality and years of healthy life lived by adolescents (Meadows-Oliver & Jackson Allen, 2012). AFHS, including health promotion and disease prevention, have the potential to reduce high risk behaviors contributing to preventable causes of morbidity and mortality among adolescents, as well as nurture protective and positive behaviors (NRC/IOM, 2009). Healthcare facilities must consider the positive outcomes that may result from providing developmentally appropriate healthcare to the adolescents. Appropriate adolescent healthcare involves both risk and protective factors in the areas of physical, social, emotional, and cognitive development (Meschke et al., 2011). Since the adolescent's biological, cognitive, and social development may not progress at the same rate, education must be malleable to fit the individual's personal needs (Meschke et al., 2011). By including the adolescent's specific social and emotional needs into educational opportunities, the education will likely be more effective and meaningful (Meschke et al., 2011). Adolescent guidelines may help

healthcare providers identify the priorities of adolescent healthcare and tailor their care specifically to the individual's priorities and needs.

2.1.4 Adolescent friendly health services provided to adolescents

Adolescent friendly health services are grouped into two categories. They include: health and lifestyle, which also comprises of general health services, referral system, contraceptive services which involve counselling on importance, choice and correct use of contraceptives, STI management including testing, counselling, and treatment, maternal health services including antenatal care, postnatal care, safe abortion services and post abortion care, HIV related services including VCT, management of sexual violence such as rape, nutritional, dietary and eating disorders management such as obesity, anaemia, anorexia nervosa, bulimia nervosa and compulsive overeating and general counselling. These services are usually available at a 'one stop shop' that is the centers for the adolescents so that they would not have to be moving from unit or one place to the other. The services are also provided based on the needs of the adolescents.

Recreational services such as sports and games also form part (GHS et al., 2012).

The purpose of the recreational services is to bring peers together for the adolescents to feel and know that they are not alone in their situations. When they meet peers, they share their experiences and this may encourage others. They also feel some sense of belongingness when they come together for the recreational services.

2.1.5 Characteristics that make the adolescent health services friendly

According to World Health Organization (2012), on making health service adolescent friendly: it deals with developing national quality standards by building on what already exists. What this means is that efforts should be directed at making existing service-delivery points –intended to provide health services to all segments of the

population friendly to adolescents, rather than setting up new service-delivery points exclusively intended for adolescents. Having said that, dedicated health service-delivery points and outreach work could play a useful role in reaching marginalized and stigmatized groups of adolescents (such as injection drug users), who may be reluctant to use a service-delivery point that is open to all. Two complementary efforts are needed – firstly, to make health-service provision friendly so that adolescents are more likely to be able and willing to obtain the health services they need; and secondly, to ensure that the health services that adolescents need to stay healthy or to get back to good health are in fact being provided and are being provided in the right manner. In other words, efforts must be made to increase both health service utilization and health service provision.

The WHO 'quality of care' framework provides a useful guide to work on improving health service provision and utilization. It brings together the complementary imperatives of, on the one hand, making it easier for adolescents to obtain the health services they need and, on the other, providing them with the health services they need in the right way. The quality of care framework provides a useful working definition of adolescent-friendly health services. To be considered AFHS, health services should be accessible, acceptable, equitable, appropriate and effective, as outlined below:

Accessible: Adolescents are able to obtain the health services that are available.

Acceptable: Adolescents are willing to obtain the health services that are available.

Equitable: All adolescents, not just selected groups, are able to obtain the health services that are available.

Appropriate: The right health services (i.e. the ones they need) are provided to them

Effective: The right health services are provided in the right way and make a positive contribution to their health (WHO, 2014).

2.2 Knowledge level of adolescents on adolescent friendly health services

Knowledge of any subject means that you have at least fair amount of information about that subject. Knowledge of AFHS is important to its access and even utilization. Significant numbers of studies have been conducted to investigate adolescents' knowledge and perception towards SRH and its services. One of such study was conducted among 3041 adolescents of age 15-19 years residing in the rural areas of 4 districts of Nepal in 2011 which concluded that the participants had moderate reproductive and sexual health knowledge (Simkhada et al., 2012). Next study was carried out in four randomly selected higher secondary school. In that study out of 417 respondents, more than 70% were found to have good practice of SRH. Good practice here implies participants have equal or more than 80% knowledge and practice of SRH (Paudel & Paudel 2014).

Similarly, an institution – based cross-sectional study conducted on utilization and factors affecting adolescents and youth friendly reproductive health services among secondary school students in Hadiya zone, southern nations, nationalities and Peoples region, Ethiopia revealed that, most of the respondents, 498 (78.5%) had knowledge about various types of adolescents and youth friendly reproductive health services. Voluntary counselling and testing (VCT) 343 (68.9%), and contraception and or condom 321 (64.5%) were the most known and utilized services by the study subjects (Helamo et al., 2017). In 2016, a research found that, as a country drives effort in establishing adolescent/youth friendly services to cater to the unique reproductive and sexual health of adolescents/youths, it is pertinent that the adolescent/youth know about these services to be able to access and benefit from them. A descriptive cross -

sectional survey conducted to examine the knowledge of adolescents/youths on available adolescent/youth friendly services (A/YFRHS) in Ikeja, Lagos State, Nigeria, showed that, more than half, 268 (79.5%) of the respondents did not know of a specific A/YFRHS provided in study area. Knowledge was low (SE = 0.11; SD = 2.20) with a mean score of 5.46 on a 10-point scale. The participants knew what adolescent/youth friendly services were but did not know where to get these services from because they were not aware of the available A/YFRHS facilities (Ajike & Mbegbu, 2016).

A study conducted in Ashaiman polyclinic, Ghana, revealed that 125 (30.8%) of the total population (n=406) knew of AFHS provided at the clinic. A larger percentage (52.7%) of the students who were interviewed said they had no knowledge of the services available at the polyclinic (Appiah – Mensah, 2016). Another study conducted in Addis Ababa, respondents' reproductive health knowledge was derived from a summary score based on the correct answers they provided for 25 reproductive health related questions posed; the mean RH knowledge score of respondents was 14.3 with (SD=6.2) used to classify the respondents knowledgeable and non-knowledgeable on AFHS. Accordingly, 398(52.7 %) had knowledge score equal or above the mean score (Yohannes, 2017).

2.2.1 Source of information on AFHS.

Results from a study conducted by Appiah – Mensah (2016), showed that, even though most of the participants did not know of the existence of AFHS, those who knew about it got to know through the schools (25.9%), health workers (6.4%), media (5.2%), friends, family members and church. In a related study conducted by Ajike and Mbegbu, (2016), respondents main source of information about adolescent/ youth

friendly reproductive health services were friends (45.7%), followed by the media, (17.1%) and parents (7.3%). Sujindra & Bupathy, (2016) in a cross-sectional study done on 323 adolescent girls admitted in the year 2012 to professional colleges belonging to the health sciences faculty of a private university in Pune, India, using self-administered questionnaire showed that, mean age of onset of menarche was 13.35 years. For many of the girls (86.65%) who had knowledge of menstruation prior to menarche obtained it from their mothers. This constitute 68% of all the sources.

The participants in Paudel & Paudel, (2014) study listed multiple sources for SRH information. In this case also, media received highest percentage (94.52%) followed by teachers (51.51%), friends (47.95%) and parents (43.84%). In United States, Martinez et al, (2010) discovered that higher percentage (70% of male teens and 79% of female teens) said they receive at least some of the sexual and reproductive health information such as how to say no to sex, methods of birth control, STIs, where to get birth control, how to prevent HIV infection and how to use a condom from their parents.

In a related study conducted among adolescents in secondary school in Hadiya, Ethiopia, regarding the source of information and respondent's belief on youth friendly services it was noted that out of the total number of respondents, 291 (45.9%) had information about the availability of the services in the nearby facility and the most important sources of information were peers 159 (54.6%), parents 79 (27.1%), and mass media 22 (7.6%) (Helamo et al., 2017). A community based cross-sectional quantitative study design supplemented with qualitative inquiry was used to assess the extent of youth friendly service utilization and the associated factors among the youth in Harar town, east Ethiopia, the study indicated that most of the respondents, 612(72.4 %), had information about YFS mainly from school teachers (31.5%) and

radio (22.8 %). Besides, 749(88.6 %) of them believed that youth friendly services are necessary for the youth (Motum, Syre, Egata & Kenay, 2016).

A qualitative study in the West Gonja District in Northern region, Ghana on adolescents' reproductive health knowledge, choices and factors affecting reproductive health choices, FGDs respondents identified peers, parents, teachers, radio and television as the main sources of information on reproductive health. However, most of the adolescents especially those out of school relied mostly on their peers for information on reproductive health. The results showed that parents were an important source of information. For in-school adolescents, teachers emerged as another important source of information on reproductive health as it was unanimous among FGD participants. (Kyilleh, Teg-Nefaah & Konlaan, 2018).

2.3 Access and utilization of adolescent friendly health services

A community based- cross sectional quantitative study design supplemented with qualitative inquiry was used from January to February 2011 to carry out a study on utilization of youth friendly services and associated factors among youth in Harar town, east Ethiopia. A random sample of 845 youth were selected using a pretested structured questionnaire. It was found that nearly 64% of the youth had already utilized youth friendly services at least once at the time of the survey. (Motum et al., 2016).

Again, in a study conducted by Appiah – Mensah, (2016) in Ghana, where he measured utilization by whether the in-school adolescents have ever visited and use the AFHS at the Ashaiman polyclinic. Results from the interview indicated that 31 (7.6%) respondents reported to have ever utilized any form of AFHS offered at the Ashiaman polyclinic, 322 (79.3%) have never utilized the services at the polyclinic. A related cross-sectional study (Tangut et al., 2012) on health service utilization, they

reported satisfaction among adolescents in Dejen, Ethiopia. It revealed that, among the sampled adolescents, 313 (45.4%) used health services during the last one year.

An institution – based cross-sectional study conducted on utilization and factors affecting adolescents and youth friendly reproductive health services among secondary school students in Hadiya zone, southern nations, nationalities and Peoples region Ethiopia, revealed that only 244 (38.5%) of secondary school youths ever utilized adolescents and youth friendly reproductive health services. And 390 (61.5%) had not ever utilized any youth friendly reproductive health services (Helamo et al., 2017). In a related study done in Bahirdar to assess the utilization of YFRHS among high school students, the study indicated that among 818 students, 32% of youth utilized youth reproductive health service (Abebe & Awoke, 2014).

In a similar study about reproductive health needs and service utilization conducted among youths in West Badewacho Woreda, Hadiya Zone, South Ethiopia, out of the total participants, only 29.4% youths utilized reproductive health services in the last one year (Cherie, Tura & Aderajew., 2014). A community based cross-sectional study was conducted from in four (4) randomly selected administrative areas of Gondar town. A total of 1290 adolescent aged 15 to 19 were interviewed using a pre-tested and structured questionnaire. The results showed that among sexually active youths, only 21% and 13% of them have ever used contraceptives and condoms, respectively (Motum et al., 2016). More so, the knowledge of contraception is considered almost universal among young people in the country but their awareness doesn't reflect in their practice. The data shows only 14% of 15 to 19 and 14% of 20 to 24 years of currently married women use modern contraception. The situation is even worse if we consider the practice of contraception use by young people at their first sexual

intercourse. Almost 33% 15 to 19 years and 40% 20 to 24 years people do not use any kind of contraceptive at their first sexual intercourse (Pathak & Pokharel 2012).

2.3.1 Services accessed and utilized by adolescents at the health facilities

There are various services that are available at the AFHS at the Ashaiman polyclinic and the adolescents who have ever visited utilized one or more of the services available there. Out of those who visited the clinic, 10 (32.2%) went there for STI management, 8 (25.8%) went for STI screening with only 1 (3.2%) respondent went in for substance abuse management. Services such as antenatal care, postnatal care and other motherhood related issues were not patronized (Appiah – Mensah, A 2016). A similar study in Ethiopia indicated that, VCT 343 (68.9%), and contraception and or condom 321 (64.5%) were the most known and utilized services by the study subjects. On the other hand, about 455 (71.8%) respondents believed that adolescents and youth friendly reproductive health services are necessary for the improvement of youths' health (Helamo et al, 2017).

The knowledge and perception of reproductive health services among in-school adolescents in Ile-Ife, Osun State in Nigeria was explored in a study, it came out that the most commonly perceived adolescent health problems included menstrual related difficulties, unwanted pregnancy, HIV/AIDs and lack of sexuality education. Most schools attended by respondents had no health facility and the few with clinics had inadequate/unfriendly staff and inadequate drugs. These researchers reported that respondents' most preferred places of seeking healthcare were government hospitals and private hospitals. However, the study showed that the adolescents had little or no access to youth-friendly services even with their preference for government hospitals as their place of choice for seeking healthcare (Omobuwa et al., 2012).

2.3.2 Other ways of obtaining health services

It has been found in most research that, majority of adolescents when faced with health issues do not seek for healthcare services from professional health service providers at health facilities. One of such study found that some of the adolescents (when problem persisted), sort help from traditional healers or used herbs. This was reported in seven of the ten female FGDs and in two of the 10 male FGDs. In half of the FGDs, some adolescents reported that they sought advice from parents and peers when faced with such problems. In the same study, a few FGDs (6/20), adolescents also noted that they seek advice from elder people in the community whiles others which can afford go and buy medicines from drug shops or pharmacies (4/20 FGDs). Private health facilities (including clinics, pharmacies and drug shops) were the most accessible to the adolescents than public health facilities (Atuyambe et al., 2015).

A qualitative study in the West Gonja District in Northern region, Ghana on adolescents' reproductive health knowledge, the study explored what adolescents do to prevent getting pregnant. The results revealed that local remedies were available and widely used by community members and not using services provided at the various health centers. One of the strategies adopted by adolescents to prevent pregnancy is the use of a local herb called "yigewulso". This herb is believed to have contraceptive effects. Other herbs also believed to have similar effects are used as emergency contraceptives after unprotected sex. This study also found that some adolescents believed that wearing of some local beads around the waist during sexual intercourse could prevent a pregnancy outcome. These adolescents also reported that other techniques they employed to prevent pregnancy outcome was for the female to lie in the prone position or wash her vagina with soap and water immediately after sexual intercourse. These practices in their opinion would evacuate or kill the sperms

in their vagina. They were also of the view that these practices were safe and produced no adverse effects (Kyilleh et al., 2018).

2.3.3 Reasons for adolescents not access and utilize healthcare services

AFHS have come to stay; service providers and other stakeholders will work towards maintaining them and improving on them from time to time. Stakeholders would like to know what makes the adolescents have interest in the services and utilize them. The level of utilization of AFHS by the adolescents depends on a number of factors. These factors can affect it either positively (facilitators) for high level of utilization or negatively (barriers) for low level of utilization. The adolescent population may face specific barriers to access and utilize healthcare due to their lack of legal, social and financial autonomy and the high dependence on parents (Curtis et al., 2011). In a study conducted in Botswana, it found that health provider attitudes had the greatest impact on youth perceptions of the YFRHS provided (Lesedi et al., 2011). In a related study done in Bahirdar to assess the utilization of YFRHS among high school students, the study indicated that among 818 students, 32% of youth utilized youth reproductive health service. Barriers in utilizing reproductive health services for the students were due to inconvenience hours and fear of being seen by parents or people whom they know; these are one of the most frequently mentioned reasons as barriers of service (Abebe & Awoke, 2014).

According to Appiah – Mensah (2016), participants gave various reasons for not ever utilizing the services at the Ashaiman polyclinic. Eighty-two (20.2%) of the adolescents gave the reasons that they never knew the services existed followed by those who indicated that the polyclinic was too far from their homes (17.2%) then those who said the cost was too much (11.1%). Only a few attributed the reasons to service providers not being friendly, the facility located too close to their homes, the

place is not adolescent friendly, they waste time there, someone might see them and judge them, the provider might think they are too young, the provider might think they are bad and some utilize the AFHS at other places. Most importantly, only 15 (3.7%) reported that they have never utilized the services because they do not have any need for them. In another study by Tangut et al., (2012) they found that adolescents were not seeking health services for the last one year in Dejen district mainly because they did not have any health problem for the last one year (69.2%). Other reasons included lack of money to pay for health services, used other means of treatment.

Delany-Moretlwe et al. (2015) reviewed the needs, barriers and gaps for other non-HIV health specific age-related data on sexual and reproductive health, mental health, violence, and substance abuse problems for adolescent, youth or young commercial sex workers, homosexuals and people who inject drugs. The results showed that young key populations are exposed more to unprotected sex, sexually transmitted infections including HIV, unintended pregnancy, violence, psychological disorders and substance abuse relative to older members of key populations and youth among the general populace. The researchers noted that coverage of services was low principally because of stigmatization and discrimination at health system and policy levels. A similar study carried out observed that majority of the service users 127 (52.1%) were satisfied with the service delivery and hospitalities but later noticed that 103 (16.2%) missed the service after some times of the utilization of the services. The most reported reasons for the missed opportunity to utilize the service was the inconvenience of the service delivery time, long queue, lack of money for the service, and privacy (Helamo et al., 2017). The limited capacity of health sectors to provide youth friendly service with inconvenient hours or location, unfriendly staff, and lack

of privacy were among the main reasons many adolescents and young adults give for not using reproductive health services. Moreover, parents, care givers, and community members have limited knowledge to discuss about reproductive health services with adolescents.

An evaluation for youth friendly reproductive health services for adolescents in Lunzu Ta-Kpeni, Malawi indicated that 38% had ever accessed youth friendly reproductive health service. The researcher indicated that societal customs, judgmental attitude and lack of dialogue between adolescents and parents on sexuality issues were some of the major factors that were attributed to low access to youth friendly reproductive health services by adolescents (Munthali, 2011). Another study cited the following as reasons by the youth for not receiving the services required; long queues at the facility (37%), facility closure at the time of arrival at the facility (27%), lack of money to pay for the services (23%) while (9%) said they met neighbours/relatives at the facility and felt embarrassed. Some 4% of the youth were turned back by service providers (Akinyi, 2009).

2.4 Health providers knowledge on AFHS

A study conducted to explore health service providers' experiences of the sexual reproductive health service provision to young people in Kenya found that majority of health service providers were aware of the youth friendly service concept. Health service personnel described YFS in terms of the way young people were approached, welcomed, listened to, handled, understood, given privacy and confidentially in order to facilitate free interaction. Despite all these, they were not aware of the supporting national policies and guidelines. Health service providers felt they lacked competency in providing sexual and reproductive health services to young people, especially regarding counseling and interpersonal communication on contraception. The researcher noted that health service providers reported being puzzled about personal

feelings, cultural and religious values and beliefs and their wish to respect young people's rights to accessing and obtaining sexual and reproductive health services (Godia, 2012).

2.4.1 Range of friendly services provided at health facilities for adolescents

From a study conducted in Ho, Hoehoe and Kpando municipalities in Ghana, it was observed with reference to the checklist that, all three facilities in the municipalities provide a wide range of services including family planning, STI treatment and prevention, HIV counselling and testing, and post-natal care. Antenatal and delivery care is however not available in the adolescent corner but then pregnant adolescent girls who visit the facility are counseled and directed to the antenatal clinics in the hospital for the appropriate care (Atiku., 2015). A cross-sectional study that used mixed method approach was carried out to capture information from 32 health facilities in Wakiso district to assess health facilities' readiness to provide friendly reproductive health services to young people aged 10-24 years in Uganda. Data extracted from clinic records revealed a number of services that were provided to young people between 10 and 24 years in the three-month period preceding the study and they included; STI management, post abortion care, sexual abuse or violence, contraception provision, antenatal care, delivery among others (Bukenya., 2017).

2.4.2 How health providers ensure that services provided to adolescents are friendly

The WHO 'quality of care' framework provides a useful guide to work on improving health service provision and utilization. It brings together the complementary imperatives of, on the one hand, making it easier for adolescents to obtain the health services they need and, on the other, providing them with the health services they need in the right way.

The quality of care framework provides a useful working definition of AFHS. To be considered adolescent friendly, health services should be accessible, acceptable, equitable, appropriate and effective (WHO, 2014).

Atiku (2012) found in a research that, there is a consulting room that accepts one client at a time for a one-on-one interaction with the service provider. The staff in charge of providing these services have cabinets with locks to keep clients' folders and records. Access to these folders is allowed for only staff members who are directly involved in giving care just in a bid to observe confidentiality of client's information. A cross-sectional study that used quantitative and qualitative approaches to capture information in 32 health facilities in Wakiso district to assess health facilities' readiness to provide friendly reproductive health services to young people aged 10-24 years in Wakiso district, Uganda. The majority of the facilities lacked infrastructure and space to provide privacy for young people, with only one facility reporting having a separate space for providing services for young people. No facility had an exclusive waiting room for young people (Bukenya, 2017).

2.4.3 Barriers adolescents face from health providers perspective for effective utilization of AFHS

A study was conducted to assess the reproductive health services utilization and associated factors among adolescents in Anchar district, east Ethiopia using a mixed method. Simple random sampling method was used for quantitative and purposive sampling technique used for qualitative method to interview four hundred and two adolescents. The key informants explained many factors that results in under-utilization of reproductive health services by adolescents; these are: fear of social value and being embarrassed, misconception of adolescents about pregnancy, unsafe sex, shortage of supply, harmful traditional practices and lack of school based adolescent reproductive health services were among reason explained by both health

workers and school teachers (Ansha, Bosho & Jaleta, 2017). The communities' internal factors such as socio-cultural norms and community's own prioritization and external factors such as influence from other communities or societies are either constrain or supportive towards change. Social norms relate to social identities influence young people's sexual behaviors and sexual and reproductive health promotions. Social norms play a particularly strong significant role in shaping young people's sexual behaviors and form a strong control upon the expression of human sexuality (UNICEF 2011). In India, a cross-sectional descriptive study conducted with health care providers on their perceptions and practices of adolescent friendly health services revealed that, the overall understanding of the respondents on adolescent health was good. Majority of the doctors (90%) felt that adolescents are not comfortable in the present available settings to bring out their problems; the reasons being lack of privacy and lack of knowledge (Sujindra & Bupathy, 2016).

2.4.4 Willingness and readiness of health workers to provide AFHS

A cross-sectional study that used quantitative and qualitative approaches to capture information was conducted in 32 health facilities in Wakiso district to assess health facilities' readiness to provide friendly reproductive health services to young people aged 10-24 years in Wakiso district, Uganda. Half of the facility in-charges 50% (16/32) reported that young people preferred to access services between 13:00 and 17:00 hours with another 16% (5/32) reporting a preference for between 17:00 and 20:00 hours, yet most of the facilities 59% (19/32) closed between 16.00-18.00 hours. No health worker reported that their facility had separate hours for young people (Bukenya, 2017).

2.4.5 Challenges health workers face in providing AFHS

Studies suggest that healthcare workers have high interest in developing these special skills required to work effectively with the adolescent but their educational needs are unmet WHO suggest that these deficiencies of health care providers in the adolescent field are associated to undefined work processes and lack of resource (WHO, 2015). In another study by Deogan, Ferguson & Stenberg (2012), they estimated the extra resources required to scale up AFHS interventions in order to reduce mortality and morbidity among individuals in low-and middle-income countries. The results showed that there was a substantial investment gap that was suggestive of the additional monetary commitments necessary to scale up health service delivery to adolescents towards universal coverage by 2015.

In order to explore the challenges and strategies in providing sustainable youth-friendly health-care services, health-care professionals working in four different settings in northern Sweden were interviewed. The informants in this study perceived that professionals working in youth clinics were motivated, interested and knowledgeable about youth, that the clinics ensured confidentiality and prioritized responding to youth health needs, and that they were considered an indisputable part of the Swedish public health-care system. However, they also pointed out some challenges: some youths faced more difficulties in reaching the clinic, the clinic work was not well monitored, the organizational structure and leadership were perceived as unclear and weak, and there were huge inequities in the resources available and the services provided between larger and smaller youth clinics (Thomee et al., 2016). In another area of study, other forms of challenges that limit health providers from functioning effectively was noticed. Limited knowledge and competency, communication and language barriers, staff shortage, age of staff, poor staff motivation and selection criteria for HSP training barriers were commonly recognized

and mentioned by the majority of HSP from all sites. The majority of HSP also expressed concerns about language and communication with young people, who often used “ghetto” and “sheng” languages which HSPs do not comprehend (Godia, 2012).

A mixed study conducted in 32 health facilities in Wakiso district to assess health facilities’ readiness to provide friendly reproductive health services to young people aged 10-24 years in Wakiso district, Uganda, had this report as some of their challenges as health providers. Commodities including condoms and contraceptives were reported to be sufficient in only 29% (9/32) of facilities. Equipment for provision of reproductive health services for young people such as small size speculum, weighing scales, and sphygmomanometer were reported to be sufficient in only 22% (7/32) of health facilities. The managers attributed the inadequate availability of supplies to the current drugs and medical supply system challenges. Such facilities cannot order adequate supplies like STI drugs, nor contraceptives to prevent pregnancy (Bukenya, 2017).

Another study conducted in Ghana on adolescents’ reproductive health knowledge, choices and factors affecting reproductive health choices, interviews with service providers revealed that the design of some of the service points makes it difficult to provide optimum privacy to clients. The study also found that some staff were not trained on adolescent friendly reproductive health services as illustrated (Kyilleh et al., 2018). In a qualitative study on healthcare providers balancing norms and practice: challenges and opportunities in providing contraceptive counselling to young people in Uganda, providers expressed a self-identified lack of skill, limited resources, and inadequate support from the health system to successfully provide appropriate services to young people. They felt frustrated with the consultations, especially when meeting young women seeking PAC (Paul et al., 2016). Professionals

working in youth clinics are perceived as motivated, interested and knowledgeable about youth, and the clinics ensure confidentiality and a youth-centered and holistic approach. Challenges remain, especially in terms of ensuring equitable access to different youth subpopulations, improving monitoring routines and ensuring training and competence for all professionals, independently of the location and characteristics of the clinic (Thomee, 2016).

2.4.6 Health workers suggestions to improve AFHS

The aspect of quality in health care services for adolescents is not well understood. The challenge is that, in general there is no single definition or framework for improving quality of health care. Although there is existing knowledge about the factors that could promote or hinder quality improvements in health care services, the evidence is scattered in a large number of published and unpublished literature. Therefore, as a first step, a meta-review of high-quality systematic reviews was conducted among 735 health providers from 81 countries to examine the facilitators and barriers to improving quality of health care for adolescents. Both published and unpublished systematic reviews and/or meta-analyses of interventions for adolescents that focused on improving quality of health care. First survey was open to all primary health care providers across the world to collect input on the facilitators and barriers to improving the quality of health care services for adolescents. The systematic reviews included 13 interventions that focused on one or more of the six dimensions of desired health care performance (effective, efficient, accessible, acceptable, equitable, and safe) and the health care providers raised concerns about their ability to dedicate sufficient time to work effectively with their adolescent clients and the use of evidence-based protocols. Overall, 69% of providers answered that they need more guideline/protocols to support them in providing services to adolescents, and the four

priority areas mentioned were mental health (34%), substance misuse (28%), sexual/reproductive health (28%), and domestic/school violence (26%) (Nair, 2015).

Another group of researchers recommended that efforts directed at improving the delivery of health service to adolescents needed to attend to the friendly characteristics that were most important. They suggested that governments should not only promote and fund research on the health and development of young people, but rather actively make use of evidence generated to guide policies and programs targeted at the youth. They also suggested that researchers needed to develop ground-breaking channels to connect to national authorities, policy makers and key stakeholders who would use their evidence as cues to help take calculated decisions. They continued by adding that, funding agencies and governments should support research on typically under-researched areas of young people's health in Sub-Saharan Africa, including mental health, injuries, and non-communicable diseases (Beguy, 2013). Building life skill, facilitating parent to child communication, establishing and strengthening of youth centers and school reproductive health clubs are important steps to improve adolescents' reproductive health (RH) service utilization (Motum et al., 2016).

In a related study conducted in Kenya, majority of the HSP, especially from integrated facilities reported that they did not consider themselves competent in providing SRH services to young people. Most of them reported not having adequate counselling skills and not receiving any special training on how to handle adolescents. They therefore indicated that health service providers who had not received training in YFS need more training especially in aspects of interpersonal communication, youth counselling, post-abortion care and post-rape care (Godia, 2012).

In order to offer good services, informants considered it important to establish dialogue with young people, and to be attentive to youth opinions and suggestions about the services. Informants considered it important to make sure that it is easy for youth to reach the YC and pointed out that YCs implemented a number of strategies to ensure accessibility. The fact that consultations were free of charge was considered to be key, as well as the fast and diverse pathways through which young people can get in contact with YCs, i.e. drop-ins, phone consultations, booking an appointment, or consulting the web-based clinic at umo.se. The opening hours of the YCs were considered to be a key factor in shaping accessibility: longer opening hours facilitated young people's access, while clinics that were open only once a week limited access (Thomee, 2016).

2.5 Strategies to improve knowledge, access and utilization of adolescents on AFHS

Although there is existing knowledge about the factors that could promote or hinder quality improvements in health care services, the evidence is scattered in a large number of literature. Therefore, a meta-review of high-quality systematic reviews was conducted among 1,143 adolescents from 104 countries who participated in the consultation to examine the facilitators and barriers to improving quality of health care for adolescents. They included systematic reviews which mainly focused on health promotion, adherence to treatment, prevention of teenage pregnancy, and support for teenage mothers, emerged with the following five suggestions:

- adolescents understand the importance of health and are conscious of the main health issues affecting them and should therefore be engaged in addressing their health care needs.

- there is an increased demand for information about health and health care among adolescents and that should be provided,
- the adolescents often reported families to be the most influential source of health information and a crucial determinant of their well-being therefore should be used as effective channels to educate adolescents,
- Although sexual and reproductive health services were considered important, adolescents demanded other services, in particular, those addressing their mental health needs as well as checking the proximity to health care services and their costs and quality as they influence adolescents' use of health care services (Nair, 2015).

Respondents in another study also suggested some ways to improve on the utilization of AFHS. Majority of them (60.6%) stated that there should be more education on the AFHS in the schools whiles 80 (19.7%) think more education should be done on the media. A few of them (2.0%) suggested that the AFHS should be set up in the schools (Appiah-Mensah, 2016). The kind of service provider present at a particular service point to render services to adolescents has much influence on the access and utilization of the services provided. A study found that, adolescents preferred services to be provided by younger health workers and of the same sex preferably not from the same area (Atuyambey et al., 2015). Where health services can be accessed by adolescents when having a health challenge is seen as key factor that can either improve or reduce the rate at which they utilize the services provided. In a study conducted by Atuyambe et al. (2015), it was realized in a focus group discussion by out- of- school male adolescents that, services provided in an outreach form in the communities was more preferable to them.

A systematic review of the role of school-based healthcare in adolescent sexual, reproductive, and mental health showed that accessible sexual, reproductive, and mental healthcare services are crucial for adolescent health and wellbeing. It has been reported that school-based healthcare (SBHC) has the potential to improve the availability of services particularly for young people who are normally underserved. Locating health services in schools has the potential to reduce transport costs, increase accessibility and provide links between schools and communities (Mason-Jones et al, 2012).

Regarding the modalities of service provision, the adolescents preferred that services be available all the time (opening and closing hours) for adolescents to utilize (Atuyambe et al., 2015). Adolescents need services such as counseling, medical clinical services including investigation, healthy life skills education, training of peer educators and peer counsellers as well as referral service (Rohmayanti, 2015). The framework of action of sexual health developed by WHO says, the correlation between education level and sexual health outcomes has been well documented. One of the most effective ways to improve sexual health in the long-term commitment to ensuring that adolescents and young people are sufficiently educated to make healthy decision about their sexual lives, is to provide accurate, evidence based, appropriate sexual health information and counseling should be available to all young people, and should be free of discrimination, gender bias and stigma. Such education can be provided via schools, workplaces, health providers and community and religious leaders (WHO, 2014). To inform the next generation of programs, experts in adolescent sexual and reproductive health were asked to propose a streamlined approach based on learning that would be both scalable and sustainable. Mainstreamed Adolescent Friendly Contraceptive Services (AFCS) incorporate

within existing contraceptive services those adolescent-friendly elements that have demonstrated effectiveness in stand-alone or separate-space models. These elements can be incorporated into a range of service delivery channels (i.e., facilities, mobile outreach, community-based distribution, pharmacies, or drug shops). Drawing from a variety of literature reviews, a number of common program elements were identified that can increase contraceptive use among adolescents (Bankole & Malarcher, 2010).

The sexual and reproductive behaviour of adolescents in sub-Saharan Africa was explained using data from DHS and AIS (2000-2010). They reported that exactly 25% of adolescents aged 15 to 19 years reported sex before age 15, but this proportion reduced over time in many countries. The researchers recommended routine data collection of sexual and reproductive behaviour for adolescents aged below 15 years, and the inclusion of comprehensive information on sexual behaviour within relationships and grouping data according to socio-demographic variables (Doyle, Mavedzenge, Plummer & Ross, 2012).

2.5.1 Community and other stakeholders involvement to improve AFHS.

Indeed, the subject on adolescent sexual and reproductive health continues to gain worldwide interest. Tesso, Fantahun & Enquselassie, (2012) conducted a cross-sectional study among young people in Nekemte town and semi urban areas in western Ethiopia. These researchers concluded that parent-communication about sexual and reproductive issues took place not only rarely, but with strong warning, and sometimes in a threatening manner. These researchers recommended that programmes and policies related to young people's reproductive health should address not only individual or behavioral factors, but also cultural and social factors that negatively influenced parent-communication. Anusornteerakul, Khamanarong & Thinkhamrop (2011) found that although the running of reproductive health service

for the youth had gained a lot of attention in contemporary times, management had no clear indication of the influential factors of concern. The researchers identified six factors and grouped them into three main categories as 'three systems' to explain the important factors that might be of concern to management of reproductive health services. These were the personnel, service, and family support systems which had to be addressed in order to remove the limitations. Kesterton & Cabral de Mello (2010) investigated the effectiveness of interventions directed at creating a demand for and use of sexual and reproductive health (SRH) services by young people gaining community support for their use. The researchers suggested that the participation of key community members such as parents and religious leaders was vital to winning a wider community support.

Service rendered effective with adolescents will involve a variety of elements that adolescents themselves should be involved, the family in this case the parents, the school guidance counsellor as well as within the community adolescents are living. To provide a supportive environment, policies should be able to improve the quality of health care delivered to teenagers, strengthen cooperation between institutions and NGOs, strengthen family and community participation, and ensure the active participation of adolescents for the implementation of this program (Rohmayanti, 2015). In another study which talks about improving access to and utilization of high-quality SRHS for young people to youth with mean age of 15 years South-eastern provinces in Zimbabwe, they suggested the following; Train and re-train health workers on youth friendliness and provide supportive supervisory visits, coupled with community-based programs to increase awareness for adults and parents as well as in- and out-of-school participatory comprehensive education programs to increase

demand and provide education and negotiating skills around sexual activity, STIs, contraception, and SRHS (Cowan et al., 2010).

2.6 Relation between demographic – characteristics and knowledge of AFHS

A study was conducted among 3041 adolescents of age 15 to 19 years residing in the rural areas of 4 districts of Nepal which concluded that the participants had moderate reproductive and sexual health knowledge. In the same study it was revealed that male respondents had better knowledge compare to female participants regarding SRH issues like HIV/AIDS (Simkhada et al., 2012). In India, adolescent girls are becoming extremely vulnerable to HIV infections and have less comprehensive knowledge in comparison to their male peers (IFPS 2012). Gender inequalities in HIV prevalence are also seen in eastern and southern Africa, where girls are more at risk of infection (UNICEF, 2011).

2.6.1 Association between utilization of AFHS and demographic- characteristics

In a community based cross-sectional study conducted using 690 adolescents on their health service utilization and reported satisfaction in Dejen, Ethiopia shows that, among the sampled adolescents who used health services during the last one year, 171 (54.6%) were in the age group15 to 17 years and 188 (60.1%) were females. With respect to marital status, 234 (74.8%) of those who used health services in the last one year were single. Concerning educational status, more than half of the participants, 184 (58.8%), who visited health facility one year prior to the study period were in the category of elementary school (Tangut et al., 2017).

In another study conducted in Accra, Ghana shows that majority of those who have ever utilized the services were in the middle adolescent group (64.5%). Only 6 (20.7%) of the respondents who have utilized the AFHS were males and 23 (79.3%) were females. Four (13.8%) students from primary, 13 (44.8%) from JHS and 12

(41.4%) from SHS have ever utilized the services at the Ashaiman polyclinic. (Appiah – Mensah, 2016).

In a related community based- cross sectional study on utilization of youth friendly services and associated factors among youth in Harar town, east Ethiopia, it came out that, being daily laborer and private worker by occupation negatively influenced the outcome variable (Motum et al., 2016).

A related study shows that socio-demographic and economic characteristics such as sex, age, being in school and educational status showed statistically significant association with RH services utilization in a study in Bahir Dar and Gojjam (Abebe & Awoke, 2014; Abajobir & Seme, 2014). Finding from a study conducted in Kenya indicated that age and sex of an individual were greatly associated with utilization of almost all reproductive health services except counseling services but in contrary to the findings in studies Bahir Dar and Gojjam religion had association to some services mainly family planning, VCT and counseling services. It was established that some religions prohibited the youth from utilizing YFRHS (Abajobir & Seme, 2014; Abebe & Awoke, 2014).

In 2011, youth friendly reproductive health services for adolescents in Lunzu Ta-Kpeni, Malawi was evaluated. The study indicated that 38% had ever accessed youth friendly reproductive health service; and there was a connection between education and access to youth friendly reproductive health services. Moreover, 30% of males and 38% of females had at least, used a modern contraceptive method (Munthali, 2011). In a related study on determinants of utilization of youth friendly reproductive health services in Kenya among school girls, it was established that sex, age, level of education, type of school and youth's awareness about existence of reproductive health facility and services offered were significantly associated with utilization at

p<0.05 while religion and parental employment status had association only to a few services. Ethnicity had no association to utilization of all YFRHS, p>0.05 (Perez, 2013).

A community based cross-sectional study was conducted in 4 randomly selected administrative areas of Gondar town. The variables significantly associated with VCT service utilization were: participants who had secondary education and above, schooling attendance, co- residence with both parents, parental communication, discussion of services with peer groups, health workers, and perception of a risk of HIV/AIDS (Motuma et al., 2016).

A study conducted on the determinants of utilization of youth friendly reproductive health services among school and college youth in Thika west district Kenya, found out on sex and utilization that, there was significance relationship in sex and utilization of family planning, more females than males utilized this service ($p < 0.001$). Odds was done to show the direction of this relationship and the result showed the Odds that females have used family planning is 2.48 times higher than males. $p < 0.001$ further proving the influence that sex of the youth had on utilization of FP. In addition, the same study shows that religion was significantly associated to utilization of family planning services with Christian youth utilizing more than Muslims and other religious groups (Akinyi, 2009).

It was also seen in other studies that, religion and those who have ever discussed about family planning services have significant association with ever use of family planning. Orthodox Christian followers were 2.45 times more likely to ever use family planning compared to Muslims (Ansha, Bosho & Jaleta, 2017).

2.6.2 Association between knowledge and utilization of AFHS

Reproductive health services utilization was significantly associated with knowledge for reproductive health. RH services utilization was associated with IEC, adolescent-parent discussion of SHR (Abajobir & Seme, 2014). Again, another study shows that, all 31 respondents who have ever utilized adolescent friendly health services in Ashaiman polyclinic are those who had knowledge about it (Appiah – Mensah, 2016). The youth friendly corners were developed in Zimbabwe as a strategy to address Adolescent Sexual and Reproductive Health issues. Utilization of services at the youth friendly corner started showing a drastic decline. The researcher reported that the rate of utilization of services dropped far below the target of 30% when the facility was first set up. The study concluded that youth who were employed, lived alone and were aware of the presence of a youth friendly corner in Harare and other places offering similar services were more likely to utilize services offered at Harare youth friendly corner as compared to others who were not (Mapfunia, 2013).

An institution – based cross sectional study was conducted on utilization and factors affecting adolescents and youth friendly reproductive health services among secondary school students in Hadiya zone, southern nations, nationalities and people's region, Ethiopia. In the bivariate logistic regression analyses, history of sexual intercourse, had children, ever encountered sexual and reproductive health problems, source of information about youth friendly reproductive health services, respondents' knowledge of VCT as a type of youth friendly reproductive health services, a belief that adolescent and youth friendly reproductive health (AYFRH) services can improve youth's health, respondents' knowledge about the availability of adolescents and youth friendly reproductive health services out of school settings and respondents ever visited service facility; but missed the service were associated with the utilization of youth friendly reproductive health services. According to the multivariable

analysis, youths with a good knowledge of the type of adolescents and youth friendly reproductive health services were 1.68 times more likely to utilize AYFRH service than their counterparts. Those youths who knew about the availability of youth friendly reproductive health services in their school were five times more likely to utilize the service than those who did not know (Helamo et al., 2017).

In a study it came out that having knowledge about the youth friendly services was significantly associated with the utilization of youth friendly services. (Motum et al., 2016).

2.6.3 Association between cost of service and utilization of AFHS

In developing countries, there is still lack of primary health care services. There are reasons that prevent adolescents to access the services which includes the cost and/or lack of convenience (Society of Adolescent Medicine, 2004). A study conducted in Nepal in 2012 shows that, the reason for not accessing health care were insufficient drugs (61%), distance to health care center (22%), staff unavailability (19%) and money (7%). Sex, ethnicity and distance were found significantly associated with access to health care services (Paudel et al. 2012). In another study conducted, the statistics revealed that there was no significant relationship between high cost and utilization of the AFHS (Appiah – Mensah, 2016).

2.6.4 Association between obtaining needed services and utilization of AFHS

A study was conducted to evaluate youth-friendly health services: young people's perspectives from a simulated client in urban South Africa Fifteen primary healthcare clinics in Soweto were randomly sampled: seven provided the YFS programme. Simulated clients conducted 58 visits; young men requested information on condom reliability and young women on contraceptive methods. It was concluded after the study that, health facilities providing the YFS programme did not deliver a more

positive experience to young people than those not providing the programme. More positive experiences were characterized by young people as those where healthcare workers were friendly, respectful, knew how to talk to young people, and appeared to value them seeking health information. Less positive experiences were characterised by having to show soiled sanitary products to obtain contraceptives, healthcare workers expressing negative opinions about young people seeking information, lack of privacy, and inadequate information. They thereby concluded that, they were also no more likely to be recommended by simulated clients to their peers for utilization neither will they also continue to seek for services (Geary et al., 2015).

2.6.5 Association between privacy and confidentiality and utilization of AFHS

One of the major reasons behind not accessing the health facilities by young people and adolescents is the fear about lack of confidentiality, for instance, fears about being recognized in a clinic waiting room with the possible stigma attached (Kambikambi 2014). A study done on adolescents' and young adults' on reports of barriers to confidential health care concerns and time alone with a provider at last health-care visit shows that, when they were asked if they would ever not go for sexual or reproductive health care because their parents might find out, they said yes. This confidentiality concern was more common among younger adolescents (20% of 15-years-old) than older adolescents (14% of 17-years-old). Moreover, 15-years-old were significantly more likely than 17-years-old to report confidentiality concerns after controlling for race, SEP, and sexual experience and education (ARR = .63, CI .41– to 98). Only a few other characteristics were associated with 15 to 17-years-old reporting confidentiality concerns (Fuentes et al., 2018).

2.6.6 Association between timing (days/period within the week) for service and utilization of AFHS

A study was conducted to assess the reproductive health services utilization and associated factors among adolescents in Anchar district, east Ethiopia using a mixed method. Result of FGD indicates that, working hours of the health institutions is one problem; since they work during school hours they must miss the day's classes to get the service. This was among the main reasons why adolescent friendly services were under-utilized (Ansha et al., 2017). Again, there was no significant association between timing and utilization of the AFHS at the Ashaiman polyclinic according to a study conducted in Ghana (Appiah-Mensah, 2016).

Summary of Literature Review

Literature revealed that despite the initiatives put in place towards improving AFHS of the adolescents, barriers still exist which affect the utilization of services by the adolescent. Studies across the globe point to the ways the services are given and the unfriendliness nature of the facilities. This is evidenced in factors such as service delivery hours, cost of services, lack of confidentiality and facility organization. Others are individual factors such as lack of knowledge and attitude. Literature also revealed that there is concerted effort by many countries to reach the adolescents with reproductive health services and though little has been achieved, a lot more need to be done to reach a good threshold to rid the adolescents from reproductive health problems and other associated health problems.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

The research methodology and procedures that were employed in this study are presented here. They include study area, study type, study population, sample, sample size, sampling techniques, data collection technique and tools, data entry and cleaning, data analysis, ethical consideration were limitations of the study.

3.1 Study Area

Ghana is located in Africa, which lies in the center of the Gulf of Guinea coast. Ghana borders with three countries: Burkina Faso (602 km) to the north, Ivory Coast (720 km) to the west, and Togo (1,098 km) to the east. To the south are the Gulf of Guinea and the Atlantic Ocean. The Greenwich Meridian, traverses the eastern part of Ghana at Tema. With a total area of 239,460 square kilometers. Ghana encompasses plains, low hills, rivers including Lake Volta, the world's largest artificial lake. Ghana can be divided into four different geographical ecoregions; the coastline is mostly a low, sandy shore backed by plains and scrub and intersected by several rivers and streams while the northern part of Ghana features high plains. South-west and south-central Ghana is made up of a forested plateau region consisting of the Ashanti uplands and the Kwahu Plateau. The Volta Basin takes up most of south-central Ghana and Ghana's highest point is Mount Afadjato which is 885 m (2,904 ft) and is found in the Akwapim-Togo ranges. The climate is tropical and the eastern coastal belt is warm and comparatively dry, the south-west corner of Ghana is hot and humid, and the north of Ghana is hot and dry. Ghana lies between latitudes 4° and 12°N. South Ghana contains evergreen and semi-deciduous forests consisting of trees such as mahogany, odum, ebony and it also contains oil palms and mangroves with shea trees, baobabs and acacias found in the northern part.

The regions of Ghana constitute the first level of subnational government administration. There are ten regions, further divided into 216 local districts. The current population of Ghana is 29,101,711 based on the latest United Nations estimates. This population is equivalent to 0.38% of the total world population. The median age in Ghana is 20.5 years. Approximatel, fifty four percent (53.9 %) of the population is urban (15,533,945 people in 2017). When it comes to the adolescents, the ages between 15-24 years comprises of (18.66%) which stands for 5,020,538 of the total population (Ghana Demographics Profile, 2017).

The Northern Region which is made up of twenty-six (26) districts, occupies an area of about 70,383 square kilometers and is the largest region in Ghana in terms of land area. It shares boundaries with the Upper East and the Upper West Regions to the north, the Brong Ahafo and the Volta Regions to the south, and two neighbouring countries, the Republic of Togo to the east, and Ivory Coast to the west. The land is mostly low lying except in the north-eastern corner with the Gambaga escarpment and along the western corridor. The region is drained by the Black and white Volta and their tributaries, Rivers Nasia, Daka, among others.

The climate of the region is relatively dry, with a single rainy season that begins in May and ends in October. The amount of rainfall recorded annually varies between 750 mm and 1050 mm. The dry season starts in November and ends in March/April with maximum temperatures occurring towards the end of the dry season (March-April) and minimum temperatures in December and January. The harmattan winds, which occur during the months of December to early February, have considerable effect on the temperatures in the region, which may vary between 14°C at night and 40°C during the day. Humidity, however, which is very low, mitigates the effect of the daytime heat. The rather harsh climatic condition makes the cerebrospinal

meningitis thrive, almost to endemic proportions, and adversely affects economic activity in the region. The region is still under populated and under cultivated. The main vegetation is classified as vast areas of grassland, interspersed with the guinea savannah woodland, characterized by drought-resistant trees such as the acacia, baobab, shea nut, dawadawa, mango among others.

3.1.1 Location and Size

Kumbungu District is one of the twenty-six (26) districts in the Northern region of Ghana. The district was carved from the Tolon-Kumbungu District, with Kumbungu being its capital. The district has five sub-districts. The district shares boundary with Tamale Metro to the South, West Mamprusi and West Gonja to the North, Savelugu/Nanton municipality in the East and Tolon district to the West respectively (Kumbungu Health Directorate Annual Report, 2016).

3.1.2 Population

The estimated population for the year 2017 is 46,171 whiles population on the ground based on two major household registration figures stands at (88,791) which is mostly rural and covers 144 communities with a population density of 88.7/square kilometer. The area is predominantly inhabited by the Dagomba ethnic group with a few other tribes from other parts of the country for example, Dagarbas and Frafras. Languages spoken include Dagaare, Frafra, Dagbani, Mamprusi, Hausa and English who are mostly working in government and non-governmental departments (Kumbungu Health Directorate Annual Report, 2016).

3.1.3 Social-cultural Activities

Socio-cultural and religious norms in the district vests most authority on the hands of chiefs, religious leaders and clan heads. The system of inheritance is patrilineal thus making women more dependent on men for resources. Women are therefore disadvantaged in terms of access to education, health, and other social amenities in relation to men though they face the same levels of poverty. The females comprise 51% of the population and 49% are male. However, only 3.1% of household heads are women. The average household size is 8.7. Religious practices include that of the Traditionalists, the Christians and Muslim (Kumbungu Health Directorate Annual Report, 2016).

3.1.4 Geographical Profile

In relation to the geographical profile of the district, the vegetation is savanna grassland and the land is low lying. A greater portion of the district is accessible to transport throughout the year except the Singa area in the Dalun sub-district which is over the river and considers hard to reach during the rainy season due to flooding from the White Volta (Ghana Statistical Service, 2014).

3.1.5 Economic Activities

The main economic activity is farming with the cultivation of food crops such as yams, maize, beans, groundnuts, and green leafy vegetables. The women and children throughout the district also engage in picking of shea nuts for oil. The oil extracted is for domestic and commercial purposes. Cattle, sheep, goat and guinea fowl rearing is also carried out. A small proportion of the population is involved in trading. There are market days, which occur once in a week in the district capital. This falls to a large extent on different days of the week allowing the movement of traders and buyers from other parts of the district and beyond to transact business throughout the district (Kumbungu Health Directorate Annual Report, 2016).

3.1.6 Transport and Communication

On transport and communication, with the thriving mobile telephone in the country, almost all the communities have accessible telephone communication as well as with transport, means of transport is always available, one can move in and out of Kumbungu within 24 hours under normal circumstances whilst relying on public means. Motorcycles are used to a great extent bicycles rather less (Kumbungu Health Directorate Annual Report, 2016).

3.1.7 Education

The basic educational system has 80 public primary schools, 23 Junior high schools and 1 Senior high school. There are 80 public nurseries which cater for children of pre-school age. The level of illiteracy is high. Gross enrolment is 21,518 but it's about 75% for boys and 25% for girls (Kumbungu Health Directorate Annual Report, 2016).

3.1.8 Health Infrastructure

There are 24 health facilities operating in the district, some are permanent with structures while some are outreach points. The Kings Medical Centre serves as a referral center for the rest of the health facilities. There are Eighteen (18) operational CHPS zones, thus; Kpulinyin, Gbullung CHPS, Gizaa CHPS, Voggu, Cheshegu, Mbanayili, Singa, Gupanerigu, Cheyohi, Tibung, Gumo, Jakpahi, Zugudaboni, Satani, Sakuba, Zangbalun, Kpegu, Nawuni CHPS. There are two (2) Health centers and these are located in Dalun to the north and Kumbungu to the south (Kumbungu Health Directorate Annual Report, 2016).

3.1.9 Social Amenities

Most communities enjoy electricity from the national grid. Eighty percent of the population has adequate access to potable water. The major sources of water supply in the district include the following: wells, boreholes, hand-dug wells and pipe borne water (Kumbungu Health Directorate Annual Report, 20116).

3.1.10 Sanitation

Sanitation is very poor in the district. Open defecation in the bush is a common practice. Garbage and refuse are littered all around and in the major towns there are a few refuse dumps. About 10% of the population has access to build toilets. There is no cesspool emptier in the district to dislodge liquid waste in the district.

3.2 Study Design

Observational study was carried out, where the researcher had no intervention for the observation. It was a social research technique that involved the direct observation of phenomena in their natural setting. The researcher only observed an ongoing behaviour and analyze the researchable situation but did not intervene. This type of study draws inferences from a sample to a population where the independent variable is not under the control of the researcher because of ethical concerns or logistical constraints. It is simply studying behaviours that occur naturally in natural contexts.

3.3 Study Method

A mixed method was employed in this study. It involves philosophical assumptions, the use of both approaches in a study. Both approaches in cycle so that the overall strength of a study will be greater than either qualitative or quantitative research (Creswell and Clark, 2007). It seeks to result in a comprehensive look at the research problem from many perspectives and offers a more complete picture when analyzing

the results. The results from the methods may validate each other and provide stronger evidence for a conclusion. It can also add insights and understanding that may be otherwise missed and help to increases the generalizability of the results. Qualitative questions were included to allow reflection on what research participants meant by their answers or simply to provide a more engaging social experience.

3.4 Study Population

The study centered on the following categories of people; adolescents, peer educators, health service providers and facility in-charges.

3.5 Inclusion and exclusion criteria

3.5.1 Inclusion criteria

The inclusion criteria were all adolescents who were between the ages of 10 and 19 years and reside in the selected communities within the Kumbungu district.

3.5.2 Exclusion criteria

The exclusion criteria were children who were below 10 years, any person above 19 years and also those within the adolescent age group who were in the selected communities but are not natives in the district.

3.6 Sample

Adolescents (age 10-19 years) were use in this study. This is a critical developmental period and is conventionally understood as the years between the onset of puberty and the establishment of social independence (Curtis, 2015). Many adolescents make the transition to adulthood in good health while others do not and may face some of the health problems most especially those related to their reproductive health. Some of these health problems affect the individual during adolescence whiles others affect the individual later in life (WHO, 2012). It is noted that different factors like poverty, gender inequality, socio-cultural and economic status play a crucial role in

determining adolescents' knowledge and access to AFHS (Kurebwa 2017). Notwithstanding these factors that are often challenging to the adolescents, AFHS are needed for them to access and utilize because of their high vulnerability to both health and non-health related issues

3.7 Sample Size

A sample size of 409 was used based on the Slovin's Formula;

(Slovin, 1960).

$$n = \frac{N}{(1 + Ne2)}$$

Where n= required sample size, N= population size and e= margin of error.

Now, N= 13,631 thus the population of adolescents in the district.

e= 5% (standard value of 0.05).

$$n = \frac{13{,}631}{(1 + 13{,}631 * 0.05 * 0.05)}$$

n = 389

The sample was further increased by 5% to account for contingencies such as non-response or recording error. The total sample size then became: 389+20 = 409.

The final sample size was then divided among the number of clusters (5) to determine the number of observations to be made from each cluster. That is 409 adolescents were interviewed across the five sub districts in Kumbungu district. The number of respondents to be selected in a particular sub-district was based on the total number of adolescents in that sub-district. These participants were randomly selected from the various communities that were picked under the five sub districts. Two health service providers were selected purposively from three sub –districts and one each from the other two for the interview using the interview guide.

3.8 Variables

3.8.1 Dependent Variables

- Knowledge, Access and Utilization of adolescent friendly health services.

3.8.2 Independent Variables

The independent variables that were used to determine the utilization of the AFHS were;

- Environment of the centers, cost, service provision, confidentiality, privacy, time of service, willingness of service providers to provide AFHS to adolescents and
- Socio-economic factors (age, sex, educational level, religious background).
- Perceived health benefits.

3.9 Data collection Techniques

Qualitative research technique such as face-to-face in-depth interviews were held with health service providers in the District. This was necessary so as to explore experiences, opinion and attitudes. It was also because, the study needed to explore more into the behaviour of the respondents to be able to confirm the quantitative data that was collected.

With regards to the administration of questionnaire, the interview method was employed to collect data from the adolescents and other health providers. Three research assistants were selected and trained to have a good understanding of the whole exercise and also understand the respondents. A test administrator guideline was created for them to follow in conducting the interviews to have much objectivity in the process as possible. Interview in this context meant that, the research assistants assisted all respondents to answer the questions by reading it to them first and then choosing the appropriate response given to them by the respondents. This process permited anonymity and resulted in more uniform responses. It eliminated some bias

as it helped to avoid some respondents obtaining help from the research assistants by reading to them with a better understanding to answer whiles other respondents answer them on their own, based on how they also understand it. During the process of the interview, all respondents were given the chance to decide the preferred language they wanted to use so as to make them feel comfortable and able to articulate their opinions. The research assistants were made to sit with each participant individually to asked the questions and choose the appropriate answer given by the respondent. They were trained to do this in a standard way. They were not required to explain any question further, or use other words to describe it, only to repeat it and allow the participant to think about their answers. This process was to give all adolescents the opportunity to answer questions fairly. They were only allowed to seek for further explanation where the need arise.

The respondents in this study were in two forms; thus, the adolescents (the right holders) and the service providers (duty barriers). The service providers were included to help obtain supportive information and also assess variables such as their readiness to render the needed services to the adolescents at the facility level (service delivery points). Based on that, there was one set of questionnaire for the adolescents and another set for the duty barriers.

A pre-test was carried out among fifteen (15) individuals to ensure that the questionnaire was easily understood. The needed modifications required, were made before proceeding for the general study.

3.10 Data collection Tools

Questionnaires were used for the data collection. The questionnaire was constructed by reviewing various documents, including existing questionnaires that have been used in previous researches. A number of closed ended questions questionnaire with few open-ended questions were distributed for adolescents to complete by filling

them. The questionnaires were translated into the local language and back translated to English to ensure accuracy and appropriateness of the questions to be administered in the local language.

An interview guide was used to conduct the in-depth interviews for the service providers. The first part of the questionnaire assessed information on the socio-demographic characteristics of the study participants. The other parts were structured according to the way the specific objectives were with all carrying fourteen set of questions. Some main questions had sub ones based on the answer to the preceding questions. Many of the questions included, gave directives to skip to future questions depending on the participants' initial response.

3.11 Data entry and Cleaning

The quantitative data collected was manually entered and stored on a computer. It was duplicated and stored on a pen-drive and a hard disc. A password was created to ensure a proper security and protection on the computer. Regarding the data cleaning, there was re-reading in all the interviews that were conducted. The pattern for the interview was then identified and appropriate themes were built for them. They were then coded and made ready for analysis.

Regarding data gathered from all the interviews in the qualitative study, they were transcribed, typed out and stored in files created on a personal computer. A password was again placed on the transcribed data to prevent access by unauthorized persons. Printed versions of the transcripts and the voice recorder that was used for the study was kept in a cabinet under lock. Access to the transcribed data was available only to the researcher and supervisor for purposes of ensuring confidentiality.

3.12 Data Analysis and Presentation of Results

Quantitative data were coded and analyzed using one of the statistical packages. Thus, statistical package for social sciences (SPSS) software. Descriptive statistics such as percentages, frequencies, cross-tabulations, were used to describe various variables.

With the qualitative data, thematic content analysis was used to report the views of participants word for word. The validation of information helped the researcher in recognizing the point at which no new information emerged from the interview leading to saturation of the data. Following this, various themes that emerged were development. This was achieved by reading the transcripts over and over to ensure that they were representative of the exact expression by the respondents regarding the phenomenon under investigation. Data from the field notes were also analysed to boost the understanding for the various categories and themes that emerged. Verification of the themes were done by getting back to some of the participants who had agreed to do so. Interviews that were conducted in the local language were translated into the

English language after which the data was then transcribed verbatim. Such transcriptions were written, typed and printed out. The transcribed data was first read thoroughly for meaning and understanding. Coding of the data was done by identifying similar words, phrases, sentences, ideas and concepts. In word document, headings for the various themes were created, categorized, coded, while excerpts and identity to quotes were also cited.

3.13 Ethical Considerations

A research project is a process which has ethical implications. The researcher therefore conducted this research taking into consideration the ethical issues. The following ethical principles guided the study. Respect for persons, respect for

beneficence and respect for justice. These principles are based on the human rights that must be protected during any research project including the right to self - determination, privacy, anonymity, confidentiality, fair treatment and protection from discomfort and harm. First of all, an introductory letter (Appendix IV) was obtained from the University for Development Studies appropriate authorities. This letter was presented to the Kumbungu District Health Directorate. The district health director of health service upon receipt of the introductory letter minuted on it to grant the researcher permission to undertake the study. Verbal consents were obtained from the chiefs of the various communities where respondents were selected. Permission was once more sort through a consent form of which participants were asked to consent to if they were willing to participate in the research. They were then assured of confidentiality of every information they were going to provide. This meant that only respondents who gave consent were used. They were encouraged to participate in the study as much as they can but were also made aware that the study was voluntary and they could therefore withdraw at any point in time during the process if the need arises. There were no compensations for study participants. Finally, all participants were made aware that, the findings of this study were going to be published to the general public.

3.14 Limitation of the study

- During data collection process, some adolescent who had visited the health facilities for a long time had forgotten some occurrence when they were asked some questions hence recall bias was possible in the study.
- It was assumed that all the respondents would understand and answer the questions correctly. However, questions were interpreted by different research

assistants hence homogeneity in understanding and responding the same way could not be guaranteed.

CHAPTER FOUR

RESULTS

4.0 Introduction

This chapter presents on the key findings from the study. The study data was gathered among 416 adolescents both in and out-school.

Two types of data are presented. Firstly, quantitative data which was derived from descriptive analysis of the questionnaire and presented in the form of percentages, tabular forms as well as charts. The results cover the socio-demographic characteristics, knowledge level of adolescents about adolescent friendly health services, access and utilization of adolescent friendly health services and strategies to improve knowledge, access and utilization of adolescent friendly health services. The results are organized according to the study objectives.

4.1 Socio- Demographic Characteristics of Respondents

This section reports on the characteristics of respondents that were involved in the data collection. Variables that were captured under this section in the study include age of respondents, sex, marital status, educational level, employment status and religion of the respondents.

Table 4.1 shows that, age of the respondents in this study ranged from 10 to 19. The ages of the adolescents were categorized into two groups, thus 10 to 14 which is described as early adolescents and 15 to 19 described as late adolescent. The distribution of age of the participants indicated that, about two thirds of the respondents 275 (66.10%) were between the ages of 15 and 19 whiles one third of the respondents were within the age group of 10 and 14. A slight higher than half the number of respondents that undertook the study were males who constituted 226

(54.30%). Very little proportion of respondents had never had any form of formal education. Out of the total number of adolescents interviewed, a great number 297 (71.40%) had attain SHS level. A sizable number of respondents have had primary education with just a few been in SHS. In the religious categorization, majority of the respondents 364 (87.50%) were Muslims followed by Christians with only 0.50% been traditionalist. An overwhelming number of the respondents 411 (98.80%) were single while minority were married. With regards to employment, majority of the respondents 392 (94.20%) were unemployed leaving the very few employed.

Table 4.1 Socio demographic characteristics (n=416)

Variable	Frequency	Percentage (%)
Age		
10-14	141	33.9
15-19	275	66.1
Gender		
Male	226	54.3
Female	190	45.7
Religion		
Christian	50	12.0
Muslim	364	87.5
Traditionalist	2	0.50
Marital Status		
Single	411	98.8
Married	5	1.2
Education		
Uneducated	32	7.7
Primary	77	18.5
JHS	297	71.4
SHS	10	2.4
Employment Status		
Employed	24	5.8
Unemployed	392	94.2

4.2 Knowledge level of adolescents on AFHS

Data collected on knowledge level of adolescents with regards to adolescent friendly health services is presented on Table 4.2. Results from the study reveals that knowledge base of students with respect to adolescent health challenges was as high

as 84.60%. Out of the 352 respondents who had knowledge on the health challenges they face, a good number of them 273 (77.5%) knew of disease conditions followed by menstrual issues and then teenage pregnancy. Abortions, intended and unintended injuries, substance abuse, personal hygiene and sexual violence were all identified as some of the health challenges known by respondents as indicated in Table 4.2 below. A summary of the knowledge on the health challenges indicates that, majority of the respondents 269 (76.4%) knew of only one form of the health challenge they face while 1/4 had knowledge on at least two types leaving less than 2% of them knowing three or more forms of the health challenge.

The results again showed that nearly half the population 207 (49.8%) in the study have ever had education and know of some adolescent friendly health services within their communities and its environs. A little over half (50.2%) of the respondents interviewed said they had no knowledge of services available which are adolescent friendly. Despite the high number of the respondents who did not know of the existence of AFHS, those that knew about it got to do so mostly through the schools (48.3%) followed by health care providers (17.9%), family members (14.5%) and other sources as indicated in Table 4.2.

A little over half of the respondents (55.3%) indicated that the education on AFHS is not enough whiles 186 of the population said there is enough education. A great number of respondents (58.3%) had knowledge on only one form of service provided with a little over 40% having knowledge on two or more services. Disease treatment including STIs (67%) was well known followed by family planning services (14.6%), and screening/check – ups. The provision of health information/counselling, nutritional management, antenatal and postnatal services were services respondents did not have much knowledge on.

TABLE 4.2 Knowledge level of adolescents on AFHS (n=416)

Variable	Frequency	Percentage (%)
Knowledge on adolescent health challenges		
Yes	352	84.6
No	64	15.4
Health challenges known by adolescents		
Disease condition	273	77.5
Lack of health information	16	4.5
Menstrual issues	25	7.1
Sexual violence	5	1.4
Issues with personal hygiene	3	0.9
Substance abuse	2	0.6
Intended and unintended injuries	2	0.6
Abortions	2	0.6
Teenage pregnancy	24	6.8
Levels of knowledge by respondents on AFHS		
know about only one health challenge	69	76.4
Know about two health challenges	78	22.2
Know about three or more health challenges	5	1.4
Ever had education on AFHS		
Yes	207	49.8
No	209	50.2
Source of information on education of AFHS		
School	100	48.3
Church	4	1.9
Friends	10	4.8
Family members	30	14.5
Healthcare providers	37	17.9
Media	26	12.6
Is there enough education on AFHS		
Yes	186	44.7
No	230	55.3
AFHS known by adolescents		
Treatment of disease including STIs	138	67
Nutritional management	30	14.6
Counselling	5	2.4
Family planning services	4	1.9
Antenatal services	8	3.9
Post-natal services	6	2.9
Check - ups/ Screening	15	7.3
Different levels of knowledge on AFHS		
Know about only one services	120	58.3
know about two services	78	37.9
know about three services	8	3.9

4.3 Access to AFHS

This analysis was carried out to show how adolescents access AFHS when they are faced with health challenges. Access was measured by whether adolescents go in to obtain healthcare services available to them at various health facilities. The study revealed that, the entire respondents (n=416) within the study have ever had a health problem and out of this, a significant number of them thus 191 constituting (45.9%) have never access healthcare services from any health facility whenever they are faced with a health challenge. Out of this number who have never access healthcare, approximately 2/3 of them (66.50%) get their health issues resolved through visiting pharmacy/chemical shops and this is almost 1/3 (30.5%) of the entire respondents who have ever had a health problem. The other outstanding respondents (n=64) also adopted various strategies to have their health issues resolved. Some which included the use of local medicines like herbs to treat which was found to be (8.4%) of the whole study population, followed by others who leave their problems unattended to (5.6%) and the last group who always sort counselling from their teachers and parents.

As indicated in Table 4.3, the analysis further revealed that, almost the entire respondents admitted that, it is important for every adolescent to access AFHS.

TABLE 4.3 Access and utilization of AFHS

Variable	Frequency	Percentage (%)
Have you ever had a health problem		
Yes	416	100.0
Total	416	100.0
Did you seek for health care service		
Yes	225	54.2
No	191	45.8
Total	416	100.0
Was it by your own will		
Yes	51	22.7
No	174	77.3
Total	**225**	**100.0**
Who asked you to visit the facility		
A relative	23	13.2
Teacher	2	1.2
Parents	149	85.6
Total	**174**	**100.0**
Services often sort for		
General health services	212	94.2
Testing, counselling and treatment of STIs	5	2.2
Family planning services	4	1.8
Post abortion care	1	0.5
General counselling	3	1.3
Total	**225**	**100.0**
If no to seeking health care services, how did you resolve it?		
Pharmacy /chemical shop	127	66.5
Others	64	33.5
Total	**191**	**100.0**
Is it important to access AFHS		
Yes	405	97.4
No	11	2.6
Total	**416**	**100.0**

4.3.1 Factors affecting access to AFHS

Table 4.4 provide information concerning the reasons why a good number of respondents were not seeking healthcare services whenever they had a health

challenge. Participants gave various reasons for not ever accessing any of the healthcare facilities for any services even when they had health issues. The cost of accessing healthcare services was the greatest hindrance (63.40%). There was 37.70% for health facilities being far from the houses of respondents. No need for the service and long waiting time at facilities both had 27.20% and 24.60% respectively. Other respondents 9.40% said, they had no idea of the existence of AFHS in the various health facilities. Poor level of treatment, stigmatization and facilities being too close to respondents' house were all noted as part of the contributing factors that prevent adolescents from accessing AFHS as shown in Table 4.4 below.

TABLE 4.4 Factors affecting access to AFHS (n=191)

Variable	Frequency	Percentage (%)
Not adolescent friendly		
Yes	36	18.9
No	155	81.1
Far from my house		
Yes	72	37.7
No	119	62.3
Costly		
Yes	121	63.4
No	70	36.6
Is too close to my house?		
Yes	4	2.1
No	187	97.9
Long waiting time		
Yes	47	24.6
No	144	75.4
Stigmatization		
Yes	12	6.3
No	179	93.7
No idea on AFHS existence		
Yes	18	9.4
No	173	90.6
No need for the service		
Yes	52	27.2
No	139	72.8
Poor level of treatment effectiveness		
Yes	16	8.4
No	175	91.6

4.3.2 Adolescents satisfaction with AFHS accessed and utilized

Receiving quality services when one seeks for healthcare most at times serves as a motivation to the client to continue using the health facility anytime they face a health challenge. This is not so different from adolescents; the satisfaction adolescents obtain when they sought AFHS are described in the table below. Regarding queuing for services, participants report shows that out of the 225 adolescents who sought for healthcare services at various health facilities, an appreciable number of them 105 (46.7%) queued for about one to thirty (1 - 30) minutes before seeing the provider. Little to a quarter of them (24%) also spent thirty to an hour whiles 14.2% spent over one hour before seeing the service provider. Notwithstanding all these, very few participants numbering 34 did not wait at all in any queue before accessing the services needed. High number of participants (98.7%) said they received the services they needed with almost all respondents (99.7%) reporting that service providers were welcoming and friendly to them.

A figure little above 1/5 of respondents (21.8%) was obtained with respect to if they are allowed by service providers to ask questions bordering them during consultation out of which 98% said they were satisfied with the answers given to them. Almost an equal percentage of respondents 47.6% and 47.1% used cash and carry (paid) and NHIS respectively to aid them obtain services needed whiles a minority of them had their services free. From those that practiced cash and carry method, the highest amount paid was GHS500 with the least been GHS2.00. About 1/3 of them paid between GHS21 – 50, followed by 27.1% paying GHS2 -20 whiles about 10 respondents could not remember the amounts they paid. Majority of the respondents (94.4%) reported that they could afford the charges. Parents were their main sources

of finance with a percentage of 87.9%. Only 2.8% of respondents financed their own services.

TABLE 4.5 Adolescents satisfaction with AFHS accessed and utilized (n=225).

Variable	Frequency	Percentage (%)
Duration of queuing for AFHS		
Did not wait at all	34	15.1
1 - 30 minutes	105	46.7
30 - 60 minutes	54	24
>60minutes	32	14.2
Did you receive needed services		
Yes	222	98.7
No	3	1.3
Was service provider welcoming and friendly		
Yes	223	99.1
No	2	0.9
Did the service provider allowed you to ask questions?		
Yes	49	21.8
No	176	78.2
Were you satisfied with the service providers' answers?		
Yes	48	98
No	1	2
Total	**49**	**100.0**
Avenue used to obtain service		
Free (no amount charged)	12	5.3
Use of NHIS	106	47.1
Charged (cash and carry)	107	47.6
Amount charged		
GHS 2 – 5	4	3.7
GHS 6 – 10	16	14.9
GHS 11 – 20	29	27.1
GHS 21 – 50	36	33.7
Over GHS 50	12	11.2
Don't remember	10	9.4
Could you afford the charges		
Yes	101	94.4
No	6	5.6
Total	**107**	**100.0**
Who paid for the bills		
Myself	3	2.8
My parents	94	87.9
Friend	2	1.9
Relative	8	7.4
Total	**107**	**100.0**

4.4 Strategies to Improve Knowledge, Access and Utilization of AFHS

Having different ways to deal with how adolescents within society obtain information about their health, get access and utilize AFHS will go a long way to reduce their health challenges most especially when these suggestions emanate from the adolescents themselves. Information gathered from the study suggest that, almost the entire participants (97.6%) are of the view that there should be more education on AFHS. A significant number (58.95) were of the view that, health workers should be used for the education followed by the use of teachers and family members representing 23.8% and 8.8% respectively.

They continued to suggest that, schools, health facilities, homes among others in a descending order as shown in table 4.6 should be the media used to disseminate health information to the adolescents. Pertaining to the place of accessing services, almost 1/2 of the respondents (49.0%) said they will prefer using the hospital followed by adolescent/youth corners (36.5%) and lastly the clinics with a percentage of 11.1%. Few others suggested homes and herbal centers. Advancing on the strategies to improve access to AFHS, a little to 2/3 of the participants (61.5%) suggested weekends to be the most preferable period within the week they would like to access healthcare whiles the remaining are of the view of using weekdays.

In addition, respondents' suggestion on whether or not they would like to receive range of services at various service centers per visit was yes for 54.1% of them. On the issues of continuing to seek for services when they are referred, majority (90.4%) said yes.

TABLE 4.6 Strategies to Improve Knowledge, Access and Utilization of AFHS (n=416)

Variable	Frequency	Percentage (%)
Do you think there should be more education on AFHS		
Yes	406	97.6
No	10	2.4
Suggested personnel for education and other services		
Health workers only	245	58.9
Trained peer educators	24	5.8
Family members	37	8.8
Teachers	99	23.8
Religious leaders	11	2.7
Place of accessing services		
Hospital	204	49
Clinics	46	11.1
Adolescent/youth corners	152	36.5
Pharmacy	7	1.7
Educational institutions	4	1
Others	3	0.7
Medium for education on AFHS		
Health facilities	92	22.1
Homes	91	21.9
Schools	149	35.8
Church/Mosque	33	8
Media (TV, radio, internet)	38	9.1
Others	13	3.1
Period within the week preferred for services		
Weekdays	160	38.5
Weekends	256	61.5
Would you like range of services offered to you at a service center per visit?		
Yes	225	54.1
No	191	45.9
Would you continue to seek for services on referral?		
Yes	376	90.4
No	40	9.6

4.4.1 Community involvement and suggestions to improve upon AFHS

Table 4.7 presents information on the suggestions made by participants as to how attitudes of adults could help improve the adolescents' ability to access AFHS, ways

of changing those ideas that negatively affect access and general means that will help improve AFHS at large. On how participants think adults should behave to help improve access, it was recorded that; adults should grant permission or accompany adolescents to health facilities recorded 34.2%. A little above 1/4 of them (25.1%) also suggested that, adults should counsel/educate adolescents on AFHS. In addition, provision of financial support to the adolescent was also mentioned by seventy-eight of the participants (18.3%). Participants were also of the view that if adults should desist from treating adolescents at home, assist them with regular duties, among others as shown in Table 4.7, access of AFHS will improve. To help solve the negative attitudes of the adults in the communities towards the access of AFHS, 320 respondents (76.9%) suggested the communities should be educated more on AFHS.

The respondents again suggested on ways by which AFHS can generally be improved upon. Very key among them was respect and care for the adolescents at service points which had 76%yes from 316 respondents. 287 respondents were also of the view that, services should either be free or affordable to the adolescents. This was followed by improving health education on AFHS which had 43.3% yes. Finally, they also suggested that, there should be convenient working hours at service points among others which are shown in Table 4.7 below.

TABLE 4.7 Community involvement and suggestions to improve upon AFHS (n=416)

Variable	Frequency	Percentage (%)
Attitude of adults that could help adolescents access AFHS		
Counsel adolescents on AFHS	105	25.1
Assist adolescents with regular duties	18	4.3
Provide financial support to adolescents	76	18.3
Grant permission or accompany adolescents to heath facilities	142	34.2
Renew or register adolescents with NHIS	11	2.7
Avoid stigmatizing	7	1.7
Avoid treating adolescents at home	40	9.6
Open free and frequent communication lines	17	4.1
Suggestion to change adult's negative attitudes		
Improve education to adults on AFHS	320	76.9
Negotiate with adults	80	19.2
No idea	16	3.9
Suggestions to improve on AFHS		
Respect and care for adolescents	316	76
Free or affordable services	287	69
Convenient working hours at point of service	136	32.7
Increase health education	176	43.3
Privacy and confidentiality	174	41.8
Short waiting time at service point	130	31.3
Actively involving adolescents in all aspect of AFHS	45	10.8
Provide appropriate package of health care or refer	63	15.1

Availability of required equipment and basic services	77	18.5

CROSS TABULATIONS

4.5 Cross Tabulation Analysis

Further analysis of various points under the specific objectives were analyzed using the chi-square cross tabulation method. Adolescent knowledge on AFHS as well as access and utilization of AFHS were re-coded as knowledge of AFHS, no knowledge of AFHS and have utilized AFHS and have not utilized AFHS respectively. All the demographic characteristics that are perceived to have influence on knowledge and access were then cross tabulated with knowledge and access level of AFHS. Socio-demographic characteristics used in this analysis included age, sex, religion, marital status, highest level of education and employment status.

Beginning with age, those within the group of 15-19 years had an insignificant increase in knowledge (49.8%) when compared to those within 10-14 years. Generally, the number of respondents from each age group without know-how on AFHS was greater than those that knew. The table below indicates that age had no significant relationship with knowledge as $p>0.05$.

The statistics revealed that there is a significant association between gender and knowledge of AFHS since p-value was 0.004 ($p<0.01$) with a chi-square statistic of 8.119. With respect to the individual group knowledge level, it showed that, males were more knowledgeable with 55.3% as compared to their opposite gender.

Furthermore, religion, education, marital and employment status of respondents had no significant relationship with knowledge. In spite of their insignificance as groups when compared to knowledge, there was some important differences wealthy to be noted. In terms of religion, traditionalist had a complete 100% knowledge on AFHS. Married couples had 80% knowledge whiles a little lower than half (49.4%) those

who are singled rather had knowledge. There was a clear difference when it came to that of the educational level as those in SHS had a higher knowledge level of 70% and that was surprisingly followed by primary school attendants with a value of 58.4%. Finally, those employed were also more inclined in knowledge than the unemployed.

Table 4.8 Relation of demographic-characteristics with knowledge on AFHS.

Variables	Knowledge		Pearson Chi Square	
	Knowledge on AFHS n (%)	No knowledge on AFHS n (%)	Chi-square	P-value
Age				
10-14	70 (49.6%)	71 (50.4%)	0.803	0.370
15-19	137 (49.8%)	138(50.2%)		
Gender				
Male	125 (55.3%)	101 (44.7%)	8.119	**0.004**
Female	82(43.2%)	108(56.8%)		
Religion				
Christian	25 (50.0%)	25 (50.0%)	0.021	0.882
Muslim	180 (49.5%)	184 (50.5%)		
Traditionalist	2 (100.0%)	0 (0.00%)		
Marital status				
Single	203 (49.4%)	208 (50.6 %)	1.972	0.160
Married	4 (80.0%)	1 (20.0%)		
Education				
Uneducated	11 (34.4%)	21 (65.6%)	4.844	0.304
Primary	45 (58.4%)	32(41.6%)		
JHS	144 (48.5%)	153 (51.5%)		
SHS	7 (70.0%)	3 (30.0%)		
Employment status				
Employed	15 (62.5%)	9 (37.5%)	0.09	0.765
Unemployed	192 (49.0%)	200 (51.0%)		

4.6 Association between utilization of AFHS and demographic-characteristic

This section presents findings from the Pearson chi-square analysis on how the demographic-characteristics influence the dependent variable through a cross tabulation. The dependent variable here is the access and utilization of AFHS. Table 4.9 revealed that, majority of those who have ever accessed and utilized AFHS (58.9%) were within the older adolescent group. The percentage of females that

accessed and utilized the services (54.7%) slightly out weigh's that of males by 1.2%. With age, gender, marital status and employment, there was no significant association between them and utilization of AFHS as their p-values 0.156, 0.838, 0.79 and 0.669 were all greater than 0.05 respectively. This was not the case when it came to religion and it association between access and utilization. According to the results, there was a significant association between religion and utilization of AFHS as p-value was 0.001. The chi-square test was 18.104 with an association $p<0.001$. The analysis further shows that traditionalist accessed and utilized AFHS most.

On the side of education, the chi-squared test statistics was 17.198 with an association $p<0.01$ for both. A conclusion is therefore drawn that education have a significant influence on access and utilization of AFHS.

TABLE 4.9 Association between utilization of AFHS and demographic-characteristic

Variables	**Access and Utilization**		**Pearson Chi Square**	
	Have access and utilized n (%)	**Have not access and utilize n (%)**	**Chi-square**	**P-value**
Age				
10-14	83 (58.9)	58 (41.1)	2.012	0.156
15-19	142 (51.6)	133 (48.4)		
Gender				
Male	121 (53.5)	105 (46.5)	0.042	0.838
Female	104 (54.7)	85 (45.3)		
Religion				
Christian	41 (82%)	9 (18)	18.104	**p<0.001**
Muslim	182 (50.0)	182 (50.0)		
Traditionalist	2 (100.0)	0 (0.00)		
Marital status				
Single	222 (54.0)	189 (56)	0.071	0.790
Married	3 (60.0)	2 (40)		
Education				
Uneducated	7 (21.9)	25(78.1)	17.198	**0.002**
Primary	50 (64.9)	27 (31.5)		
JHS	162 (54.6)	135 (45.4)		
SHS	6 (60.0)	4 (40.0)		

Employment status				
Employed	14 (58.0)	10(42.0)	0.183	0.669
Unemployed	212 (54.1)	180 (45.9)		

4.7 Association between utilization of AFHS and other variables

Other variables capable of having influence on access and utilization of AFHSs are analyzed and presented in the table below. Knowledge on AFHS was shown to have an association with access and utilization of AFHS as the p-value was 0.001 with a chi-square of 15.117 obtained from the analysis.

Also, needed services was proved to have a significant association with access and utilization of AFHS as it had $p<0.001$ and a chi-square of 17.339. This means when adolescents obtain the kind of service they want, it helps in making them access and use AFHS a lot.

However, variables such as cost of service, privacy and confidentiality, timing (days and period within days) were all found not to have any significant association with access and utilization of AFHS by adolescents as their $p>0.05$. With distance adolescent have to cover before getting to the facility, it had no bearing on access and utilization as none of them served as a motivation to the respondents to patronize the services.

TABLE 4.10 Association between utilization of AFHS and other variables

Variables	Access and Utilization		Pearson Chi Square	
	Have access and utilized n (%)	Have not access and utilize n (%)	Chi-square	P-value
Knowledge of AFHS				
Yes	130 (62.8)	77 (37.2)	15.117	**0.001**
No	95 (45.6)	114 (54.4)		
Distance to facility				
Far from house	1 (1.4)	71 (98.6)	0.126	0.723
Too close to house	1 (0.8)	118 (99.2)		
Costly				
Yes	4 (3.3)	117 (96.7)	1.206	0.547
No	0 (0.00)	70 (100)		
Receives needed services				
Yes	219 (99.1)	2 (0.9)	17.339	**p<0.001**
No	3 (75.0)	1 (25.0)		
Privacy & confidentiality				
Yes	196 (99.0)	2 (1.0)	1.399	0.237
No	26 (96.3)	1 (3.7)		
Timing (days)				
Weekdays	94 (97.9)	2 (2.1)	0.104	0.747
Weekends	128 (98.5)	2 (1.5)		
Timing (period within day)				
Morning	195 (99.0)	2 (1.0)	0.430	0.807
Afternoon	25 (100.0)	0 (0.00)		
Evening	3 (100.0)	0 (0.00)		

4.8 Findings from key Informant interviews

Themes and categories

The findings of the qualitative study were aggregated into categories, which were then further merged into themes. Eleven themes were identified, and they are discussed below.

4.8.1 Characteristics of health staffs interviewed

In other to have adequate reasons to support some of the information obtained in the qualitative analysis in other to make issues more clear and meaningful, key informant

interviews were conducted among eight (8) health staffs selected among the five sub-districts. Four midwifes, three community health nurses and one general nurse were chosen for the study. Data on the background characteristics of the health staff respondents was analyzed manually and presented in Table 4.11.

Table 4.16 below indicates that, more than half of the respondents (62.5) interviewed had between one to four years whiles a quarter had above ten years working experience in the Ghana Health Service. All the staff interviewed had some experiences with adolescents.

Table 4.11 Background characteristics of health staff. (n=8)

Variable	Frequency	Percentage (%)
Number of years worked in GHS		
1-4	5	62.5
5-9	1	12.5
>10	2	25.0
Number of years worked in the district		
1-4	5	62.5
5-9	2	25.0
>10	1	12.5

4.8.2 Knowledge of key informants on AFHS

In order to determine the knowledge level of the health staff, respondents in the key informant interviews were asked whether they have heard of adolescent friendly health services. The responses revealed that all the health staff have heard of AFHS. In order to understand more of what they actually know about AFHS, they were asked to describe their knowledge about AFHS. They were able to describe what AFHS meant in a way. They were of the view that, AFHS concerns boys and girls within the ages of 10 and 19 years and need some special attention to be able to make informed choices about their health. They added that, it is how health worker need to be friendly with the adolescents so as to make them reproductively empowered.

Providers explained on the knowledge they possess:

*"Yes, I have heard. Basically, AFHs deals with em… boys and girls within the ages of 10 and 19 years. em…, we want them to be em… reproductively empowered, we want them to be able to make informed choices so that em… health wise they should be able to be healthy enough, yeah. So basically, that is what I no''. (**HW 5)***

*"Yes, I have heard of AFHS. Okay, what I can say about it is that, those adolescents the way they are, they need some special attention, so the best thing is for every health service to have a corner for them, but this is the case in my facility, we do not have a corner for them. so that when they come, they can receive the services that they need from there''. **(HW 6)***

*"I heard of it when I went to the facility. I wasn't know all is what about. I question my in -charge. Sometimes they have their health problems but because of their shy that they usually feel they don't want to bring it out , so is now a challenge in Ghana and we the health professionals need to take it up form that place to make sure that, we should be friendly to them and talk to them about their own health so that they are not, that kind of shyness that they feel, they do away with it and whatever they have they should be able to run to the facility to explain to anyone of the health workers there to get solution to it.'' **(HW 7)***

4.8.3 Range of AFHS provided at health facilities

These refer to the kind of services that are available in the facility for adolescent clients to access. It encompasses all services rendered by the health service providers within the facility and outside the facility on outreach programmes. The scope that they are able to cover within the capacity that the facility can operate with regard to resources. All facilities provide some range of services including family planning, treatment of general disease conditions including STI treatment and prevention, HIV

counselling and testing, health education on general health issues, treatment of intended and unintended injuries, antenatal, delivery and post- natal care. Comprehensive abortion care is however not available in most of the facilities but then pregnant adolescent girls who are in need of the services and visit the facility are counseled and directed to the hospital for the appropriate care. This is further highlighted in the comments of service providers as follows:

"*Is FP services we do provide, and sometimes we go for school health services and tell them what they are supposed to do especially the girls when they are in their menstrual period. What they are supposed to do to maybe keep themselves healthy and also abstain from men''.* ***(HW 2)***

"*As I started already, we go round give health education, FP services, we give multivite combined with folic acid to help them with their menstrual problems. Especially the female, we give them so that it will boost their immune system and also boost up their Hb''.* ***(HW 1).***

"We still have counseling for those adolescents who come with reproductive health problems, teenage pregnancy, we counsel them. And then we do outreach, we go to the communities to do education. There is also the portion of the family planning too which they do to especially those who come with complications of abortion and things we do it for them''. ***(HW 4)***

4.8.4: Perception about adolescent access and utilization of services.

Adolescents been able to access and utilize the services provided to them is the only way by which their health problems could be solved. Respondents based on records from the school health register, monthly report, quarterly review and annual reports to conclude whether adolescents actually utilize services or not. Apart from that, there

has not been any conscious effort by management and service providers in the district to conduct any study to determine the access and utilization level of adolescents. From responses, 62.5% (n=5) of them see it to be on the average.

"Em…, few come, some of them come. Some no''. ***(HW 2)***

"*Ok, I will say they come but they don't come. Because my facility like this because they fear that people will talk about them, they come at the time maybe hmm, you have to run up and down before you can save their lives for them. they fear that when they come, that kind of stigma will be there so they don't like coming".* ***(HW 6)***

"Well, in terms of ANC, ANC, the utilization there is high. But when it comes to FP, its on the low side. They prefer going to the, the emm local drug stores to emm get those services there. With respect to FP, its very low but ANC wise they come". ***(HW 5)***

"We get to realize that they were patronizing the prevention materials. The assessment rate was great but right now the standards started falling again". ***(HW 7)***

Aside the average utilization of the services by adolescents as suggested above by the health providers, few others (n=3) were of the assertion that utilization is of the low side. One had this to say:

"*Well, I will say is 30 out of 100 averagely. Because eh… even though we encourage them to come, you open up to them being their elder sister they can talk too here and there but you know we are in a setting of eh… Muslim community and a traditional, so the person opting up to come to you for these services is somehow, they don't feel comfortable".* ***(HW 3)***

4.8.5 Health services adolescents seek for from health facilities.

The interview once more went on to determine from health providers what services do adolescents usually come to their facility to seek for? The indication showed that,

there wasn't much difference in the services adolescents do come to seek as compared to those they provide. For the in- school adolescents, they visit these facilities to utilize more of the services when it is a new beginning of the academic calendar where new students are being enrolled. Some of the usual services they sort for at the various facilities includes family planning, antenatal, delivery services, postnatal, termination of unwanted pregnancy, counselling on general health problems, report on sexual abuse, irregular menstrual problems and treatment of general illnesses. Some health workers expressed it in these ways:

"Ok, basically those who come there em… they come there first of all to get FP services, basically those what they come to seek for and emm, a couple of time especially when the new em.., em.. em.. students are enrolled. They normally come in especially the girls, they normally come in for a long term method like the 3 years ah… that is what they normally come in for. And once a while some will go in for em.. em.. unsafe abortion and they will pass by hoping that you will help them or they are pregnant and coming to seek FP services and you test them and realize that they are pregnant. And they have this perception that when they come for FP services, it will help to terminate the pregnancy. So basically, the most sort after services is FP. Apart from that, ANC services, ANC services we don't have a problem with that at all. They come in for our ANC services". ***(HW 5)***

"Some of the health issues, some of them come with abuse, abuse, sexually and harassment, then some of them come with eh… this eh… abortions, then eh… some come with, what is the name family planning service because they have heard about it and they want to practice it so they actually come and eh… ask and no much about it before they can go into it because of the eh.. eh.. how do I say it the misconceptions about F.P services, so in general that is the things they come for". ***(HW 8)***

"Some of them come to tell you that they have malaria, and maybe is not common malaria, they have other things, so when they come, they ask them the last period of their menses whether the fellow tells you that she bleed last month, you then counsel them. they also come to report on malaria and other this thin, but maybe the hidden one, they come with irregular menstrual problems". ***(HW 6)***

4.8.6 Health services provided to adolescents are friendly

Privacy and confidentiality

Most providers expressed general satisfaction at the state of privacy and confidentiality accorded to adolescents although some staffs felt that the facility failed to ensure enough privacy. Most adolescents had their sessions held privately and were attended to in a one to one interaction. Some of the strategies often adopted include scheduling them on specific days or periods within the day, use of certain available rooms such as the palpation and counselling rooms as well as inviting some of the adolescents to their residence to attend to them. Some of the health workers, during the interview had much to say:

"Yeah, we have em, em, a room dedicated for those service. We have a counseling room there. So as and when they come in then they go in there". ***(HW 5)***

"Mostly what we do is when they come, like Tuesdays and Wednesday are always our busy days here. Today like this we were there, people were not much. We always schedule's time like a day that we are not busy, people are not around. That will be on Fridays and Thursdays, so when you come is not all that busy". ***(HW 2)***

"Yes, we have the labour this thin, the this thin, the palpation room, so when they come with those issues, the palpation room, we go in with them and talk to them alone. And when one of them has such a problem, we make sure that when they come as I said we talk to the person. They come as a group, they will go and the person will

*come back later on after they have close from school, he will come back later on, then we sit with you then we discuss it. If it is that we should involve the parents, then we do so". **(HW 7)***

The providers also attested to the informational privacy they provided by explaining their obligation to keep whatever they told them in confidence:

*"We let them understand that whatever they are going to tell us, we are not going to disclose it. But we build the confidence, we build the confidence of the adolescents that whatever you are telling me is going to remain between I and you. So don't feel shy to tell me what exactly or what you need from me". **(HW 1)***

However, a few other providers had challenges when it comes to ensuring adolescent's privacy and confidentiality. They also mentioned that:

*"The way our wards are, if one person is lying here another person is lying here. Sometimes that particular situation makes sometimes very difficult to even no in details some of their problems. You go an extra mile to, if they are able sometimes we still try to talk to some of them one on one and you are able to get the issues. Otherwise some of them they shield the information. Is the in-charge office that such cases can, that is where they can have a meeting with them". **(HW 4)***

From the above, it is clear that providers try to keep adolescent's problems private and confidential, and while many had their expectations satisfied, there still remained gaps to fill.

Equal care and respect

The providers revealed that there are protocols within the facility to follow and there are structural considerations in enforcing such policy:

"We apply the protocol of the facility when you come. The processes you will go through is applied to everybody. We don't give preferential treatment and we don't

*even tolerate where staffs will have to take money from patients to give them such special treatments". **(HW4)***

It was noticed that, they apply the principle of first come, first serve. Moreover, they tried to do away with social ties, nepotism among others when it comes to provision of services:

*"Yes, we ensure that there is equal treatment. The reason why I am saying this is that, like if a client eh.., eh… an adolescent come maybe one comes before the other, we don't look at it like eh... maybe because the other one is a sister of yours, we treat the person who has come late these services before you treat the one who come first. We give them the equal services that they all need from you by first come first serve". **(HW 2)***

Packaging of services to attract adolescents (working hours and waiting time)

Waiting time is one factor that clients are apprehensive about.

They would enquire from others, how quickly they would be attended to should they visit the facility. It is even more of a problem to the adolescent who want health services but is shy and naïve. They would not want to be seen in the clinic by too many people accessing services from a facility she believes adults and therefore society frowns on. An adolescent's remark about waiting time is as follows:

*"We make sure they don't keep so long at the facility because some of them they will tell you my mother has sent me and I have decided to pass here. So with such a person, we don't delay. We just give the services the person need and he or she will go away". **(HW 1)***

*"For working time, I think 2016 we were ask to check on our working time and how long patients wait. So each staff make sure that when the person comes you serve him chickly so that you don't delay the person". **(HW 4)***

Essential to the success of a health-service organization is its mode of operation. This comprises the working hours and some other organizational culture that is characteristic of the service providers. A service provider remarks about it:

"We meet them after school and we don't close early. Because we stay at the quarters, so sometimes we will here till 3 or for. And sometimes weekends, some come during the weekends. You can see, we have nothing doing but we are still here till they close and come and meet us". ***(HW 1)***

"At least because we are friendly to them, we interact with them more and they come. So, yeah, because of the cordial relationship we have with them, that is why they come around. There is a duty roster, we assign responsibility to individuals, so as and when in there is someone there to attend to them. There is always a stuff at work and at the other side, there is a quarter there, there is someone there. This side too, there is someone here, so as at when they come in you always meet someone. They come to the house especially in the evenings". ***(HW 5)***

Developing of different names (nick-names) for some of the health products adolescents need but shy to mention their actual names when accessing it also helped to attract them come for those products:

"Some of them, they only know that, condom, condom, so when they come to the facility level and maybe they are to mention it, it is a problem or they want it and they come to the facility and it is not available, to go to some place to have it is always a problem. So we started developing different names, so some of the name s, we say helmet, some people say go circle and others will say elastic. So these were the kind of things we mention to them". ***(HW 7)***

Those who sell drugs in the community have been trained on how to dispense some drugs and other health products to adolescents. This makes it easier for them to access

and utilize the services anytime the need arises and prevent any suspicions from parents:

"We have given some of the commodities that is the pills to those who sell drugs and have train them on how to dispense it to them (adolescents). If the adolescent is going to such a person, they will think that oh… she is going to buy maybe para. They will not know what she is really going to do. So that is what we also do". ***(HW 3)***

Availability of recreational materials at the facility for the adolescents to play with also attract them to come for services.

"Yes that is what I am saying the ludo playing, viewing of the this thin, screen the tele that I said this NGO provided attract them to come". ***(HW 8)***

Equipment and supplies for service delivery

The service provided can only be said to be available when the equipment and supplies are in place to ensure smooth delivery of the skills they possess. There are concerns for the provision, adequacy, and use of the equipment. Responding to a question on the availability and adequacy of these items, including infrastructure, health service providers said:

"Yes, we have every needed equipment there, we have our lab there, in case you want to check the Hb and other things, we have our theatre there, we have our pharmacy which is well echipped with drugs". ***(HW 6)***

"With that one, we don't have all the equipment. For instance, eh… when they come here, what will I even say, we have some but not all. When it comes to FP, we have all the devices". ***(HW 1)***

"Most of the drugs, we don't have them. Is only Depo and Cheadle that we have. Eh… the oral drugs we don't have them. So maybe if we get them ah... it will help". ***(HW 2)***

The use of teaching aids is very critical in the dissemination of sexual and reproductive health education due to the practicality of the subject under discussion. It allows for first hand transfer of knowledge from the health service provider to the adolescent client and a subsequent return demonstration where appropriate. Therefore, in a facility where this is lacking, the health information transfer may only be partially achieved. The write- up below was what a health provider said:

"Well supplies, supllies, supplies, supplies, well, it is woefully inadequate, yeah, it is woefully inadequate. em.. you know, right from em… let's say, these things how is it called, is it flies or those small, small pamphlets that they give them, we don't even have some there at least to give them. those things, those posters, those little, little things. When it come to the service itself, sometimes we are short of gloves, we are short of this thing, and there is nothing we can do. So those things "deaee" there is more room for improvement". ***(HW 5)***

It is clear from the above expressions on the question being asked that, whiles some have adequate resources and are working effectively, others seem to have little resources to work with.

Providing the right services in the right way

Effectiveness comes about when the right services the adolescent needs, are provided to them by health providers in the right manner (quantity and quality wise). Upon asking the health providers if they are able to provide the right friendly health services to adolescents in the right way, a number of them had the following as their answers:

"I will say is eh… I will give it 30/100. Because the major training is not there, the logistics are not there, how to tangle issues, whether we are right or wrong. We fortunate we have not encounter a situation whereby it will land us into trouble that is

*why we are thinking what we are doing is the best but when you look at it critically its not good. For me personally, it is not encouraging". **(HW 3)***

*"In terms of the work to do I will say yes but the environment to deliver I will say we can do better. For me I just cited instances that it is difficult to have a private conversation with a client". **(HW 4)***

*"Noo, it can't be possible when you need to do something and it is not there, the only thing you can do is to improvise and to improvise, the person will not see the right picture of it". **(HW 7)***

Others however think that, they are able to do well despite the challenges they encounter. One of such health providers expressed herself in this way:

"She laughs, haha… em…, she pauses for some time, then say; yeah, yeah, at least we are, we are, we are em… what is the word "koraa mpo" we are improvising" (HW 4).

Readiness of adolescents to obtain services provided

For adolescents to have their health problems solve, they need to be ready and willing to access and make use of the services available to them. In trying to enquire from health providers on whether they see any readiness and willingness in the adolescents in attempt to access and utilize the services they provide, they all gave out positive comments which includes:

*"Yes, yes because I got to realize that, some of them even after leaving for school, the SHS, still, they still come back to the facility for those services. Sometimes too, they just call you on phone then you educate them what to do or they will tell you this is this, and this and this, then we tell them, you need to do this, you need to do this, you need to do this". **(HW 7)***

"Yeah, they are willing. Anytime you go to the secondary school to do some form of health education, you realize that, that particular week they will be coming. They just want to find out more. And sometimes our medical assistant usually go there to give them health education and you realize that they will be coming". ***(HW 5)***

"Yes, yes you see it. Sometimes when you go for school health, how a person will ask you the question will make you feel that the person is willing to come and do certain things". ***(HW 3)***

4.8.7 Barriers adolescents face for effective utilization of AFHS

If adolescents have not been accessing and utilizing services available to them, then there is a reason attach to that. This can emanate from either the providers, parents/guardians, community members and other stakeholders who are responsible in ensuring that all things work well for adolescents to be able to access and utilize the services available to them. During the interview with the service providers, they were asked that, in their opinions, what are some of the common factors that makes it difficult for adolescents to utilize the services they provide for them. Following this question, several reasons sprigged out which included; fear of being stigmatization, misconception about some services, lack of privacy and confidentiality, religious/cultural believes, attitude of health workers, lack of permission from parents/guardians, inadequate information on services available, unfavourable period for rendering services and time wasting at the facility. Details of some views expressed are indicated below:

"They think that sometimes when they take the FP, their menstrual cycle does not come. The medicine is having effect on their cycle. And some too superstition, they think when they take it they will never become pregnant again". ***(HW 2)***

"Sometimes the readiness for the staffs to give the services or the availability of the nurse is also a contributing factor. Like they will come, someone is been trained for these services, so if it happens that the person has gone for a workshop or the person has gone somewhere and because they are not used to you and they are used to the person, sometimes it becomes difficult for them to assess the this thin, the services". ***(HW 8)***

"Some of them the time that they are supposed to come for the services is also another contributory factor. Like most of them they will like to come for the services usually in the evening time or when there is no body at the facility because where we have created the corner is at the facility level not outside the facility". ***(HW 8)***

"Well, I will say inadequate information. I belief if they have more information, you know when you have the information at hand, then you will be able to make an informed choice". ***(HW 5)***

"Sometimes too em… should I even say parental disruptions. Because of the religious background or the traditional eh… whatever she found herself or himself will compare her not to come. The child will be standing there chietly and you can see that she wants to tell you something but because the parents are around, she will keep chite". ***(HW 3)***

4.8.8 Usefulness of services to solve health problems of adolescents

All the interviewees attested to the fact that, the services they have been providing to the adolescents in one way or the other has brought about a great improvement in relation to their health issues. They acknowledge that, despite all the challenges they face, the little that they are able to do with the limited resources is yielding results in the health of the adolescents. They comment on various benefits that their contribution has yielded:

Some say it has help in reducing teenage pregnancy, abortion and the infection of STDs. This has led to the improvement of academic performance. Three of them put it in this way:

"Like this abortion, because when I went there I actually saw that age of 13 years of age, that is why I was saying some of the harassment because is a local level this thin, some of them JSS 2, P.6, you see them becoming pregnant but with these services we started providing, we saw that, that this thin is actually reducing. There was reduction in abortions and then teenage pregnancy". ***(HW 8).***

"I can say for the last two years we use to record these criminal abortions, ehe…, but since we started this kind of health education and the way sometimes when they come we teach them, we try to talk to them and they come out with their problem, we are able to control that kind of criminal abortion. So, I can boast with myself that as at last year, we never recorded any criminal abortion". ***(HW 6)***

"We get to realize that they were patronizing the prevention materials. The assessment rate was great but right now the standards started falling again. Because that time we just realize that, a year can come, from January to December you will not record any teenage pregnancy. And when they take their exams, we go to the schools and ask their performance, we just realized they are doing well". ***(HW 7)***

In addition to what has been said above, another provider was also of the view that, it has improved ANC attendance among pregnant adolescent girls as well as facility-based delivery at her clinic:

"In one breath, for instance if you look at the ANC and post- natal for the adolescents, we now have young girls when they are pregnant will come to the hospital for ANC till they even deliver at the hospital. So, to that extent I will say is

*useful. Also, young girls who come with pregnancy related complications and we monitor them till the give birth". **(HW 4)***

Few others were also of the view that, it has help them to obtain some knowledge as to how they should manage some health issues they do face. In addition, it has also done a long way to empower them:

*"Is useful, she smiles, I said is very useful because of late it has help them. For instance, we don't see disease in adolescents again as it used to be. It has improved their knowledge on health issues". **(HW 1)***

*"Is useful to them to because if the person cones to you and you are able to talk to the person very well, you empower the person". **(HW 3)***

4.8.9 Willingness /readiness of health workers to provide friendly services to adolescents

All the health providers in their attempt to respond to a question asked on their readiness as well as their willingness to provide services to the adolescents, they all said yes. Some of the backings they had includes; sacrificing non- working hours or periods to serve the adolescents and sometimes make some expenses to support the health issues of adolescents. Sometimes too, they trace to meet them wherever they are to render the services to them. Some of them highlighted instances that suggest that the response they gave earlier is true:

*"I have some youth, eh… young people too that vantage communities, ehe… I discuss this kind of comprehensive abortion with them, family planning. Telling them when they get their period or maybe missing their period, ehe… they should call me and bring her so that I will counsel her". **(HW 6)***

*"For here I think we are willing to provide services because we spent extra time to probe till we find out the root cause of the adolescent's problem". **(HW 4)***

"They come here around 9 thereabout and sometimes koraa, I fight them, "she laughs as she says so". ***(HW 5)***

"I will say that eh… it is not only the facility level that we do this, like they also have their group that they meet, so we meet them at where they actually meet to have their meeting. By speaking to them, we schedule with them, because they have also got their own time. So we schedule with them as they cannot come to our facility to take these services, we go and give them those services. They have those things existing in the community, the groups are there that we also meet them and give them that eh…, services at their own time". ***(HW 8)***

Sometimes, others spent extra resource such as financial burden just to assist an adolescent to access some needed services. One of such cases is elaborated below by a provider:

"Oooh we are willing because, the last abortion we encountered we have to fuel the motorbike and sent the person to the hospital. But our place we are always here to attend to anytime they want. So we don't have a specific day, a specific time unless we are not in town here but if we are around anytime rain or shine we are here. That is why, my place is an open place so even when the person come and she does not meet us, she can come to my place and we discuss". ***(HW 3)***

4.8.10 Challenges health workers face in providing AFHS

Health providers were asked about some of the major challenges that they face as they provide services to the adolescents. A number of them seems to had issues with working space purposely for the adolescents. Few of those ideas can be seen below:

"We are challenge with the place to actually give the services when it comes to the facility level. Because as am saying that we have got, the room that we have, they are rooms that we cannot use as adolescent corners for that facility and where we have

*identified as eh… adolescent friendly corner, that place too is not a saver area or I will say that it is not of a private area for the adolescents to assess it". **(HW 8)***

*"We started something last year, but immediately we try to do something they come and pack things there and its like we stop again. And because we don't have permanent place, they will always come and pack things inside the room". **(HW 5)***

Another important issue that was also of a major concern was inadequate trained health providers specifically for adolescents. Most of the providers were bordered about not having the expertise who know how to handle these adolescents in the manner and way they are supposed to be handled:

*"The major training is not there, the logistics are not there, how to tangle issues, whether we are right or wrong. We fortunate we have not encounter a situation whereby it will land us into trouble that is why we are thinking what we are doing is the best but when you look at it critically its not good. For me personally, it is not encouraging". **(HW 3)***

*"One person is been trained if more than one person is been trained on adolescent reproductive, I think if the other one is not there others will be able to actually give them the services. Because somebody is just trained on this but we can all give the services but am looking at what is the name, the trust because the person is just meant for them and the person is always with them. So the professionals that are trained for them is not just enough at all". **(HW 8)***

"Sometimes too the person will come, like this abortion thing, they were on us, we should do something and we told them that we don't do those kinds of things here. Even though you will explain to them, they will tag you that, this nurse when you go there, she doesn't want to give this services to you, she doesn't want to do this. They

*think you are not ready to give those services to them. they think so far us you are wearing uniform, they think you are entitled you can do everything". **(HW 4)***

Other issues that came up as challenges confronting the service providers include; language barrier, lack of permission from parents/guardians, supervision by superiors, consumables, mode of settling bills and colleagues sometimes not in support of some services needed to be provided:

*"Our main challenge is language "me every day I will say it" Our main challenge is language, that is our main challenge. The latest person who was trained, she is even "anti gbue…" than me "she claps her hands as she says so". You get it, the will is there but as to how to go about it". **(HW 5)***

*"There is a lot of challenges we face. Because sometimes, some of them will come, as they have health insurance, they think that the insurance covers everything. We explain to them this is this and this and this but they don't want to understand you. Sometimes you need to talk, talk, talk, talk, talk and still they don't want to understand you unless you involve the volunteers we have in the community, the community volunteers, and sometimes, they turn to listen to the volunteers better than the health workers themselves". **(HW 7)***

*"Sometimes some of the contraceptives someone may come for, maybe the person want a F.P method especially implano NST because the person is sexually active and the person at that time in point, the contraceptive the person want is not there". **(HW 7)***

*"The cultural issues. For instance, when a snakebite you, you don't take injection. Though the person is willing to come but for that reason, he will not". **(HW 4)***

"Some too if you are a staff who is willing to help them especially with this kind of abortion people, your colleagues try to mock at you, eheem, that you are

encouraging them to do eeem, eeem, to practice such kind of thing, that is against God". ***(HW 6)***

4.8.11 Health workers suggestions to help improve friendly health services provided to adolescent.

Working in a dynamic environment requires that facility managers, especially, adopt a proactive rather than a reactive posture if they want to be on top of issues in their business circles. Health service providers look forward to improving coverage, competency areas amongst other things in the nearest future as far as adolescent sexual and reproductive services are concerned. The quote below expresses one of those desires by a service provider:

"What I will like to see is like adolescent clubs in the nearby communities such that the healthcare personnel's especially the young healthcare personnel's able to interact with the adolescents all the time in the communities around. We should get specialize corner just for them so that when the person is coming for this type of facility, he doesn't need to come and sit at the OPD for everybody to see him or her and say we saw her at the hospital just walk for the service". ***(HW 4)***

The issue of training as well as supervision is touted here by a number of health workers who believe that obtaining the necessary training and supervision will be the breaking point for improvement over the current performance. This is how they put it:

"And refresher training of the this thin the newly posted nurses about the adolescents and the corner. Because some of them, when they hear adolescents, adolescent corner, the world corner, it knocks them out because somebody may not understand this is what you are suppose to be doing, or this is what you are supposed to be doing". ***(HW 7)***

"Yeah, ok, training is one. Our superiors coming down to help organize durbars, to talk to the parents as in how useful these adolescent services are. And supervision too

*is also important. Once a while they should go to the centers and supervise what they are doing whether they are doing it right or there is some challenges they are facing, or you need to correct certain things so that they will keep on doing good things".**(HW 3)***

Strengthening of school health was also mentioned as one of the key ways by which services can easily be provided to the adolescents. Few said this:

*"What I want the district to do is to strengthen eh… school health by going out, that is what we call outreach. Aha… the district should be able to provide financial support for fuel for the nurses to travel for the outreach services. We have motorbikes but sometimes the fuel is the problem". **(HW 7)***

Establishment of adolescent corner and the provision of logistics is needed in every working place in other to effectively deliver what is expected. Health providers outlined in their interview some of the things that needs to be done:

*"We need some logistics so that if they need the services then we provide instantly that they coming here. So that immediately the person makes up the mind then you do it for the person. We need the out games, oware, ludo for the adolescents. Most times you have to organize maybe those things and when they come to that place to play, when they are playing and they have any issue, they will go and then discuss it with the nurse. We need logistics like FP drugs, condoms, and the pills". **(HW 1)***

*"They should make sure that all the necessary equipment for health delivery is adequate. If possibly create corners, adolescent corners". **(HW 6)***

CHAPTER FIVE

DISCUSSION

5.0 Introduction

This section discusses the findings of the study. The study was conducted among adolescents in the Kumbungu district on accessing and utilization of AFHS.

5.1 Socio-demographic characteristics of respondents

Age is important in every aspect of life and is used in making decisions about one's health. This study revealed that majority of the participants (66.1%) falls between the ages of 15-19. This confirms the findings of the Ghana demographic and health survey, 2014 that Ghana's population bears youthful structure.

The study also looked at the marital status of the participants. The proportion of never married in this study is 411 (98.8%). Indeed, this shows that increasing proportions of adolescents especially females are staying out of marriage at younger ages. The participants were either in school or learning or learning a vocation for future life. This may be seen as a step to improving the health of adolescents because they are avoiding early marriage which could have several consequences on them especially the females during pregnancy and delivery.

Given the critical role education plays in development process, successive governments in Ghana have initiated various programmes aimed at creating equal opportunity for all children of school going age. Notable among them is the PNDC law 42 which made provision for establishment of a "basis to social justice and equality of opportunities" with particular attention being paid to the deprived communities such as those sampled in this study. The findings of this study show that, there is a possibility of achieving this goal in the district as 92.3% of the respondents

are schooling. The Kumbungu district is made up of active adolescent population and pursuing formal education currently.

The religion embraces many aspects of man's relation with the supernatural. Beliefs and practices associated with supernatural in Ghana operate at many levels in different forms. According to the 2010 population census, Islam was the predominant religion in the area (GSS, 2010). This study revealed that, majority of the inhabitants are Muslims. This confirms the findings that, Islam is the predominant religion in the area (GSS, 2010).

The type of work performed by employed persons. It also covers the manpower capabilities of an economy and can therefore provide an indication of its preparedness for development. This study showed that, as high as 94.2% of the participants are unemployed. On the other hand, it has an international dimension. This is also confirmed by a study conducted among female adolescents in Yendi municipality where 94.1% were unemployed (Abdul-Malik, 2013). This could have an impact on AFHS since some services and products needs to be paid for. Therefore, if there is desire for use but the prospectus user cannot afford, then access and utilization could be affected.

5.2 Knowledge level of adolescents on AFHS

The study assessed knowledge of participants on AFHS, the sources of information on AFHS and the various type of AFHS known to them. The findings revealed that, nearly half of the respondents (207) representing 49.8% in the study have ever had education. They know some of the adolescent friendly health services within their communities. This means, adolescents are aware of the existence of AFHS and have knowledge on them. Though this result seems to be low, it is higher than other studies conducted in Ghana earlier where those who knew the existence of AFHS was

(30.8%) (Appiah- Mensah, 2016) and in Nigeria where more than half, 268 (79.5%) of the respondents did not know of a specific A/YFRHS provided in study area (Ajike & Mbegbu, 2016). It is however lower than the studies in Nigeria where 52.7% of the respondents had knowledge on the existence AFHS (Yohannes, 2016), in an Ethiopian study where 78.5% had knowledge about various types of adolescents and youth friendly reproductive health services (Helamo et al., 2017). In other places, there were more higher results such as the findings made from a study in Capital City where respondents had equal or more than 80% knowledge and practice of SRH (Paudel & Paudel 2014) and in Nepal where a study concluded that the participants had moderate reproductive and sexual health knowledge (Simkhada et al., 2012).

It can be inferred from the above that, there are some variations in the results from place to place. These variations as postulated by Paris et al, (2008) could be due to cultural differences and government policies. It is common knowledge that in a place like Europe, people are more open to discussing health issues bordering their adolescents especially issues related to sexual and reproductive health than those in Ghana. Indeed, social norms influence individual thoughts. The difference between the two studies in Ghana could be due to the influence of government policies within the period of 2016 to early 2018. Within this period, a lot of activities have been carried out following the launched of Adolescent Health Service Policy and Strategy by GHS which contains a number of interventions and it is expected to be a reference document for the health of adolescents and young people for the next five years (2016-2020) to provide the framework within which health provision and other related interventions for adolescents and young people would be coordinated and implemented (GHS, 2015). Following the implementation of this policy, one could say it has contributed to increase the awareness on AFHS.

On the various types of services that respondents knew off, it was found that, most of them (67%) knew about general health services, followed by family planning services with a percentage of 14.6 whiles respondent's knowledge level on all other services were less than 10%. This implies that, respondents have if no but limited knowledge on most services that are adolescent friendly and are important for their health. The level of knowledge on some services like family planning seems to be way lower in our case (14.6%) than that of other adolescents in Ethiopia where their knowledge on family planning was 64.5% (Helamo et al., 2017). This could be attributed to low level of education on those services.

This study further found the various sources from where the adolescents obtain their information. It indicated that, those that knew about it got to do so through the schools (48.3%) followed by health care providers (17.9%) and family members (14.5%). This result is consistent with that of (Kyilleh et al., 2018) whose study in Northern Ghana found that parents were an important source of information and for in-school adolescents, teachers emerged as an important source of information on reproductive health. It is also similar to a study in Ethiopia where 72.4% of the respondents had information about YFS mainly from school teachers (31.5 %). Paudle & Paudle, (2014) also listed teachers (51.5%), and parents (43.8%) as some of their multiple sources for SRH information as well as Appiah – Mensah (2016) whose main source of information for the respondents in Ghana was through schools (25.9%) followed by health workers. In addition, Sujindra & Bupathy, (2016) identified that many of the girls (86.65%) who had knowledge of menstruation prior to menarche obtained it from their mothers which constituted 68% of all the sources. All the above findings are similar to this study, because they all have schools, health workers and family in their first three major sources of information on AFHS. Notwithstanding, there were

other studies which had it major source of information different. One of such is Ajike and Mbegbu, (2016), whose respondent's main source of information about adolescent/ youth friendly reproductive health services were friends and media.

This presupposes that if the schools are engaged, the teachers as well as the parents are giving some form of training and efficient information complement with regular visit by health professionals to the schools and communities, to educate the adolescents on their health issues, some great achievement could be made. Since the health workers were also one of the key sources, if their attitude towards these adolescents are more friendly and welcoming, it could boast the rate at which adolescents approach them for health care services.

Binary analysis also showed an association between the knowledge of respondents and gender as a socio- demographic characteristics. The implication is that, been a male of a female adolescent within Kumbungu can determine your knowledge on AFHS. Details of the findings shows that, the number of respondents who knew about AFHS was high among males. This means that, the male adolescents are more aware of AFHS than the female counterparts. Indeed, it is known by literature that males have improved knowledge over the females. This is supported by a study conducted in Nepal that revealed male respondents have better knowledge compare to female participants regarding SRH issues like HIV/AIDS (Simkhada et al., 2012). In India, adolescent girls are said to becoming extremely vulnerable to HIV infections and have less comprehensive knowledge in comparison to their male peers (IFPS 2012). In the same vain, gender inequalities in HIV prevalence are also seen in eastern and southern Africa, where girls are more at risk of infection (UNICEF 2011).

It could be so because adolescents especially females are reluctant and uncomfortable to discuss RH issues. In most cultures, open discussion of RH issues with parents and significant others is minimal due to the conservative cultural and religious practices. Because of this, the youth do not have adequate information about their RH needs and problems. Most of the discussions between family and the adolescents took place only after certain RH problem has occurred. Most parents are ill-prepared, uncomfortable or awkward in discussing RH issues with their children. This makes adolescents lack knowledge and skills to make rational decision and seek contraceptive or other RH services (Motuma et al., 2016). All these could also be ascribed to the high usage of male condoms as a family planing method by the males and through that possibly could obtain much information about other services. This may not be the case in the females since most of them may find it difficult to share their experiences with their parents and other people around them as compared to the males.

Since health workers are crucial in the provision of these services to the adolescents, their knowledge level in AFHS is likely to influence that of the adolescents. In this study, it was observed that, all the health workers interviewed had some level of knowledge on AFHS. This was because, they have heard of it and were able to describe some components of it but not details as in some standard policies surrounding and this was similar to what Godia (2012) also identified in a study.

5.3 Access and utilization of AFHS

Accessibility in AFHS means, how adolescents will be able to obtain the health services that are available to them (WHO, 2012). All respondents (n=416) within the study affirmed that, they have ever had a health problem. Out of this, a significant number of them thus 225 constituting (54.2%) have ever utilized and accessed healthcare services from various health facilities available to them as at the time of the

study. Although utilization in this study seems to be above average, it is lower than a study conducted in Harar town, east Ethiopia where nearly 64 % of the youth had already utilized youth friendly services at least once at the time of the survey (Motum et al., 2016). However, this finding is higher than the ones reported from Ghana and other parts of the world. Some of such studies conducted revealed that 45.4% of adolescents sampled for a study used health services during the last one year (Tangut et al., 2012). Similarly, only 38.5% of secondary school youths ever utilized adolescents and youth friendly reproductive health services (Abebe & Awoke, 2014). Cherie, Tura & Aderajew, (2014) also reported 29.4% for adolescents in West Badewacho Woreda, Hadiya Zone, South Ethiopia.

This variation could be attributed to difference in size and settings of the study. The level of access and utilization found in this study can also be ascribed to an external factor that compelled most of the respondents to seek for the services. This is because the study indicated that 77.3% of the respondents sought the service based on other people's instructions. Out of this number, 98.8% were instructed by their families to sought services. It can then be concluded that these directives from families compelling the respondents to sought services brought about the utilization level found especially the early adolescent (10 – 14 years) who are under the care of these families and form 1/3 of the entire study respondent with a utilization rate of 58.9%. Since they are not fully independent, they were more likely to be seeking for services when instructed by their families or even taken to health facilities by their families for the services.

Contrary to all these findings adolescents have services available meanwhile the access and utilization level was not encouraging, other adolescents in other places

lack these opportunities. One of such studies conducted in Nigeria shows that adolescents had little or no access to youth-friendly services even with their preference for government hospitals as their place of choice for seeking healthcare (Omobuwa et al., 2012).

The respondents who have utilized the AFHS went to the various health facilities to access one or more services. The services include; general health services (94.2%), family planning (contraceptives condoms, antenatal and post abortion care), testing, counselling and treatment of STIs, post abortion care and general counselling. Following the health workers interview, all those services happen to fall within the range of services they provide at the facility for the adolescents with the exception of comprehensive abortion care where they do refer to the only hospital they have. This is in line with what have been spelt out by GHS et al., (2012) as the services that must be offered at the AFHS and can be accessed and utilized by all adolescents. This comprises general health services, referral, contraceptive services, STI management including testing, counselling, and treatment, maternal health services including antenatal care, postnatal care, safe abortion services and post abortion care, HIV related services including VCT, management of sexual violence such as rape, nutritional, dietary and eating disorders management, general counselling, sports and games (GHS et al., 2012). It is clear in this study that, the services highly accessed and utilized is the general health services (94.2%) with few other respondents making use of other AFHS. This gives a prove that, the respondents are only using the services they said they knew off when they were asked to mention the AFHS they knew. It implies that, most of the AFHS are probably not known by the respondents, else they would have use them as well. One could therefore predict that, if the

respondents are made to have knowledge on most of the AFHS, they are likely to access and utilize them.

From the study, majority of the early adolescents (10 - 14) were found to have accessed and utilized the AFHS offered at the various health centers followed by the late adolescents (15 - 19). But in other studies, such as that of Kenya, it was the late adolescents who utilize the services more (54.6%) (Tangut et al., 2017). In all, several studies have confirmed that age is statistically significant to the access and utilization of AFHS (Abajobir & Seme, 2014; Abebe & Awoke, 2014; Perez 2013). Almost the studies on AFHS involve all the age groups and this is because adolescent health challenge affect all adolescents. WHO confirms that adolescent health challenges affect all adolescent groups (WHO, 2014).

This study recorded more females (54.7%) to have accessed and utilized AFHS. This is similar to findings from Tungut et al., 2017; Abajobir & Seme, 2014; Akinyi 2009).

It was identified in this study that, the religion adolescents belonged was statistically significant to access and utilize AFHS at $p<0.010$. Adolescents who belonged to the traditional and Christian religion had a higher rate of access and utilization with 100% and 82% respectively. This is consistent with study where orthodox Christian followers were said to be 2.45 times more likely to ever use family planning compared to Muslims (Ansha, Bosho & Jaleta, 2017). Again, similar to Appiah – Mensah finding where Christians had 85.7% usage rate than Muslims.

Education was found to have influence on access and utilization status of adolescents. The results show that adolescents with even least form of education (e.g. primary level) had higher access and utilization than the uneducated. Education helps to improve health seeking behavior of an individual. The finding was consistent with

the pearson chi square analysis which shows that, adolescents education is significantly associated with their access and utilization at p= 0.002. This finding is consistent with other studies like Tangut et al, (2017) findings that, more than half of the respondent, 184 (58.8%), who visited health facility one year prior to the study period were in the category of elementary school. Education as significant factor to adolescent access and utilization AFHS is reported in several studies (Muthali 2011; Perez 2013; Motuma et al., 2016). It was noted that, among the educated adolescents who utilize the services, those who are in primary level had the highest (64.9%). This could be the fact that, most of the adolescents within this level are the early adolescent who are likely to be under strict parental control. For that matter might have been instructed by parents to utilize the services or been taken to the facilities by the family members themselves for the services. This is clear in the study where 77.3% of adolescents who access and utilize services did so because they were asked by their family members or teachers.

Further analysis on access and utilization depict that, majority of the respondents (97.4%) attest to the fact that it is important to access and utilize AFHS when they have issues with their health. This finding is supported in literature by a study conducted in Harar town, east Ethiopia. It indicated that, 749(88.6 %) of the respondents believed adolescent/youth friendly services are necessary for their health issues (Motum et al., 2016). Notwithstanding this affirmation by the adolescents, a good number of them (45.8%) sought for health care services from health care professionals before whenever they were faced with a health challenge. This is quite alarming and need to be worked at to reduce the number.

Upon investigating this, it came to light that, they use to resolve their health issues by seeking for help from other sources and people. The main sources from where they obtained high support in solving their problems were the chemical shop which constituted (31.3%) followed by herbal treatment (8.4%). Whiles other sought advice from their parents and teaches to solve the health problem facing them, a few of (5.1%) often left their problems unattended too. This was consistent with a study which discovered that private health facilities (including clinics, pharmacies and drug shops) were the most accessible to the adolescents than public health facilities (Atuyambe et al., 2015) and similar to findings from Marhal et al., (2012) where 61% access contraceptives from private sector. It was once again confirmed by a study conducted in Northern part of Ghana that local remedies were available and widely used by community members. Thus, and not using services provided at the various health centers (Kyilleh et al., 2018).

This is probably because there are fewer or no questions asked at the chemical shop as compare to the health facility when they go to buy it. It could also be because of the lapses such as non – availability at the facilities and unwillingness of some health care providers to provide some AFHS. This finding could hinder the nation from achieving its aim with respect to how adolescent's health needs to be improved. This is because, if the providers at the various chemical shops are not trained on how to dispense right drugs in their correct dosses, then it could result in more complications arising. More to that, if parents and teachers happen not to have the necessary information that can help solve the issues of the adolescents, that could also leave the problems hanging. Lastly, use of herbs in their wrong doses could have a negative implication on their health.

5.4 Factors affecting access and utilization of AFHS

The percentage of adolescents who were accessing and utilizing AFHS by the time of the survey was found to be 54.2%. Comparing this to other studies makes it higher. The level of utilization of the AFHS by the adolescents depends on a number of factors. These factors can affect it either positively (facilitators) for high level of utilization or negatively (barriers) for low level of utilization.

Further analysis was used to identify some demographic characteristics that act as factors affecting the access and utilization of AFHS as adolescents age, gender, religion, marital status, education and employment status. Pearson chi square was used to conduct analysis to determine the level of significant association between the dependent and independent variable. The analysis found association between religion of adolescents, their education level and employment status to be significantly associated with the access and utilization of AFHS. This is consistent with studies by Munthali (2011) and Perez (2013); Akinyi (2009) and (Ansha et al., 2017). On the other side, there was no significant association between age, gender and marital status of adolescents and how they access and utilize AFHS.

One other factor identified to have the ability to affect access and utilization of AFHS was cost. From this study, it was realized that, 70 (36.6%) of the respondents who have never used AFHS said it was not as a result of the cost of the service. This may imply that, they could afford yet none of them had ever utilized any service as at the time the study was being conducted. Though they admitted of having health problems. Some of those respondents who even said cost of service was a hindrance to them, still went to access and utilize some of the services. Moreover, all the 52.4% of the respondents who have ever utilized the services were able to afford the charges

with majority using cash and carry means to pay. This does not give a clear association between utilization of AFHS and cost involved. It was also explained by the p value which was 0.547 (p> 0.05). This is confirmed by a study conducted in Ghana by Appiah- Mensah (2016) where he found that, the act of seeking for healthcare by adolescents had no association with the cost involved.

It was identified in literature that it is always not the case as in some studies, cost of service had a negative influence on utilization of AFHS. One of such study was by Helamol et al., (2017); Society of adolescent medicine (2014); Paudel et al., (2012). Among other studies, cost was a major factor affecting the adolescents utilizing the services (29.1%). This is because majority are in school and depends largely on their families to pay their bills (24.5%). Meanwhile, they are most likely to find it difficult asking their parents for money to utilizes such services taking into consideration the fact that most of the adolescents think adults in the community will react negatively to them utilizing the services. This has been confirmed in a study that, the adolescent population may face specific barriers to access and utilize healthcare due to their lack of legal, social and financial autonomy and the high dependence on parents (Curtis et al., 2011).

Some of the adolescents who were not accessing and utilizing AFHS also attributed it to the environment. The environment refers to the location of the AFHS, how far or close it is from the homes of the adolescents. Young people sometimes express a desire to go out of their neighborhoods so they will not be seen by family and neighbors. At the same time, young people do not want to or cannot travel too far to reach service sites. About 37.3% of those who have not utilized the services before

stated their reason for not utilizing it. Health facilities where the services are located is far from their homes confirming the study by Appiah - Mensah (2016).

Other factors are greatly affected by the adolescents' need for the services. Any adolescent will initially think of utilizing the services if they have a health problem and need for a particular service before considering other factors that can aid them to obtain that service. If they do not have any health problem and need for the services, they will not access and utilize them. This was clear in this study as it became one of the reasons why some of the respondents (12.5%) who have never accessed and used any AFHS said, they did not have any health issues and therefore had no need for the services. This finding conforms to a study in Dejen district where (69.2%) adolescents were not seeking health services for the last one year mainly because they did not have any health problem for the last one year Tangut et al., (2012).

Timing is one major determinant of utilization of adolescent friendly health services (WHO, 2014). Also suggested that waiting time for adolescents to utilize health services should be short. Results from this study indicated that many in and out-school adolescents do not utilize the adolescent friendly health services in Kumbungu district because they will wait for longer period of time at the facilities. Study conducted by Akinyi, (2009) reported on the same issue as he cited long queues at the facility (37%), facility closure at the time of arrival at the facility (27%) as reasons by the adolescents for not receiving the services required.

The number of adolescents who knew of the existence of the AFHS and have utilized it, responded to the issue of timing this way. They stated that there was no delay whenever they visited the facility for services as most of them queued for about 1 – 30 minutes before receiving service or even less than that. Still on the timing, the

respondent preferred to utilize the services in the mornings of weekends. Meanwhile most of the health centers in the various communities from where majority of the respondents access their services from, do not work at the weekends. This explain why time in terms of day was a challenge to some of the adolescents who desired to access services. The result was not different from a study which revealed that, one of the most frequently mentioned reason as a barrier for utilization of services by the adolescent is inconvenience hours (Abebe & Awoke, 2014).

One major factor that affects the level of utilization of the AFHS is knowledge on the service. More than half of the respondents (50.2%) who were interviewed did not know of any adolescent friendly health services within the district. Most of those who had ever utilized the services are those who knew of the services. This implies that, the 45.8% of the respondents who have never use any services were those who did not have knowledge on it. This is similar to the studies by Motum et al (2016); Mapfunia (2013) and Abajobir & Seme (2014). The cross-tabulation analysis further shows that, there was a statistical significant association between knowledge of AFHS and its utilization by adolescents as p= 0.010. This was seen to be similar to a study conducted by Helamol et al., (2017) which observed that youths with a good knowledge of the type of adolescents and youth friendly reproductive health services were 1.68 times more likely to utilize AYFRH service than their counterparts and also those youths who know about the availability of youth friendly reproductive health services in their school were five times more likely to utilize the service than those who did not know.

This shows that where both the adolescents and public are aware of the AFHS, the level of utilization is high and this will help curb the rates of adolescent health

challenges. Notwithstanding, there are few exceptional cases where adolescents did not have knowledge on the services yet made use of them. This could be linked with parental control, advice from teachers, community members and friends.

From this study, it was made clear that service provision was a factor that affected the utilization of the AFHS at the various facilities. They had great association as p= 0.010. Findings shows that, the adolescents did not perceive that the providers might think they are too young to utilize the services nor see them as bad to utilize the service. This is in agreement with the study by Helamo et al., (2017). But, there have been other studies which turned to be different form finding in this study. One of such is a study which concluded that, health facilities providing the YFS programme did not deliver a more positive experience to young people. Less positive experiences were characterized by having to show soiled sanitary products to obtain contraceptives, healthcare workers expressing negative opinions about young people seeking information, lack of privacy, and inadequate information Geary (2015). The conclusion that can be drawn is that, the adolescents are more likely not to recommend AFHS to their peers for utilization neither will they also continue to seek for those services.

Privacy and confidentiality are also other factors that affect the utilization of AFHS. One of the major reasons behind not accessing the health facilities or services by young people and adolescents is the fear about lack of confidentiality. For instance, fears about being recognized in a clinic waiting room with the possible stigma attached (Kambikambi 2014). It came out that 99% of those who taught their information will not be shared out with other people use the services. Only one among those respondents who believed their issues are likely to be shared and had no

confidence in the providers did not utilize the service. Thus, leaving 96.3% of such adolescents utilising the services. This does not give a clear association between privacy and confidentiality in this study. This finding differ from other studies like Fuentes et al., (2018) who found an association between privacy and confidentiality and usage of AFHS.

From the perspective of health workers, they mention some factors that had a negative influence on effective utilization of AFHS. they include; misconception about some health services, religious/cultural believes, lack of privacy and confidentiality, fear of being stigmatized, attitude of health workers, inadequate information on services available, unfavourable periods for rendering the services and time wasting at the facility. Key among them was misconception about some health services, religious/cultural believes which fell in line with studies conducted by Ansha, Bosho & Jaleta (2017) and UNICEF (2011). Concerning privacy and confidentiality, Sunjindra & Bupathy, (2016) had a result similar to the current study.

The 54.2% access and utilization rate could be positively associated with some of the things the providers did. They include; strategies adopted to ensure privacy where they gave some specific time and days to some adolescents to access the services, using certain offices which were empty but not meant for adolescents to attend to them and engaging some of them in their own residence. Other measures include following protocol within the facility to ensure equal care and respect, packaging of services to attract the adolescents such as chick services rendered, waiting to serve them outside normal working hours, developing different names for some products which were difficult for the adolescents to call their normal names in public and

linking up with some drug sellers to use them as mediators to provide services to the adolescents.

The key informant interview also sought to establish provider challenges in the provision of AFHS. The utilization achieved was above average from the side of the adolescents. But from the perspective of the health providers, access and utilization seem not to be the best and they are often confronted with some issues as they put up their best in providing these services to the adolescents. Responses gathered on services provision challenges included; issues with working space purposely for the adolescents. This was also discovered in a study by WHO, (2015); Deogan, Ferguson &Stenberg (2012) and Bukenya (2017). Another important problem that was of concern inadequate trained staffs on adolescent issues. A similar challenge was identified by Paul et al., (2016) where providers expressed a self-identified lack of skill and inadequate support from the health system to successfully provide appropriate services to young people. They felt frustrated with the consultations, especially when meeting young women. Another study also found that, some staff were not trained on AFHS (Kyilleh et al., 2018). Godia (2012) also had a similar result. Other prominent issues were language barrier and lack of constant supervision by superiors. In line with this, Thomee et al., (2016) discovered in their study that, clinic work was not well monitored. These findings suggest that attention should not be placed on only the right holders (adolescents) but on the duty bearers and factors that affect their production.

5.5 Health workers willingness and readiness to provide AFHS

Health providers in proving their readiness and will to provide the services needed by adolescents, mentioned some of the things that they have been doing that reflect what they claimed. Critical among them was their ability to sacrifice non-working hours

thus from the period of 3:00pm to late evening like 9:00pm to provide services these adolescents need. Most at times the weekends is often used to serve them. It turned to be the opposite when literature on such studies were searched. It was noted in a study that, as young people preferred to access services between 13: 00and 17: 00 hours and others 17: 00 and 20: 00 hours, most of the facilities by then have closed between 16: 00 – 18: 00hours meanwhile there was no separate hours for the young people (Bukenya, 2017). This simply depict that, for a health worker to spend some hours outside the normal period to serve adolescent clients is really a personal will to do so and shows how ready such a provider is to support the course of providing friendly health services to the adolescents. This readiness and willingness truly reflect in this study as the adolescents in the study themselves confirmed that, they often sought for services from providers mostly in the evenings and at the weekends. Other things that the providers did includes: supporting health issues of some adolescents mostly financially when the need arises, tracing to find out some of the meeting times for these adolescents in their communities to render various health services to them. This means that, the providers are able to provide services to adolescents who by one reason or the other are not able to report to the facility by themselves.

5.6 Suggestions on strategies to improve knowledge, access and utilization of AFHS.

On strategies to help improve AFHS, the adolescents came out with varying views that can help achieve that. The discussions below elaborate on it. Findings from the study suggests that, almost all the respondents (97.6%) were of the view that there should be more education on AFHS because it will increase utilization. This will help the adolescents to know and understand the services and see the need to utilize them.

This finding is similar to those presented by many other studies. Nair (2015) found that, there is an increased demand for information about health and health care among adolescents and that should be provided. Similar findings were attained by WHO (2014) and Doyle, Mavedzenge, Plummer & Ross (2012).

The study found that, adolescents preferred these services mostly in the schools, health facilities, adolescent corners, homes and on the media. Appiah- Mensah (2016) and Atuyambe et al., (2015) reported a similar result. Mason-Jones et al, (2012) also reporting on a related finding said locating health services in schools has the potential to reduce transport costs, increase accessibility and provide links between schools and communities for the adolescents to use friendly health services.

The participants went on to suggest health workers, teachers, family members to be the preferred group of persons to provide needed services to them. Adolescents preferred that services be provided by younger health workers and of the same sex preferably not from the same area Atuyambe et al., (2015) found that. So was Nair (2015) who also had a similar finding.

Weekends specifically the morning was the most preferable period adolescents wish to use in accessing and utilizing AFHS. They were of the reasons that, is a convenient period to receive early treatment. Moreover, there will not be much clients at the facility so providers will be able to attend to them early which will enable them return home early for other works. Unfortunately, most of these services are provided for the adolescents like the health centers do not operate at weekends or on weekdays close at 2: 00 pm. This implies that, a new strategy should be considered if the district really wants the adolescents to utilize the services effectively. This could include creating more convenient working hours at the facilities. A different study which had a similar view wrote that, regarding the modalities of service provision, the

adolescents preferred that services be available all the time (opening and closing hours) for adolescents to utilize (Atuyambe et al., 2015).

Further analysis reported that, 54.1% of the adolescents would prefer to have access to range of services through different channels. Some reasons given was that, they would like to obtain complete treatment, avoid further complications as well as coming back to the facility. At the other side, nearly half of the respondent (45.9%) did not agree to that because they did not want to keep too long at the facility whiles others taught that, they will not receive quality treatment. It was also made clear in this study by the respondent that, they would continue to seek for health care services whenever they are referred with the view to receive a more effective treatment. This is a positive sign that should encourage health care providers to take advantage and refer cases concerning adolescents which they may not be able to handle to the appropriate levels as early as possible to avoid any further complications.

Concerning adolescent's suggestions on community involvement to improve upon AFHS, all the adolescents who were interviewed expressed their views on attitude of adults in the community including their parents and teachers on how they could promote adolescents to access and utilize the services. They also suggested ways that could help change adults' negative attitudes as well as suggestions to improve on AFHS in general.

Majority of the participants stated that, if adults in the community will be able to fulfill the listed contributions, access and utilization of AFHS will be promoted. They mentioned counselling adolescents on AFHS, provision of financial support, desisting from treating adolescents at home, assisting adolescents with their regular duties when adolescents are faced with health issues.

They also added that, to help solve the negative attitudes of adults in the communities towards the access and utilization of AFHS, they suggested the communities should be educated more on those services and at a point, the adolescents should be able to negotiate with the adults. By so doing, parents, teachers and other adults would support decisions of their wards and students respectively to access adolescent friendly health services when the need arise. Similar finding shave been made from Rohmayanti, (2015) and Kesterton & Cabral de Mello (2010).

For the general improvement of services, they suggested that, they should be respected and care for at the point of service, services should either be free or affordable.

The health providers carry the responsibility to provide the services also came out with some suggestions. They were of the view that, there should be adolescent clubs in the nearby communities. Motum et al., (2016) found that establishing and strengthening of youth centers and school reproductive health clubs are important steps to improve adolescents' reproductive health (RH) service utilization. The issue of training health workers to know how to handle adolescents also came up. This was in agreement with a study which found that, health workers must be train and re-train on youth friendliness and provide supportive supervisory visits, coupled with community-based programs to increase awareness for adults and parents to provide education and negotiating skills around sexual activity, STIs, contraception, and SRHS (Cowan et al., 2010). In another research, 69% of providers answered that they need more guideline/protocols to support them in providing services to adolescents (Nair, 2015). Godia, (2012) also indicated that health service providers who had not received training in YFS need more training especially in aspects of interpersonal

communication, youth counselling, post-abortion care and post-rape care. Other suggestions such as strengthening of school health, establishment of adolescent's corners at various facilities and the provision of needed logistics were mentioned.

CHAPTER SIX

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

6.0 Introduction

This chapter presents the summary and conclusion of the study. It also makes recommendation for future practice and research. The study intended to assess the knowledge, access and utilization of AFHS in the Kumbungu district, Ghana in order to inform stakeholders including Ghana Health Service, funding agencies, policy makers among others to make informed decisions to help improve the standards of health services provided to adolescents in Kumbungu district.

6.1 Conclusion

From the study, the following major summary and conclusions were drawn;

1. The results show that, adolescents have various health problems notably among them was disease conditions. Detailed knowledge about AFHS was

recorded as 49.8%. Major source of information on AFHS was from school. Gender was noticed to have a significant influence on the knowledge adolescents have on AFHS. A conclusion is thereby drawn that, adolescent's knowledge on AFHS is low. This is further strengthened as majority of them knew about only one service provided at the facility which is the normal treatment of disease condition and had no knowledge on other services available at the facility for them.

2. The access and utilization rate of AFHS in the study was above average as 54.2% was recorded for that. A total of 45.8% of adolescents who have ever had health problems were noticed not to have utilize any AFHS in their life time despite knowing the importance of it. Rather, they sought for health care at chemical shops and used herbal medicines for self-treatment. The conclusion is that, the access and utilization level of AFHS in the district is fairly good but not the best as many others continue to practice self-medications which is not recommended health wise.

3. The factors that affected the access and utilization of AFHS in the area under study were religion, education, knowledge on the service and provision of needed services. They were all identified to have a significant association with access and utilization of AFHS when a further analysis was carried out.

4. From the service providers, they are ever ready/willing to provide friendly health services to adolescents. The main challenge identified was lack of separate facilities (corners) for the adolescents and inadequate training on how

to handle adolescent health issues. It is therefore concluded that, their inability to perform is more of institutional problem rather than unwillingness from the providers side.

6.2 Recommendations

In line with the findings and conclusion drawn, the following recommendations are proposed to enable stakeholders that matter in this study to design and implement appropriate and effective strategies that will help to improve adolescent friendly health services in Kumbungu district.

To Kumbungu District Health Directorate:

1. School h ealth as well as community education on AFHS should be strengthened. This can be done by rolling out more educational campaigns on AFHS in communities and schools to increase knowledge, access and utilization of AFHS.
2. Intensive training such as in- service training, workshops, among others should be organized on AFHS for the health care providers to improve their knowledge on how to handle and provide services to adolescents.
3. The district together with the community members and other partners should create more adolescent health clubs in the communities so as to help providers reach the adolescents easily to render services to them.
4. Health care providers especially midwives and community health nurses should embark on comprehensive routine education campaigns at facility and community levels.
5. Kumbungu district assembly should take advantage of the radio stations and community durbars in the district to strongly communicate health education messages so that parents will understand the importance of supporting their

children to seek for AFHS most especially when they are faced with a health challenge.

6. The directorate in collaboration with the district education services should train some teachers so as to serve as channels for educating the in – school adolescents on AFHS.

To the Regional Health Directorate:

1. The health directorate should work harder with partners such as the district assembly to establish adolescent corners, empower and build the capacity of all other facilities where adolescents can access friendly health care.

To MoH and Its Partners:

1. It is also recommended that, future research shuld be considered to explore the knowledge, attitude and use of AFHS among the female adolescents.
2. The government should embark on policies that will primarily focus on socio-economic empowerment, especially education of the female gender for them to be empowered in making relevant decisions concerning the health of their children.
3. Ministry of health in partnership with Ghana Health Service and other partners should make available various resources needed such as four-wheel drive to the District Health Directorate to enhance the movement of management for supervision.

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APPENDIX I

INFORM ASSENT BY PARENT/GUARDIAN FOR ADOLESCENTS AGED 10-17 YEARS

Permission

Your child has been selected to be part of this study but your permission is required before proceeding. He/she has the right not to answer questions to which he/she is embarrassed and the responses will be kept till the end of the study.

Title

Assessing the knowledge, access and utilization of adolescent friendly health services in Kumbungu district, Ghana.

Introduction: This study is being conducted by Francis Kronzu Cudjoe, of the Department of Public Health, School of Allied Health Sciences (SAHS), University for Development Studies (UDS), Tamale, Ghana.

Names and affiliations of researchers conducting the study

Francis Kronzu Cudjoe, M. Phil (Student), University for Development Studies, Ghana

Martin Nyaaba Adokiya, PhD, MPH, University for Development Studies, Ghana

Purpose of study

The purpose of the research is to assess adolescent's knowledge on adolescent friendly health services and how they access and utilize those services in Kumbungu

district. This research is also expected to explore the willingness of health workers to provide adolescent friendly health services to adolescents.

Study procedure: You were selected because you are an adolescent of the ages 10-19 years and reside in the selected community within Kumbungu district. Adolescents who are below 10 years or above 19 years and also those that fall within the recommended age group who will be in the selected communities but are not natives in the district will not be included in the study. You will be interviewed on your knowledge, access and utilization as well as strategies to improve upon adolescent friendly health services.

Benefits: The findings of this research would be helpful to policy makers on strategies to improve on adolescent friendly health services in the district and Ghana as a whole.

Risks: There is no risk as far as this research is concerned.

Confidentiality: All information collected in this research will be coded. Data collected cannot be linked to you in anyway. No name or identity will be used in any publication or reports from this study. All answers your ward will provide will be confidential and will not be seen by anyone other than members of my team.

Voluntarism: Participation in this study is based on your own free will. You are not under any obligation to be a participant. The research is entirely voluntary.

Alternatives to participation: Services rendered to you in any health facility will NOT be affected if you choose not to participate in the research.

Withdrawal from the research: Your child may choose to withdraw from the research at any time for personal reasons. He or She will not be under any obligation to explain his/her actions. He or She may also choose not to answer any question he or she find uncomfortable or private.

Consequence of withdrawal: There will be no consequence, loss of benefit or care to him/her if he or she choose to withdraw.

Compensation: Participation in this research is purely voluntary and for academic purposes. Notwithstanding, adolescents will receive pens and pencils. In addition, this study will help support and strengthen approaches and structures of adolescent friendly health services in the district and Ghana.

Questions/contacts: If you have any question concerning this research, please do not hesitate to contact Dr. Martin Nyaaba Adokiya of the Department of Public Health, SAHS, UDS, (0509044041) and Francis Kronzu Cudjoe of School of Allied Health Sciences, Department of Public Health (0244217733/0509011972).

Certificate of Assent

I have read the following information, or it has been read to me. I have had the opportunity to ask questions about it and any questions that I have asked have been answered to my satisfaction. I consent 9voluntarily for my child/ward to be a participant in this
study.

……..... ……
Name/Initials of Parent/Guardian Name/Initials of participant

…….. ……..
Relationship to child Name of researcher/research assistant

……. ……..
Signature/thumb print of parent/guardian Signature of researcher/assistance

…… …….
Date Date

APPENDIX II

CONSENT FORM FOR ADOLESCENT AGED 18-19 YEARS

Title

Assessing the knowledge, access and utilization of adolescent friendly health services in Kumbungu district, Ghana.

Introduction: This study is being conducted by Francis Kronzu Cudjoe, of the Department of Public Health, School of Allied Health Sciences (SAHS), University for Development Studies (UDS), Tamale, Ghana.

Names and affiliations of researchers conducting the study

Francis Kronzu Cudjoe, M. Phil (Student), University for Development Studies, Ghana

Martin Nyaaba Adokiya, PhD, MPH, University for Development Studies, Ghana

Purpose of study

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Study procedure: You were selected because you are an adolescent of the ages 10-19 years and reside in the selected community within Kumbungu district. Adolescents

who are below 10 years or above 19 years and also those that fall within the recommended age group who will be in the selected communities but are not natives in the district will not be included in the study. You will be interviewed on your knowledge, access and utilization as well as strategies to improve upon adolescent friendly health services.

Benefits: The findings of this research would be helpful to policy makers on strategies to improve on adolescent friendly health services in the district and Ghana as a whole.

Risks: There is no risk as far as this research is concerned.

Confidentiality: All information collected in this research will be coded. Data collected cannot be linked to you in anyway. No name or identity will be used in any publication or reports from this study. All answers you will provide will be confidential and will not be seen by anyone other than members of my team.

Voluntarism:

Participation in this study is based on your own free will. You are not under any obligation to be a participant. The research is entirely voluntary.

Alternatives to participation

Services rendered to you in any health facility will NOT be affected if you choose not to participate in the research.

Withdrawal from the research

You may choose to withdraw from the research at any time for personal reasons. You will not be under any obligation to explain yourself. You may also choose not to answer any question you find uncomfortable or private.

Consequence of withdrawal

There will be no consequence, loss of benefit or care to you if you choose to withdraw.

Compensation

Participation in this research is purely voluntary and for academic purposes. Notwithstanding, adolescents will receive pens and pencils. In addition, this study will help support and strengthen approaches and structures of adolescent friendly health services in the district and Ghana.

Questions/contacts: If you have any question concerning this research, please do not hesitate to contact Dr. Martin Nyaaba Adokiya of the Department of Public Health, SAHS, UDS, (0509044041) and Francis Kronzu Cudjoe of School of Allied Health Sciences, Department of Public Health (0244217733/0509011972).

Certificate of Consent

I have read the following information, or it has been read to me. I have had the opportunity to ask questions about it and any questions that I have asked have been

answered to my satisfaction. I consent voluntarily to be a participant in this study.

……..... ……

Name/Initials of Participant Name of researcher/research assistant

……..... ……

Signature/ thumb print of Participant Signature of researcher/research assistant

……. ……

Date Date

APPENDIX III

QUESTIONNAIRE

KNOWLEDGE, ACCESS AND UTILIZATION OF ADOLESCENT FRIENDLY HEALTH SERVICES IN KUMBUNGU DISTRICT, GHANA

INFORMED CONSENT

Exchange greetings…… My name is Francis Kronzu Cudjoe, a master's student of the Department of Public Health, School of Allied Health Sciences, and University for Development Studies. The research seeks to "Assess the Knowledge, Access and Utilization of Adolescent Friendly Health Services in Kumbungu District, Ghana". I would very much appreciate your participation in this survey (Target Group: Adolescents 10-19 years). The information you will provide will help to understand, inform and direct future plans and actions of stakeholders to help improve the overall reproductive health services needed by the adolescents in the Kumbungu District and Ghana. All of the answers you will give will be confidential and will not be seen by anyone other than members of the research team. You can

decline to answer any question you do not feel comfortable answering. However, I hope you will partake fully in the survey since your views are important.

May we begin the interview now? 1. Yes 2. No

IDENTIFICATION

1. Date of interview……
2. Sub-district name……
3. Name of Community……
4. Questionnaire Number……

SECTION A: SOCIO-DEMOGRAPHIC CHARACTERISTICS

Q1. How old are you?	Q2. Sex
1. 10-14 2. 15-19	1. Male 2. Female
Q3. What is your religious denomination?	Q4. How will you describe your current marital status?
1. Christian 2. Islam 3. Traditionalist 4.Other(s), specify…….	1. Single 2. Married 3. Divorced 4. Widowed

Q5. What is your highest level of education?	Q6. What is your employment status?
1. Primary school 2. Junior High School 3. Senior High School 4. Tertiary 5. None 6.Others specify……	1. Employed 2. Unemployed

SECTION B: KNOWLEDGE LEVEL OF ADOLESCENTS ABOUT ADOLESCENT FRIENDLY HEALTH SERVICES

Q7. Do you know of some adolescent health challenges?	Q8. If yes, mention at most any three of them.
1. Yes 2. No	…… …… ……
Q9. Have you heard of or had any education on Adolescent Friendly Health Services?	Q10. If yes, from where?
1. Yes 2. No	1. School 2. Church 3. Friends 4. Family members 5. Health care providers 6. Media (TV, radio, internet) 7. On notice board/posters

Q11. Do you think there is enough education on Adolescent Friendly Health Services?	Q12. What do you think can be done to intensify the education on the Adolescent Friendly Health Services?
1. Yes 2. No	…… …… ……..

Q13. Do you know whether there are Adolescent Friendly Health Services at the various health facilities?	Q14. Do you know some of the adolescent health services offered at these health facilities?
1. Yes 2. No	1. Yes 2. No

Q15. Mention at most three of these services available.	
…….. …….. ……..	

SECTION C: ACCESS AND UTILIZATION OF ADOLESCENT FRIENDLY HEALTH SERVICES.

Q16. Do you think it is important for every adolescent to access these services?	Q17. Have you ever had a health problem as an adolescent?
1. Yes 2. No	1. YES 2. No

18. Did you seek for healthcare service from any health facility?	If yes to Q18, continue from Q19-
1. Yes 2. No	If no to Q18, continue from Q48-

Q19. Was it by your own intension that you sort for the health service at the facility?	Q20. If no, who made you to go in for that service?
1. Yes 2. No	1. A relative 2. Teacher 3. Parents 4. Friend 5. Others, specify……..

WITH SERVICE AND SERVICE PROVIDERS.	
Q21. What was your reason for going there?	Q22. How often do you go there?
1. Family planning services 2. Screening/treatment of sexually transmitted disease	1. Daily 2. Weekly 3. Monthly

3. Treatment of all other disease 4. Pregnancy screening 5. Postnatal services 6. Post abortion care 7. Antenatal services 8. Health information/counselling 9. Sports and recreational 10. Nutritional management 11. Management of sexual violence 12. Substance abuse management	4. Quarterly 5. Yearly
Q23. How long did you have to wait in the queue if any?	Q24. Did you receive the information and services you wanted?
1. Did not wait in a queue at all. 2. 1-30 minutes 3. More than 30 minutes to 1 hour 4. If more than 1 hour, specify…….	1. Yes 2. No

Q25. Were there enough products to meet your request?	Q26. How much time did the service provision take?
1. Yes 2. No	1. Within 30 minutes 2. Within 1 hour 3. If more than 1 hour, specify…….

Q27. Was the service provider welcoming and friendly?	Q28. Did the provider listen to your concerns to your satisfaction?
1. Yes 2. No	1. Yes 2. No
Q29. Did the provider allowed you to ask questions bordering you?	Q30. Did the provider respond to your questions to your satisfaction?
1. Yes 2. No	1. Yes 2. No

Q31. Did the service provider have adequate time to provide the services to you after the consultation?	Q32. Could you afford the charges of the services provided to you?
1. Yes 2. No	1. Yes 2. No

Q33. By what means did you pay for the charges?	Q34. How much was charged for the service provided?
1. Myself 2. Parents 3. Friend 4. Relative 5. Others, specify……	1. No amount was charged 2. If an amount was charged for the service, please specify Ghc……..

CONVENIENT DAYS AND TIMES FOR THE ADOLESCENTS	
Q35. What period of the week would you prefer to come for services?	Q36. What time of the day is convenient for you to come for the services?
1. Weekdays 2. Weekends	1. Morning 2. Afternoon 3. Evening

FACILITY ENVIRONMENT	
Q37. How many kilometers is the health facility from your home?	Q38. Do you think the location can make people see you going there?
1. ……	1. Yes 2. No

	PRIVACY AND CONFIDENTIALITY
Q39. Did you find the consulting room suitable/appropriate?	Q40. Did anything or anyone interrupt your time with the provider
1. Yes 2. No	1. Yes 2. No

Q41. Did you feel that anyone could overhear the conversation you had with the provider?	Q42. Do you think your conversation with the provider will be kept in confidence?
1.Yes 2. No	1. Yes 2. No

SUPPORT POLICY	
Q43. Did the provider tell you that you were too young to receive any of the services	Q44. Did the provider set a date for your next visit?
1. Yes 2. No	1. Yes 2. No

Q45. Do you think the provider will attend to you if you go there without appointment?	Q46. Will you visit the facility again?
1. Yes 2. No	1. Yes 2. No

Q47. If no to Q46, why?	
……	
……	
……	

If no to Q18, continue from Q48.	
Q48. How then did you	Q49. Why didn't you seek for healthcare service at the

resolve the health issue you had? Through:	health facility when you had the health problem? (**Tick as many as apply**).
1. Pharmacy/Chemical shop 2. Others, specify……..…..	It is not adolescent friendly 1. It is far from my house 2. Cost is too much 3. It is too close to my house 4. The providers are not friendly 5. Long waiting time 6. Someone might see me and judge me 7. The provider might think I am too young 8. The provider my think I am a bad boy/girl 9. I access the services at other place 10. I had no idea that it existed 11. I don't have any need for the services 12. Poor levels of treatment effectiveness

SECTION D: STRATEGIES TO IMPROVE KNOWLEDGE, ACCESS AND UTILIZATION OF ADOLESCENT FRIENDLY HEALTH SERVICES.

Q50. Do you think there should be intensive education on adolescent friendly health services?	Q51. Which of the following persons/group of people would you suggest that should provide the education?
1. Yes 2. No	1. Health workers only 2. Trained peer educators 3. Parents/guardians (families) 4. Teachers 5. Religious leaders 6. Journalists 7. Others specify……

Q52. Where do you think education on these services should be carried out to make it more effective to the adolescents?	Q53. Do you think there are some adolescent health services you wish to have but are not offered at various health centers?
1. Health centers 2. Schools 2. Churches/mosque 3. Homes 4. Media (TV, radio, internet) 5. On notice board/posters 6. Others, specify……	1. Yes 2. No

Q54. If yes to Q51, what are some of those services?	Q55. Do you think every adolescent of any age and sex should be allowed to access services?
1. …… 2. …… 3. …… 4. ……	1. Yes 2. No

Q56. The providers at the facility should have enough time for you if you go there?	Q55. Do you think the providers should not restrict you from any of the services because of your age, religion or sex?
1. Yes 2. No	1. Yes 2. No

Q56. Do you want providers to keep every information about services rendered to you private and confidential?	Q57. Would you like the providers to attend to you if you go to seek for services even without any earlier appointment?
1. Yes 2. No	1. Yes 2. No

Q58. Would you prefer to have particular group of providers rendering services to you?	Q59. If yes to Q58, which of these providers would you like to receive services from? Tick as many as apply.
1. Yes 2. No	3. Doctor 4. Nurse 5. Midwife 6. Peer educator 7. Others, specify……

Q60. Where will you like to obtain your services from?	Q61. What period of the week would you prefer to come for services?
1. Hospital 2. Clinics 3. Adolescent corner/youth centers 4. Pharmacy 5. Educational institutions 6. Shopping centers/market 7. Work places 8. Others, specify……	1. Weekdays 2. Weekends

Q62. What time of the day will be convenient for you to access the services you need?	Q63. Why would you prefer the chosen time in Q62?
1. Morning 2. Afternoon 3. Evening	……

Q64. Would you also prefer a specific time or period set aside by the health facilities to provide services to only adolescents like you?	Q65. If yes to Q64, why will you prefer that?

1. Yes 2. No	1. Privacy and confidentiality 2. Not to meet relatives and family members 3. To obtain better attention and care from the health providers 4. Convenient time to seek for services needed 5. Others, specify……..

Q66. Would you like health facilities to offer range of services to you at once when you visit there?	Q67. If yes, why?
1. Yes 2. No	…… …… …… …… ……

Q68. Would you continue to seek for any service you need when you are referred from one facility to another?	Q69. Why?
1. Yes 2. No	…… …… ……

Q70. Which of the following means would you prefer to use in paying for the services rendered to you?	Q71. Which of the following will encourage you to seek for healthcare services?
1. Health insurance (free) 2. Part-payment 3. Full payment 4. Others, specify…….	1. Easy accessibility of health services. 2. Positive attitude of health staffs 3. Youth involvement in service provision (trained peer educators) 4. Age appropriate environment 5. Outcome of services provided meet the needs of adolescent 6. Others, specify……..

COMMUNITY INVOLVEMENT	
Q72. How do you think adults in the community including your parents, teachers and other stakeholders should behave to help adolescents access the health services they need?	Q73. If their responses and reactions are negative, how do you think they can be made to change their attitudes towards these services you need as an adolescent?
.... ……	…… …… ……

Q74. Which of the following will you suggest to help improve upon AFHS? Tick as many as apply. Tick as many as apply.	
1. All adolescent clients should be treated by health care providers with care and respect regardless of status. 2. Free or affordable service to adolescents. 3. Point of service delivery must have a convenient working hours. 4. Adolescents must be well informed about the range of reproductive health services available and how to obtain them. 5. Community members must be made to understand the benefits of these services to the adolescent and support their provision. 6. Community members and some adolescents must be involved in the provision of the services. 7. There should be policies and procedures in place to guarantee client confidentiality. 8. There should be privacy at the point of service delivery. 9. Health care providers should be non judgemental, considerate and easy to relate to. 10. Point of service delivery must ensure that short waiting time is used with or without appointment. 11. Appealing and clean environment. 12. Actively involving adolescents in designing, assessing and providing services. 13. The required package of health care at the point of service delivery must be provided or through referral linkages. 14. Health care providers must have the required competencies to work with adolescents. 15. Health care providers must use evidence base-protocols and guidelines to provide health services. 16. Health care providers must dedicate sufficient time to deal effectively with adolescent clients. 17. The point of service delivery must have the required equipment, supplies and basic services.	

UNIVERSITY FOR DEVELOPENT STUDIES
SCHOOL OF ALLIED HEALTH SCIENCES
DEPARTMENT OF PUBLICK HEALTH
KEY INFORMANT INTERVIEW GUIDE

Introduction

Exchange greetings…… My name is Francis Kronzu Cudjoe, a master's student in the department and school named above. I am working on a project concerned with adolescent's friendly health services in which you could participate. The study is to "Assess the Knowledge, Access and Utilization of Adolescent Friendly Health Services in kumbungu district, Ghana". It seeks to explore health providers perceptions on adolescent friendly health services and willingness to provide them. The interview will last for about 30 minutes. All the answers you will give will be confidential and will not be seen by anyone other than members of the research team. You can decline to answer any question you do not feel comfortable answering and you may stop the interview if you do not want to continue. However, I hope you will partake fully in the survey since your views are important. The information you will provide will help to understand, inform and direct future plans and actions of stakeholders to help improve the overall reproductive health services needed by the adolescents in the Kumbungu District and Ghana.

May we begin the interview now? 1. Yes 2. No
Do you have any concern before I start? (Address all issues)
May I start now?

IDENTIFICATION

1. Name of facility: …… 2. Location of facility: …….
3. Profession: …… ... 4. Position: …….
5.Gender:…… 6. Respondent code: ..……
7. Interview date: …… 8. Interview start time: ……
9. Time interview ends: ……

1. How long have you been working with Ghana Health Service? ……
2. How long have you been working in this district? ……
3. Have you heard of Adolescent Friendly Health Services (AFHS)? Yes { } No { }. If yes can you describe what you know about it?
4. What kind of AFHS do your facility provide?
5. What will be your general view on how adolescents utilize the AFHS you provide?
6. Are there any records for at least the past one year? If yes, can I see and cross-check the register?
7. For what health reasons do most of the adolescents come to utilize the services?
8. In what manner do you ensure and guarantee adolescents privacy and confidentiality?

8.1. In what way do health care providers ensure that they give all adolescent clients equal care and respect regardless of status?

8.2. In which way do you package your services to make them appealing and attractive to adolescents to use your services e.g. friendliness as in working hours, waiting time, etc.?

8.3. What do you have to say with regard to your facility having the required equipment and supplies necessary to deliver the right health services to adolescent clients?

8.4. What will you say about your facility providing the right services in the right way? Had that contributed positively to the health of adolescents?

8.5. What indications are there to show that adolescents are willing to obtain the health services that are available in your facility?

9. In your own opinion what are the most three common factors that makes it difficult for adolescents to utilize friendly health services they need? ……
……
……
10. How useful do you think is AFHS in helping to reduce the health challenges adolescents face?
11. In which way are health workers willing to provide AFHS to adolescents?
12. What are some of the major challenges you face as service provider in providing AFHS at service delivery points?
13. What changes would you like to see that could make services more adolescent friendly and enhance utilization?
14. My last question, are there any suggestions you would like to add to help improve the standards of AFHS in the district?

Thank you for being part of this study. Have a nice day/evening

APPENDIX IV

UNIVERSITY FOR DEVELOPMENT STUDIES

School of Allied Health Sciences

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P. O. BOX TL 1350
Tamale Campus
Tamale - Ghana

9th January, 2018

DEPARTMENT OF PUBLIC HEALTH

TO WHOM IT MAY CONCERN

Dear Sir/ Madam

LETTER OF RECOMMENDATION FOR MR. FRANCIS KRONZU CUDJOE

It is my pleasure to submit to you this letter of recommendation on Mr. Francis Kronzu Cudjoe, a final year MPhil Community Health and Development (MCHAD) student, with Index Number (UDS/CHD/0253/16) of the Department of Public Health, School of Allied Health Sciences.

Mr. Cudjoe needs your support and permission to gather data for his thesis titled "***Assessing the knowledge, attitude and access of adolescent friendly health services in Kumbungu, Ghana***".

I therefore humbly recommend him for your utmost consideration and support.

Should you have any clarifications or questions concerning this letter, please do not hesitate to contact me at your earliest convenience.

Yours Sincerely,

Michael Wombeogo (PhD)

(Senior Lecturer & Head of Department, Public Health, SAHS/UDS)

DOH

Bearer of this letter had been to me and I have had discussions with him please give him the needed support so as to collect the required data.

Thanks

DOHS

12/01/2018