UNIVERSITY OF CAPE COAST

PERCEPTION AND ATTITUDE OF ADOLESCENTS ON UTILISATION OF ADOLESCENT- FRIENDLY HEALTH SERVICES IN JUNIOR HIGH SCHOOLS IN CAPE COAST CIRCUIT, GHANA

BY

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DECLARATION

Candidate's Declaration

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:…….

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Supervisors' Declaration

We hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

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ABSTRACT

Adolescent health problems are quite alarming and have daring consequences on public health globally. This study was designed to explore adolescents' knowledge level, perception, and attitude of adolescent friendly health services (AFHS) on their utilization of the service in Cape Coast Circuit in Ghana. Frequency counts, percentage scores, and Chi-square were used to analyse the results. It was found that, the awareness level of adolescents in JHS, in the Cape Coast Circuit on AFHS is low (n = 214, 43.6%). The perceptions of the adolescents on the utilisation of the AFHS in Cape Coast Circuit centers are that staff at the AFH centers have adequate time for them (n = 379, 77.2%) and that they are friendly (n = 372, 75.8%). The main attitudes of the adolescents were that they would visit AFHS centers if the services were free (n = 432, 88%), and available within the community (n = 411, 83.7%). The study also showed that adolescents' level of utilisation of AFHSs in Cape Coast Circuit is low (25.5%). None of the socio-demographic factors (gender and age) influences adolescent utilisation of AFHSs (P> .05).It was recommended that; school health education in corporation with community education should be strengthened on AFHS, healthcare providers should be encouraged to continue to be friendly and devote adequate time to their clients when they visit the AFHS centers. Health stakeholders should ensure that AFHSs are continuously free and accessible to adolescents. They should target adolescents irrespective of age, gender, religious and cultural affiliation to administer the services to them.

KEY WORDS

Adolescent

Perception

Attitude

Utilisation

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DEDICATION

To my late mother, Comfort Nsiah

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CHAPTER ONE

INTRODUCTION

Background to the Study

Adolescent-friendly health service (AFHS) is the provision of quality and step-by-step guidance in health service for adolescents (World Health Organization [WHO], 2012). AFHS, according to McIntyre (2002), provides adolescents with the required psychological and physical needs in the aspects of counseling, family planning, education on adolescent reproductive health, education on nutrition, and education on the use of contraceptives. There are challenges confronting utilisation of AFHS (United Nations Children's Emergency Fund [UNICEF], 2011). Research has shown that AFHS is underutilized in Ghana (Addo & Ampomah, 2015; Awawu, 2017; Odoi, 2017).

In 1996, Ghana Health Service (GHS) implemented AFHS program to the existing healthcare services to provide the health needs of adolescents (GHS, 2005). This service is to provide information and counseling services to adolescents during their development. The services include; reproductive health, sexually transmitted infections prevention and treatment, family planning, nutrition, hygiene, and substance use. This study was design to find out the perceptions, attitude and knowledge level of adolescents on utilisation of AFHSs in Cape Coast Circuit to enable make recommendations for stakeholders to improve the use of AFHS.

Adolescent health problems are major public health concerns (WHO, 2018a). During adolescence stage, at this point where they are sexually active, they involve themselves in risky sexual behaviors. As a result, adolescent health problems in Ghana (such as substance use, early and unprotected sex, injuries,

illegal abortions and teenage pregnancy) still remain a public health challenge (Ghana Demographic and Health Survey [GDHS], 2017; GHS, 2018). Involving in this risky sexual behavior can pose many health problems (Hale & Viner, 2016). These health problems can be surmounted by the utilization of AFHS. Utilization of AFHS is concerned with adolescents making effective use of the service by seeking knowledge on their reproductive health, family planning (measures which include contraceptives use for teenage pregnancy prevention, and condom use to prevent sexually transmitted infections [STIs]), and nutrition.

Globally, statistics has revealed that the youth forms 18% of the world's population for which out of every six, one is an adolescent (WHO, 2016). There are various sexual and reproductive health problems adolescents face worldwide. These reproductive and sexual health issues include; teenage pregnancy, unsafe abortions, and STIs like HIV/AIDS, syphilis and gonorrhoea (United Nations Population Fund [UNFPA] & Joint United Nations Programme on HIV/AIDS [UNAIDS], 2012). For example, in every 1000 girls who's age ranges 15-19 years, 44 give birth per year globally (WHO, 2018b).

Moreover, over one million STIs are acquired everyday globally for which adolescent's form the highest number. Adolescent rates are also very high in substance use, violence and unsafe abortion which are public health concerns (WHO, 2018a). Adolescent's perception and attitude towards utilisation of healthcare may affect the total well-being of a person (Averiyire, 2015). However, a bold new vision came up to solve the health needs of adolescence with the aid of the 1999 International Conference on Population and Development (ICPD). ICPD sought to achieve; access to reproductive and

sexual health services, reduction of maternal mortality, reduction of infant and child mortality and the provision of universal education (UNFPA, 2014).

In Africa, availability, affordability and accessibility of AFHS is a problem (Nema & Sharma, 2007). Even though, persons particularly adolescents indifferent countries face different challenges in access to adolescent reproductive health services, adolescents in developing countries are less privileged in these healthcare services compared to the adolescents in developed countries (Boonstra, 2007). In West Africa, the barriers affecting the utilisation of AFHS service include; poor access to services, fear of stigma, and unavailable focus group discussions of adolescent's health problems (Marinda, Saadat, Odutolu & Rafael, 2016). Adolescents in some societies engage in sexual activity without protection due to peer pressure (Adegoke & Maya, 2011; Wusu, 2013). As a result of this, teenage pregnancy, contracting of STIs, and unsafe abortion appear to be on the increase.

In Ghana, lack of knowledge on the availability of the AFHS at the healthcare center, accessibility to the healthcare center, and traditional values can cause under-utilization of the AFHS (Biddlecom, Munthali, Singh & Woog, 2007). Adolescents in Ghana experience health problems as well as behavior problems which is a result of poor choice of food, early and unprotected sexual intercourse, and substance use (Doku, 2012). These health problems are associated with malnutrition, contraction of STIs, unsafe abortion, and teenage pregnancy.

A study by Adeleke and Balogun (2019) on in-school adolescents' perception and attitude of AFHSs indicated that adolescents who lived with both parents perceived they received health service accessible compared to those

who live with other people apart from their parents. Moreover, females had positive attitude and perception on healthcare services they received than males. Again, respondents in Junior High Schools had poor perceptions on AFHSs than respondents in Senior High Schools. Even though, AFHS is available in most regions in Ghana, adolescents in the Cape Coast Metropolis may not be using it to help address their health problem (Asiedu, 2016). Several researches (Addo & Ampomah, 2015; Alemayehu, Terefe & Juhar, 2017; Averiyire, 2015; Awawu, 2017; Odoi, 2017; Suneth, Thilini & Piyaseeli, 2008) have been conducted globally pertaining to utilisation of AFHS. This study has highlighted the utilization of the AFHS centers among adolescents in differing setting with mixed results.

Statement of the Problem

General health problems adolescent's face includes; injuries, mental health, violence, alcohol and drug use, early pregnancy and childbirth, unprotected sex, menstrual problems, malnutrition, and STIs (which include gonorrhea, HIV/AIDS and syphilis). These health problems are major public health threat globally (WHO, 2018a). Odoi (2017), Aba (2016), and Addo and Ampomah (2015) conducted separate research on utilisation of AFHS and revealed that there is low utilisation of the services in Ghana. However, little is known about the knowledge level of AFHSs among adolescents in Cape Coast. Research conducted by Andrew and Johnson (2017) indicated that perceptions and poor attitude of service providers such as; long waiting times for adolescents, spending little time during consultation, judgmental attitude of service providers and lack of privacy and confidentiality in service provisions are associated with low utilization of AFHSs. The study focuses only perception

of adolescents on the attitude of service providers on the access and use of reproductive health services. However, there is a gap and there is the need to highlight on adolescent's general perception and attitude on their utilization of AFHSs.

A study revealed that there is 42% alcohol drinking and 69% unprotected sexual intercourse prevalence in Ghana particularly among adolescents in the Central Region (Hormenu, Hagan & Shack, 2018). The Cape Coast Municipality recorded a total of 608 HIV/AIDS infection in 2017 and the most vulnerable people were adolescents (Annan, 2017). The figure is high compared to the 121 and 498 recorded in 2015 and 2016 respectively. Available records have shown that, the prevalence of teenage pregnancy in Central Region is high. In 2015, teenage girls who got pregnant were 13,000 and in 2016, 5,000 teenage girls got pregnant between July and December (Ghana Statistical Service [GSS], GHS & International Classification of Functioning, Disability and Health [ICFDH], 2018). Furthermore, Botchway (2018) reported that most adolescents in Cape Coast Metropolis use marijuana with impunity. Anecdotal evidence from the Cape Coast AFHS centers indicated that there is rapid reduction in utilisation of the AFHS in Cape Coast Metropolis. Therefore, this study seeks to explore adolescent's perception, attitude and their utilisation of AFHS in Cape Coast Circuit of Ghana

Purpose of the Study

The purpose of this study was to find out the knowledge level of adolescents, perception, and attitude of AFHS on their utilisation of the service in Cape Coast Circuit.

Research Questions

1. What are the knowledge levels of adolescents on AFHS in Cape Coast Circuit?
2. What are the perceptions of adolescents on utilisation of AFHS in Cape Coast Circuit?
3. What are the attitudes of adolescents on utilisation of AFHS in Cape Coast Circuit?
4. What are the levels of utilisation of AFHS among adolescents in Cape Coast Circuit?
5. Which socio-demographic factors are associated with adolescent's utilisation of AFHS in Cape Coast Circuit?
6. What is the influence of knowledge level, perception, and attitude on utilization of AFHS?

Significance of the Study

Adolescent's knowledge level, perception, attitude and their utilisation of the AFHS may have the potential to address and solve adolescents' health problems. The study will contribute to the existing available knowledge in literature related to this research and the findings of this study will make recommendations to stakeholders on measures to improve utilisation of AFHS in Cape Coast Circuit and by fulfilling one of the Sustainable Development Goal

(SDG) 3 in 2030 the health needs of adolescents would be solved by ensuring general access to Adolescent-Friendly Health Services.

Delimitations

This study was delimited to:

1. Adolescents in Cape Coast Circuit area.
2. Socio-demographic information which included age, sex, and religion.
3. Purposive sampling procedure.
4. Researcher generated questionnaire.

Limitation

1. During the collection of data process, some of the students who had ever visited the AFHS centers forgot what happened over their visit when they were asked some questions and therefore there were possibility of recall bias which can affect the generalisation of the results.

Definition of Terms

Utilization of adolescent friendly service: This refers to adolescents making effective use of AFHS by seeking knowledge of sexual and reproductive health, seeking knowledge on family planning measures such as the use of contraceptives to prevent teenage pregnancy, condom use to prevent STIs and obtain knowledge on nutrition.

Adolescent sexual and reproductive health: It is the state of complete physical, mental and social well-being in all matters relating to the adolescent reproductive system and include their ability to remain free from unwanted pregnancy, unsafe abortion, STIs (including HIV/AIDS), and all forms of sexual violence and coercion.

Organisation of the Study

The study was organized into five chapters. The first chapter (Chapter One) was introduction to the study. Background to the study, statement of the problem, purpose of the study, research questions, significance of the study, delimitations, limitations, definition of terms, and organisation of the study were covered in this chapter. Chapter Two was concerned with literature related to the study. The headings included; adolescent health, utilisation of AFHS and barriers of utilisation of AFHS. Theoretical framework and conceptual base pertaining to AFHS were included in this chapter. Chapter Three described the methods which were used to carry out the study. It included; research design, study area, population, sampling procedure, data collection instrument, data collection procedures, data processing and analysis, and chapter summary.

Chapter Four presented results and discussions of the findings of the study. The final chapter (Chapter Five) summarized the study, drew conclusions and made recommendations for policy and practice and for further research.

CHAPTER TWO

LITERATURE REVIEW

The purpose of this study was to find out the knowledge level of adolescents, perception, and attitude of adolescent friendly health service (AFHS) on their utilisation of the service in Cape Coast Circuit. The contents in this chapter deals with the review of literature important to this study. The literature review was developed under these sub-headings;

1. Theoretical Framework
2. Conceptual Base of the Study
3. Concept of Adolescence and Adolescent Health Problems
4. Adolescent Health
5. Adolescent Friendly Health Services
6. Adolescent Knowledge Level on AFHSs
7. Perception of Adolescent on AFHSs
8. Attitude of Adolescents on AFHSs
9. Adolescent Utilisation Level of AFHSs

Theoretical Framework

Several theories have been propounded over the years in relation to the AFHSs and healthcare services. The theories include; stages of change (transtheoretical) model, precaution adoption process model, health belief model (HBM), Nola Pender's health promotion model, theory of reasoned action, social cognitive theory, theory of planned behavior, Anderson model of health service utilization and others. However, this research focuses only on two of these theories because they are more related and relevant to the study. The

theories are: Andersen's model of health service utilisation, and the health belief model.

Andersen's model of health service utilization

The Andersen model of health service utilisation (AMHSU) is a model that aimed at showing the factors that lead to the health service utilisation. Ronald M. Andersen, at the University of California, Los Angeles who is a health service professor developed this model in 1968. Globally, the Andersen health behaviour model is accepted and for health service utilisation, it is used as a reliable tool for the study (Yan-Ning, Dong-Xiao, Bo, Qi-Ming, & Hong-ye, 2016). According to this model, health service utilization has three main constructs such as predisposing factors, enabling factors, and need factors.

Predisposing factors

Predisposing factors reflect the individual's propensity to use health services (Jang, Chiriboga, Allen, Kwak & Hale, 2010). Predisposing factors involves features which include ethnicity, age, and health beliefs. For example, an individual is likely to use health services if he/she beliefs that they are effective in treatment of an ailment. The predisposing factors involve; social structure (such as; ethnicity, social networks, education, occupation, social interactions, and culture); health beliefs (such as; knowledge, values, and attitudes) for which people portray towards the health care system; and demographics (which involves age and gender).

Enabling factors

Enabling factors are the resources that may facilitate access to health services (Jang et al., 2010). Enabling factors include family support, health insurance accessibility, one's community and so forth. The enabling factors

involve; First, personal or family: This emphasizes on how to access and the means to health insurance, income, health services, a regular source of care, travel, extent and quality of social relationships. Second is the community which looks at health personnel availability, health facilities, and the waiting time. Third, possible additions: This includes genetic factors and psychological characteristics.

Need factors

Need factors represents the combination of perceived and actual need for the services of healthcare. Need factors portray the likely needs of utilization of health service, which include chronic conditions, restricted activity, and self-perceived health (Jang et. al., 2010). Other socio-economic factors which include ethnicity the need of health service (Glei, Goldman & Rodríguez, 2003). The two main need factors are perceived and evaluated need.

Perceived need emphasises on helping to understand healthcare seeking behavior and to adhere to medical regime. It involves how persons view their general health and wellbeing. It also involves persons judgement about their own health issues and the relevance of seeking healthcare (Andersen, 1995).

The evaluated need emphasises on skillful judgment on persons' health condition and the need to seek healthcare. The evaluated need highlights on the kind and type of treatment that a person will receive after presenting him/herself to the medical care for treatment (Andersen, 1995). Figure 1 is a diagram which represents the Anderson model of health service utilisation.

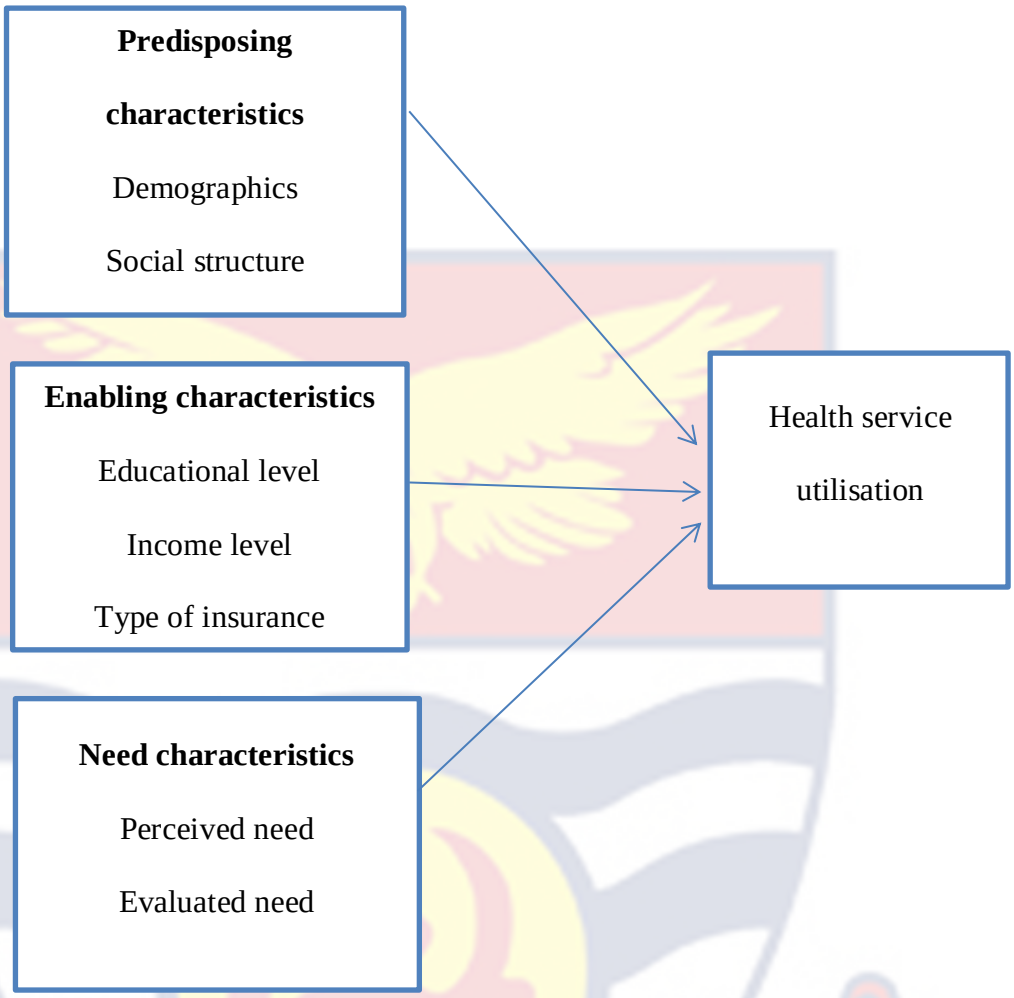

Figure 1: Andersen model of health service utilisation (Andersen, 1968)

The constructs (predisposing factors, enabling factors, and need factors) of this model leads up to the use of health services. The predisposing factors include socio-demographic factors (like; sex, age, religion, ethnicity) knowledge of adolescents on AFHSs, and attitude of adolescents on AFHSs. All these predisposing factors directly affect the utilisation of AFHSs. The enabling factors (which include; income level, type of insurance, educational level) directly affect the utilisation of AFHSs. The need factors involve components such as perceived need and evaluated need and all these affect the use of AFHSs

directly. This model is significant to this study because its constructs explain and accounts for the factors which results in the utilisation of AFHSs.

Health belief model

The second model guiding the study is the health belief model (HBM). The HBM is a psychological model that explains and predicts health behaviours like preventative screenings or seeking treatment for a health condition (Rosenstock, 1966). The HBM focuses on attitudes and beliefs of individuals and mostly used in health education and health promotion (Glanz, Rimer, & Lewis, 2002). In the 1950s, the HBM was developed and in the 1980s modified by social psychologists Hochbaum, Rosenstock and Kegels working in the United States public health services.

According to Hochbaum, Sorenson, and Lorig (1992), in reacting to the failed free tuberculosis health screening program, this model was developed to find out the people's perception in relation to the TB program. The tuberculosis screening program enabled people, especially adults, to get free screening for both TB and x-rays. Since then, the HBM has been used to find out and explain different health behaviors of people.

According to Baiden and Rajulton (2011), the HBM model over the years is used to promote behaviors such as medical compliance, health service utilization, condom use, and use of seat belt. Also, HBM suggests that a person will adopt a behavior if he or she believes in the effectiveness of the recommended health behavior. HBM enables persons to adopt positive health behaviors by the use of negative health consequence to motivate people to use health services (Christina et al., 2016). For instance, Baiden & Rajulton (2011) indicated that for people to practice safe sex, HIV/AIDS can be used as a

negative health consequence to motivate them to avoid unsafe sex. Additionally, taking an individual with hypertension into consideration, the perception associated with the likelihood of getting heart attack can be used to motivate the individual to regularly exercise, to manage his or her diet and take the prescribed medications.

The HBM is based mainly on six key concepts for a person willingness to change their health behavior. These key concepts are; perceived susceptibility, perceive severity, perceived benefit, perceived barriers, cues to action, and self-efficacy.

Perceived susceptibility

This is based on belief about the risk of developing a health problem. This means that people will change their behavior to minimize the risk of contracting and developing health problems if an individual is susceptible to the health problem. For example, HIV programs on awareness about HIV and sexually transmitted infections (STIs) which are designed are often based on the fact that greater knowledge among adolescents will result to changes in their sexual behavior (Georges & Nyovani, 2007). This implies that, people will use a condom if they belief and know that they are at a risk of getting HIV/AIDS from unsafe sexual intercourse. With perceived susceptibility, people are motivated to go for vaccination against influenza, sunscreen used against skin cancer and gum disease and tooth loss could be prevented by flossing their teeth (Chen, James & Wang, 2007).

Perceived severity

Perceived severity refers to the individual belief about the severity or seriousness of health problem and its potential consequences. This implies that

the consequences and seriousness of a health problem will trigger an individual to change their health behaviors. While the perception of seriousness is mostly based on medical information or knowledge, it may also come from the belief a person has about the difficulties a disease would create or the effects it will have on his or her life in general (McCornick & Jones 1999).

Taking into consideration partners who are in love are less likely to avoid kissing the other partner on the mouth because the partner has sniffles when they engage in the act and may result in one contracting cold. However, if the person believes the health issues as severe (such as; both are more likely to avoid the kissing if it might give one or both of them HIV/AIDS, or Ebola) the person is likely to stop that attitude or behavior to prevent or reduce the severity (Jing & Shaheen, 2018).

Perceived benefits

Perceived benefits refer to individual's belief that the value or efficacy to decrease the risk of diseases by engaging in a health promoting behavior. For example, an individual will engage a behavior to promote their health if they belief that a specific action minimizes their susceptibility to the health problem and to reduce seriousness of it (Razmara, Aghamolaei, Madani, Hosseini, & Zare, 2018). Also, a person who smokes will probably not quit the smoking behavior when that person is not aware of the benefits to obtain which will improve his or her life.

Perceived barriers

Perceived barriers refer to individuals' assessment of the obstacles to behavior change. This means that if a person thinks that changing behavior would not be easy, they may stop changing to that behavior. For instance, if

partners think that the use of condom implies no trust in a relationship, they may be unwilling to use it (Georges & Nyovani, 2007). Most often it is not only a matter of physical difficulty, but social difficulty also prevails and changing the health behaviors can cost money, time, and effort (Kelly & Barker, 2017). A person would adopt a new behavior if he/she outweighs the consequence of the behavior before the new behavior would be adopted (Center for Disease Control and Prevention [CDC], 2004).

Cues to actions

Cues to actions are events that trigger the desire to make a health change and involve people or things that move people to change their behavior (Graham, 2002). They promote awareness and provide reminders. For instance, reports from the media, mass media campaign, illness of a family member, advice from persons and observing a condom poster on a vehicle can prompt a person to change his behavior. A cue to action enables to make a health change when a person moves from planning to change to actual change.

Self-efficacy

Self-efficacy refers to the level of a person's confidence in his or her ability to successfully perform a behavior. Self-efficacy is the belief of one's own ability to do something (Bandura, 1977). It focuses on a person's belief in their ability to make a health-related change. Self-efficacy provides training, guidance, and positive reinforcement in a person's ability to take action.

Figure 2 presents the health belief model. From figure 2, the HBM consists of socio-demographic factors (which include; sex, age, ethnicity, and religion), self-efficacy, perceived susceptibility, perceived severity, and cues to action (which include; media, reminder postcard, newspaper or magazine). It

also includes perceived benefits, and perceived barriers. The HBM consists of three different constructs which leads to the utilization health services. They involve; individual perceptions, modifying factors and likelihood of health service utilisation. The individual perceptions consist of perceived susceptibility and perceived severity of a condition and the individual perceptions also emphasize on adolescent's thoughts and beliefs of AFHSs utilization.

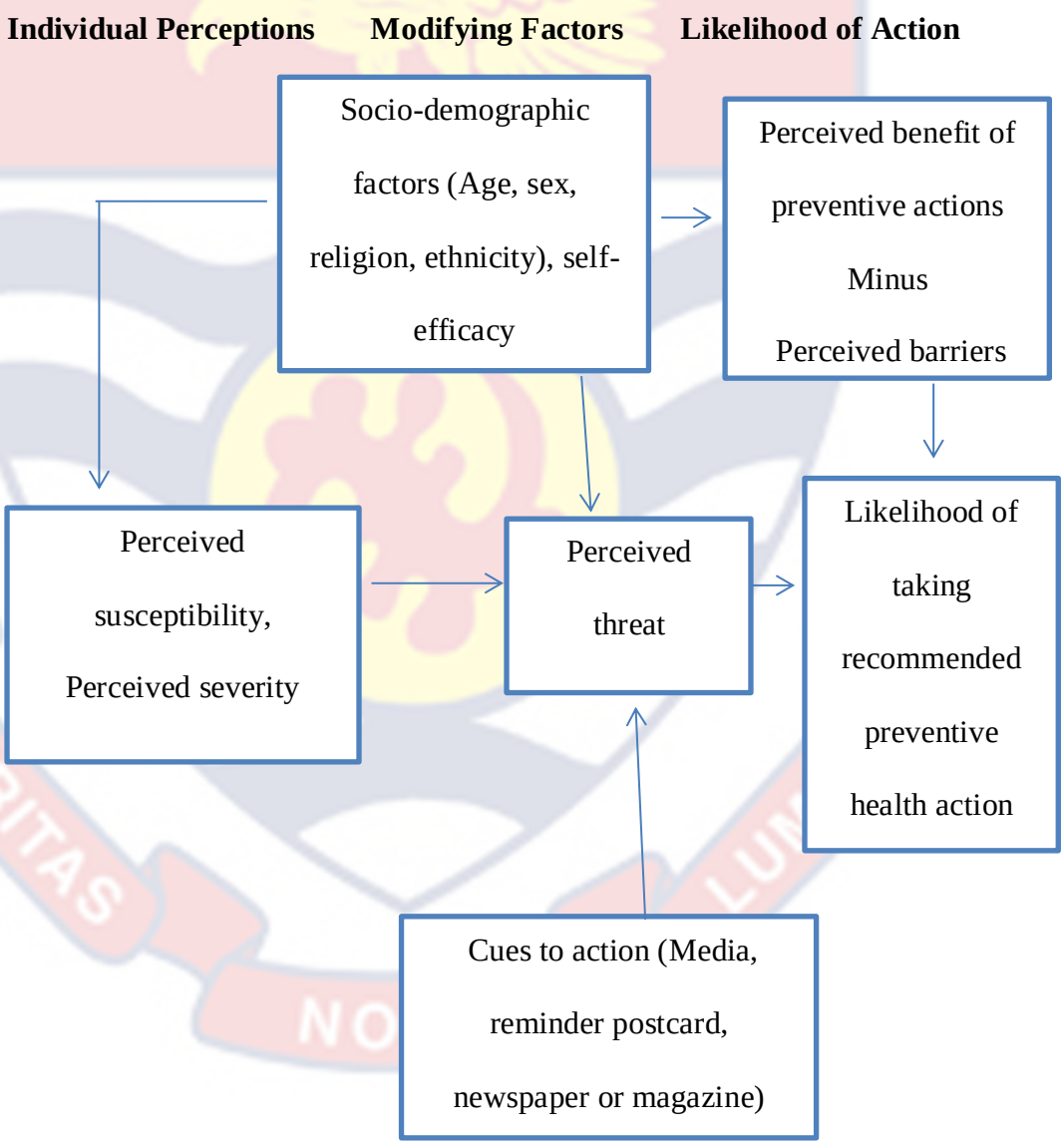

Figure 2: Health Belief Model (Rosenstock, 1966)

The modifying variables include individual characteristics such as socio-demographic factors (examples; age, sex, religion, ethnicity, and education), and self-efficacy. According to Rosenstock (as cited in Ahenkora, 2017), the HBM suggests that modifying variables affect the likelihood of utilisation of health services indirectly by affecting perceived seriousness, susceptibility, benefits, and barriers.

According to this model, perceived threat is affected by socio-demographic factors, self-efficacy, perceived susceptibility, severity, and cues to actions which enhance the likelihood to adopt utilisation of health services. This model explains that for individuals to adopt health promoting behaviors, they first assess the effectiveness of the recommended health behaviour. The model is significant to this current study in view of the fact that its constructs explain the perceptions, attitude and beliefs of people that predict their utilization of AFHSs among adolescents.

Conceptual Base of the Study

The conceptual framework developed for this study was synthesized from literature and modified to suit this current study. Factors that lead to the use of AFHSs are described by this conceptual framework and the variables of the framework affect the utilisation of AFHS among adolescents. The constructs of the framework are predisposing factors, enabling factors, need factors, perceived susceptibility, cues to actions, self-efficacy, perceived benefits, and perceived barriers. These variables contribute in adolescents' utilisation of AFHSs. The details are presented in Figure 3.

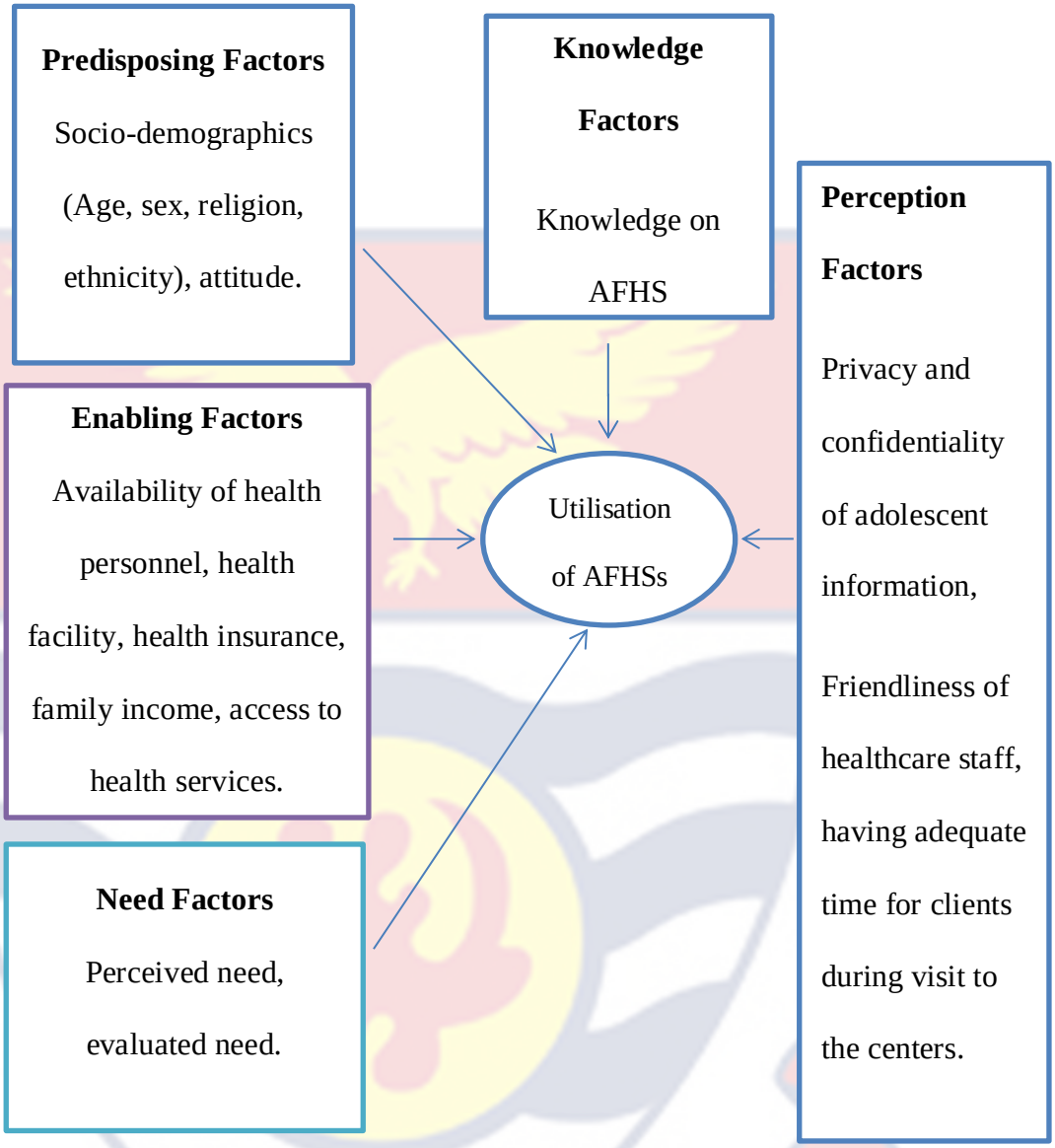

Figure 3: Conceptual Framework of the study was adapted from the Andersen Model of Health Service Utilization and Health Belief Model (Rosenstock, 1966 ; Andersen, 1968).

The predisposing factors involve socio-demographic features (which include; sex, age, ethnicity, and religion). Each of these constructs affect the utilization of AFHS. Taking sex into consideration, more adolescent girls visit health facilities to seek the service compared to adolescent boys (Creel & Perry, 2002). The individual's religion and ethnic background may also determine his/her

level of utilization of AFHSs. The predisposing factors also attitude of adolescents on AFHSs.

Knowledge factors involves adolescent knowledge level on AFHSs can be sought from school, church, media, health workers, friends, family or teachers. According to Aba (2016), knowledge here is concerned with the awareness of the AFHSs, its existence, their knowledge on the services provided, where the AFHS facilities are located and their knowledge on the need to seek for the service. Attitude, as one of the predisposing factors in the framework, comprises the attitude of adolescents on the utilisation of AFHSs. Adolescents take into consideration the availability of the AFHS in their community and their involvement in the planning and monitoring of the service. Adolescents can also not overlook the cost of the services at the AFHS centers. According to Creel and Perry (2002), adolescents may not utilize the AFHS if the services are time wasting and involve complex procedures.

The enabling factors include availability of health personnel, facility, health insurance, and access to health services. All these enabling factors may affect the utilisation of AFHSs. The need factors comprise of perceived need and evaluated need and these directly affect adolescents' utilisation of the AFHSs. Other construct in the framework is perception factors such as friendliness of healthcare staff towards adolescent, service providers having adequate time for adolescents during their visit to the centers, and keeping adolescents information private and confidential on their visit to the centers. The conceptual framework demonstrated that predisposing factors, enabling factors, need factors, knowledge factors, and perception factors affect AFHS utilisation.

Concept of Adolescence and Adolescent Health Problems

Adolescence is defined as the transitional period between childhood to adulthood and usually ranges from 10 to 19years (WHO, 2014). Adolescence is among the phases of human development. During adolescence, several changes occur in the body which include physical, social, intellectual and sexual changes (WHO, 2012a). According to Hodgson and DeCoteau (2022), factors such as peer influence, parental influence and influence of the media affect adolescent development. United Nations Children's Fund (UNICEF, 2006) indicated that there are three stages of adolescence development. These are; early, middle and late adolescence.

Early adolescents fall between the ages of 10-13 years. At this stage, adolescent growth is quick and this rapid growth reaches a peak. Body changes do occur at this stage and these body changes can inspire them to curios in some adolescents, and usually do not know what to expect or what is normal. Middle adolescence is between 14-16 years. At this stage, physical changes from puberty continue and secondary sexual characteristics progress. The rate of growth is slowed down and reach closely 95% of growth in adult, strong peer group and friendships are very crucial and determines their behavior. Late adolescence is between 17-24 years and generally adolescents would have completed physical development and growth (Association of Maternal and Child Health Programs [AMCHP], 2013; WHO, 2010). According to AMCHP, during this stage, their decisions or thoughts which are been influenced by their peers for friends making and to select partners are solely based on the individual choices rather than their peers or other people decisions (WHO, 2010). Young

people experience increase in emotional stability and independence during this last phase of adolescent development.

Adolescent Health

Adolescent health is the physical, mental and social well-being and not merely the absence of disease or infirmity during the period of adolescence (Ghana Health Service [GHS] & Adolescent Health and Development Program [ADHD], 2012). Globally, adolescents contribute for the 6% of the global burden of disease, injury, and more than 1.2 million die each year (Rose-Clarke et al, 2019). Health problems during adolescence stage may have impacts negatively on the adolescent health in adult life. For instance, teenage pregnancy may have severe consequences across generations by increasing the risk of low birth weight, poor growth, and poverty among the adolescent mothers (Rose-Clarke et al, 2019). For global cases HIV exposure of about 2 million persons, greater proportion of 1500,000 were from the Sub-Saharan Africa and the most vulnerable people were adolescents (Dube, Van, & Vajanapoom, 2013).

Research conducted by WHO (2014) indicated that adolescent health problem such as teenage pregnancy ruin adolescents from pursuing their education because of school drop-out among adolescents in Ghana. There is increase in productivity and reduced health cost when adolescents' health is improved (Odoi, 2017). For prevention of health problems in adulthood, measures should be taking during adolescence stage to protect them from health risk and promote healthy behaviors (WHO, 2018). Adolescents face many health problems which includes teenage pregnancy, substance use, STIs, violence and injuries, and malnutrition.

Teenage pregnancy and childbirth

Complications from early pregnancy and childbirth is a major cause of death globally among adolescent girls (WHO, 2018b).The United Nation's Population Division (UNPD) categorized the global adolescent birth rate in 2018 that per every 1000 adolescent girls, 44 of them give birth and the ideal goal is that the world should ensure common access to sexual and reproductive healthcare services which include family planning, information and education, and the integration of reproductive health into national strategies of the health by Sustainable Development Goal (SDG) 3 in 2030 and programs which will help provide the health needs of adolescents. Research conducted by Getachew, Arowojolu, Odukogbe and Alemayehu (2018a) indicated that nearly one out of five adolescents in Africa get pregnant as a result of socio-demographic factors which include residence, educational status of adolescents, educational status of parents, and parents not having communication with their children on sexual and reproductive health.

Records show that Africa has the highest teenage pregnancy rate which is 16.3% in the Eastern, Western also contributes to 27.9%, and 28.9% in Southern Africa (Asare, Asare, Baafi & Adam, 2019; Worldatlas, 2017). In Ghana, nearly 14% of adolescent girls aging from 15-19 have begun to give birth and this contribute to high teenage pregnancy rate (Asare, Asare, Baafi & Adam, 2019). There are many risks that are associated with early pregnancy and childbirth. According to WHO (2013b), these risks include; maternal death, anemia, unsafe abortion, low birth weight, poverty, school dropout, and still birth.

Substance use

Substance use among adolescents is a public health issue and it increases risky behaviors, like unsafe sex, violence or injuries (including those due to road traffic accidents) and premature and minimizes self-control (WHO, 2018a). Globally, substance use is common among adolescents particularly in the United States and most cases of substance use among people have their initial onset during this stage in life (Joel, Marcy & Brady, 2011). In Africa, substance use is common among adolescents (Negussie, 2012; WHO, 2011). A study showed that substance use such as alcohol has high prevalence among adolescents in Ghana particularly the Central Region (Hormenu, Hagan & Schack, 2018). The study revealed that prevalence of alcohol consumption among adolescents is 42% (n = 554). The study indicated that persons who had ever taken alcohol is 54% (n = 297), ever drunk once is 9% (n = 53), and 10% (n = 55) represented adolescents who had been drunk many times. This statistic shows that there is high prevalence of drunkenness in the Ghana particularly among adolescents in the Central Region. Gutierrez (2015) indicated that substance use has great effects on the individual and society as whole, from health risks to the user to increased early pregnancies, car accidents, violence, injuries, financial cost, and productivity cost.

Sexual transmitted infections

Adolescents are sexually active and they are at greater risk of contracting Sexual transmitted infections (STIs) for a combination of behavioral, biological, and cultural reasons (CDC, 2017). Prevalence of STIs is high and the possible contributing factor is the barriers to access quality STI prevention and management services. This high incidence, according to CDC, is as a result of

specimen collection, concerns about privacy and confidentiality, high cost of the service bill, long waiting times, and attitude of healthcare providers.

Globally, over one million persons get infected with STIs daily and adolescents are the most vulnerable people (WHO, 2013a). In Africa, the population of adolescents is gradually increasing with its attendant STIs (Suzanna et al., 2018). For instance, a study indicated adolescents in the sub-Saharan Africa are living with HIV since they are vulnerable including young women and girls aged between 15-24 years (Global Health Council, 2007; UNFPA and UNAIDS, 2012). Moreover, 20% of adolescents aged between 15-19 in Uganda contracted STIs in 2011 (Uganda Bureau of Statistics [UBOS], ICF International Inc., Uganda Demographic and Health Survey, 2011). In Ghana, STIs particularly HIV/AIDS prevalence was 1.7 for which young people from 15-24 years are the most vulnerable, and out of every eight young people, one of this have reported symptoms of STIs particularly girls (Ghana Demographic and Health Survey [GDHS], 2017).

Violence and injuries

One major cause of death among adolescents is violence and accounts for most male deaths in developed and developing countries (WHO, 2018a). WHO noted that, globally, among every three adolescents aged 15-19 years one of them has been a victim of emotional, physical and sexual violence perpetrated by other people. According to the Ghana Statistical Service (GSS, 2014), adolescents aged 12 and 14 years who died was 2,068 out of which violence alone contributed to 384 (18.6%) of the total death rate. Also, those aged 15-19 years was 4,399 for which violence constituted 721 (16.4%) of the death rate in 2010.

Malnutrition

Most adolescents are vulnerable to diseases and preventable deaths due to under-nourishment and most adolescents are overweight or obese (WHO, 2018a). WHO's research revealed that over one in six adolescents from 10-19 years was overweight globally in 2016. Globally it was estimated that 23.8% of boys and 22.6% of girls in developed countries were overweight or obese in 2013 (Ng et al., 2013). In developing African countries, there is increasing rate of obesity among school-aged children (Muthuri et al., 2014; Negash et al., 2017).

Levy (2012) indicated that in developing countries like Ghana, there is increasing rate of overweight or obese adolescents. Adolescents who are obese are probably to be overweight in adulthood and the obese adolescents are at high risk of developing health problems such as high blood pressure, high cholesterol, type 2 diabetes, and orthopaedic problems that may continue to exist in adulthood (Theodosia, Anniza, Thandi & André, 2019). Again, a study revealed that there is high prevalence of underweight, overweight and obesity among adolescents in Ghana (Dapare, Adams, Djabuni, Osei& Shittu, 2017). The study further revealed that out of 200 students used for the study with (49.5%) males and (50.5%) females, prevalence of high physical activity and underweight was higher among males (p=0.0017 and p=0.0027) whereas overweight, obesity and low physical activity had high prevalence among the females (p=0.0001, and p=0.0023 respectively).

Adolescent Friendly Health Services

Adolescents require healthcare services support during their transitions from childhood to adulthood in order to provide their health needs (National

Research Council and Institute of Medicine [NRCIM], 2009). This means making available health services essential and effective for adolescents in difficult circumstances provide their needs. AFHS highlights the advantage of understanding the views of adolescents on health care and stakeholder's perspectives on health services. This is because the way health centers function is affected by them. Adolescent years of healthy life can be affected by preventable chronic illnesses (Meadows & Jackson, 2012). WHO (2009) surveys conducted indicated that when adolescents visit healthcare centers, they are expected to be seen immediately by establishing a friendly 'drop-in' services by the health centers, they are more concern about privacy and confidentiality, they want to be treated respectfully by staff and may not be happy for healthcare staff to judge them, they want convenient place and time where services will be provided to them, and want affordable or free services.

Services provided by AFHS centers

According to WHO (2012), the AFHS provide services which include general health services, sexual and reproductive health information and counseling, promoting healthy sexual behaviours such as peer education, family planning measures, methods and counselling on emergency contraceptive methods, provision and promotion of condom use, testing services (which include; pregnancy, HIV testing), and STIs management. Other services provided by AFHS are abortion, post-abortion care, dietary, nutritional, and eating disorders management (which include obesity, anemia, anorexia nervosa, bulimia nervosa and compulsive overeating),general counseling, antenatal care (ANC), delivery, postnatal care (PNC) and pregnant mother-to-child

transmission (PMTCT) services and appropriate referral linkage between facilities at different levels.

Adolescent Knowledge Level on AFHS

Adolescents who lack or have little knowledge on AFHS are vulnerable to unsafe reproductive health behavior (Binita, Poonam &Joar, 2019). Adolescents' knowledge on AFHSs help them to find support and enable make informed decisions. These decisions and choices have effects on the adolescent reproductive health and future. For example, Harden, Brunton, Fletcher and Oakley (2009) revealed that wrong choice of decisions among adolescents can lead to unplanned or teenage pregnancy and STI.

Globally, studies have shown that most adolescents have moderate knowledge level of AFHSs (Simkhada, Van, Regmi & Bhatta, 2012). Another study revealed that lack of knowledge on AFHSs was linked with early sex and as a result leads to unwanted pregnancies and contraction of STIs (Idele et al., 2014; Minnick & Shandler, 2012). There are several sources of information for adolescents concerning AFHSs. In Africa, a study by Biddlecom, Munthali, Singh and Woog (2007) revealed that adolescents do not know of any source to obtain information on AFHSs particularly those between the aged 12 and 19 years. Most adolescents in Africa have poor knowledge level on AFHS and when adolescents are not provided with access to information on AFHSs becomes a challenge for future programs (Gupta, 2000).

In Ghana, a study by Kronzu (2018) on knowledge level, access and adolescents' utilization of AFHSs in Kumbungu District indicated that they have low knowledge level on AFHSs. GDHS (2008) indicated print and broadcast exposure media are vital since they are effective in to reach the entire

population to help carry vital health information such as information on AFHSs to adolescents. Parents who could be helping adolescents to obtain the source of information are bounded by society and cultural factors since discussing sexual issues with adolescents is considered taboo among certain societies and cultures (Owusu, Blankson & Abane, 2011).

Perception of Adolescents on AFHSs

Perception is operationally defined as the way in which something is regarded, understood or interpreted. The perception of adolescents on AFHS may have impact on its utilisation. Respect, privacy and confidentiality are the main qualities adolescents expect from the health facilities (WHO, 2012). A study revealed that adolescents perceived that if their parents find them using the AFHSs, they will quit utilizing it because they are afraid that their parents would punish them for visiting the AFHS facility (Aaron & Anaba, 2019; Kuzma & Peters, 2016). Moreover, adolescents have the perception such as fear of being embarrassed. They believe that poor communication skills of service providers discourage them from attending to the AFHS centers to seek for the service (Ansha, Bosho & Jaleta, 2017; Tylee, Haller, Graham, Churchil & Sanci, 2007). The adolescents emphasized that their views are not respected by some of the health care staff, are judgmental, especially toward the pregnant girls, and talk to them in an impolite manner.

Research conducted by Aaron & Anaba (2019) indicated that adolescents perceive members in their community to see them as “bad” boys and girls when they visit the AFHSs centers. The authors emphasized that some people had the perception that adolescents who visit the AFHS centers go there

for contraceptives and abortion services. These reasons account for why adolescents stay away from the AFHSs.

Attitude of Adolescents on AFHSs

Attitude is operationally defined as a set of emotions, beliefs, and behaviours towards a particular object, thing, or person. The attitude of adolescents on AFHS may affect the utilization of the service. Aba (2016) indicated that many AFHSs centers may be near or far from the adolescents' homes and they would feel shy going to the centers close to their homes. Adolescents worry that other neighbors including their family members will see them going to the facility. Aba hinted that if the AFHS centers are too far from their residential homes, they most of the times do not visit such facilities to seek the service because of lack of money for transportation and long waiting time which prevents them from returning to their homes early. According to Aaron & Anaba (2019), operating hours at the AFHS centers was inconvenient for adolescents to access the services because majority of the adolescents indicated that they are students who are in school and on these hours cannot seek for the service. Adolescents emphasized that AFHSs operating hours ranges 8.00 a.m. and 2.00 p.m. on weekdays only excluding weekends and public holidays.

Aaron & Anaba (2019) further revealed that medicine shortage and supplies influence adolescents' behaviors to utilize the AFHSs since adolescents claimed that they sometimes do not receive the drugs prescribed to them and supplies such as condoms from the AFHSs and had to buy them from pharmacy shops. The adolescents also emphasized that they are young and not employed, and so could not afford the cost involved and therefore they stay away from the services.

Adolescent Utilization Level of AFHSs

In 2006, WHO the effectiveness of interventions to improve the use of health services by adolescents in developing countries was published by WHO which was a systematic review. The review emphasized on 12 initiatives for which one was randomized controlled trial (Nigeria), six was quasi-experimental studies (Bangladesh, China, Madagascar, Mongolia, Uganda and Zimbabwe), two national programs (Mozambique and South Africa), and three projects (Ghana, Rwanda and Zimbabwe). The interventions showed that actions (such as; adolescents will be favored in health service since providers will not judge them and also consider them in dealings with them, and they will be provided with the health services they need since health facilities are equipped, adolescents including community members are aware of the various places to obtain the health service) to increase adolescents' utilization of health services by making health services adolescent friendly (WHO, 2012). A study in Ghana, Malawi and Uganda in 2004 showed that adolescents between 12-19 years under-utilized AFHSs (Biddlecom et al., 2007). A study was done by Odoi (2017) in Ghana on adolescent utilization of adolescent friendly health services in the Tema Metropolis. Results showed that out of 806 adolescents used for the study, the percentage of adolescents' utilization of the AFHS facilities was 12.3%. Among those who visited the facility, 43.3% indicated that they visited the health facility for general counseling and information on health services for which the government health facilities provided these services. Another research conducted by Aba (2016) on the rate of adolescents visit and use of the AFHS at Ashaiman polyclinic indicated that out of 406 adolescents, 7.6% had ever utilized AFHS, and 79.3% had not use the services at all at the polyclinic.

These studies suggest that the utilization level AFHSs among adolescents in the Greater Accra Region is low.

Summary of Literature Review

The literature reviewed reveals key concepts in the study such as theoretical framework, concept of adolescence and adolescent health problems, adolescent health, Adolescent-friendly health services, adolescent knowledge level, perception, and attitude on their utilisation of AFHSs. Due to the perception and attitude of adolescent in relation to their utilisation of AFHSs, two theories have been used to help understand this. The theories are Anderson Model of Health Service utilization, and Health Belief Model. Existing literature suggests that during adolescence stage, many changes do occur and factors such as influence of the media, parental influence, and peer influence affect adolescent development, and health problems, which may affect adolescent health in adulthood. It has also been proven from the literature that in difficult circumstance of adolescents, available health services must be effective in providing the health needs for them.

It is obvious from the literature reviewed that studies have been conducted on Adolescent-friendly health services and was generally found that adolescent knowledge on AFHS was low. For instance, a study by Kronzu (2018) indicated that adolescents have low knowledge level on AFHSs. It is observed from the literature that either perception or attitude have impact on adolescent utilization of AFHS. For example, adolescents belief that poor communication skills of healthcare providers discourage them from patronizing the services. Moreover, there are inconveniences for adolescents on accessing AFHS since majority of them are in school and not favoured by the operating

hours of the AFHS centers (Ansha, Bosho & Jaleta, 2017; Tylee, Haller, Graham, Churchil & Sanci 2007; Aaron & Anaba 2019).

CHAPTER THREE

RESEARCH METHODS

The purpose of this study was to find out the knowledge level of adolescents, perception, and attitude of Adolescent Friendly Service (AFHS) on their utilization of the service in Cape Coast Circuit. The methods used for the study are presented in this chapter. It involves: Research Design, Study Area, Population, Sampling Procedure, Data Collection Instrument, Data Collection Procedures, and Data Processing and Analysis.

Research Design

The quantitative descriptive cross-sectional survey was employed to conduct this study. This method provides information on adolescents' rate of use, level of knowledge, perception and attitude of AFHSs. Descriptive cross-sectional survey was employed for the quantitative method. This type of design is a basic research method and it is very crucial as a situation in its current state is examined (Megan, 2018). Megan emphasized that the strength of the design lies in its ability to provide in-depth suggestions and details of the study. Again, respondents cannot be under influence of their peers to provide similar answers to the questionnaire. According to Thomas (2020), this study design allows researchers to obtain data from huge population and the differences compared between groups. It also provides a snapshot of a specific moment in time. However, since cross-sectional study represents only one-time measurement, it is not easy to find the cause and effect relation. Moreover, a long-term trend or behavior over a period cannot be analyzed by this study since this study is conducted in a single moment in time. This study design is appropriate for this work since it gives information about the prevalence of a condition at a place.

Study Area

The area to be studied is Cape Coast. It is the capital of the Cape Coast Metropolitan which has a total area of 122km². Figure 1 represents the map of Cape Coast.

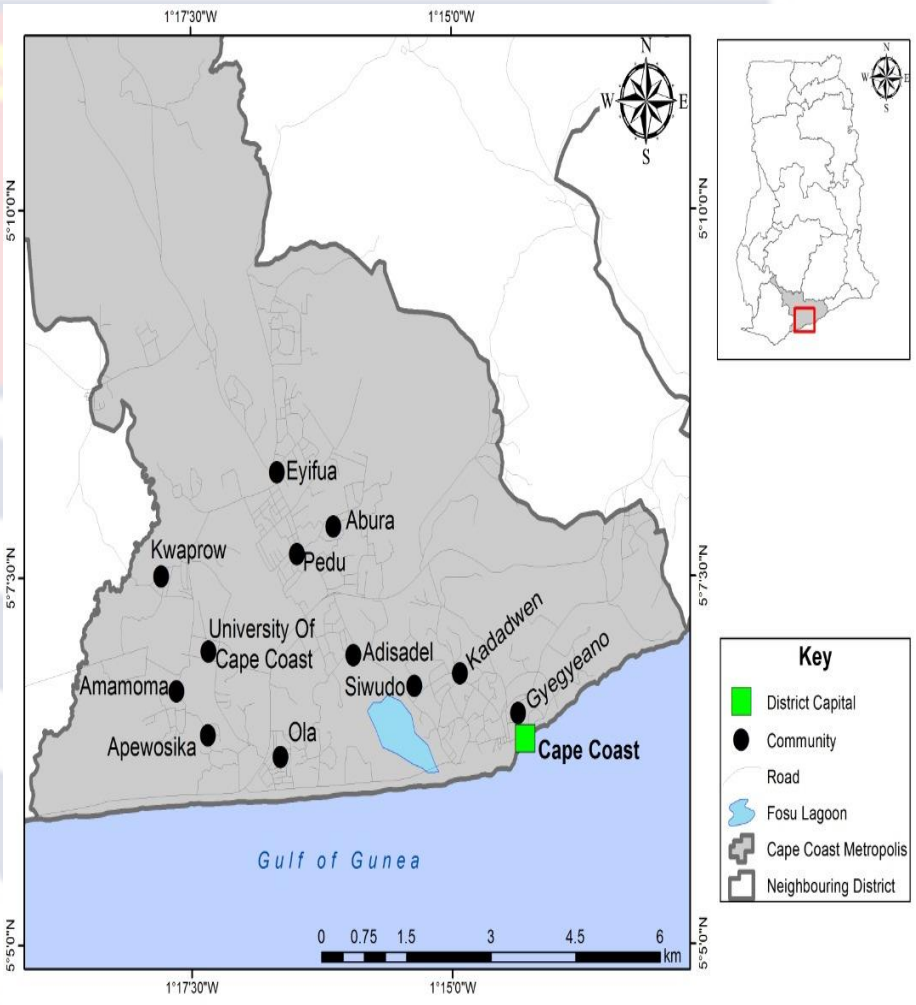

Figure 4: Map of Cape Coast **(**Department of Geography and Regional Planning, UCC, 2022).

Cape Coast and its Metropolis is the smallest among others in Ghana (Cape Coast Metropolitan Assembly, 2014). The Metropolis share boundaries with the Gulf of Guinea to the South, Komenda/Edina/Eguafo/Abrem (K. E. E. A.) to the West, Abura/Asebu/Kwamankese District to the East, and North by Twifo Heman Lower Denkyira District. In Ghana, Cape Coast is noted to have

established the first senior high school in the country. The ethnic group that is predominant in Cape Coast are Fantes. Most of the inhabitants are highly religious and they comprise of mainly Muslims and Christians. There are numerous health facilities in Cape Coast but only a few of these hospitals provide AFHSs. The hospitals which provide the AFHSs in Cape Coast include; Ewim Polyclinic, Adisadel Health Center, and Cape Coast Metropolitan Hospital.

Population

The study population constituted of adolescent boys and girls in both private and public Junior High Schools (JHS) in Cape Coast. There are 31 basic schools in Cape Coast. The number of private and public JHS in Cape Coast are 11 and 6 respectively. In all, 17 JHS are in Cape Coast. The population of the private and public JHS are 526 and 856 respectively. The total population of the JHS schools located in Cape Coast is 1,385 (Cape Coast Metro Education Directorate, 2019).

Sampling Procedure

In selecting the participants, all JHS 3 students were purposively sampled for the study. Their total population was 491. Table 1 shows the population of the participants involved in the study.

Table 1: Population of Students used for the Study

Name of school	Total number of students
Amanful Catholic Boys	23
Ekon M/A Junior High School	47
Mensah Sarbah Basic School	60
Nkanfoa St. Paul's Catholic Basic School	35
Reverend Alec Jones Memorial Methodist School	56
Saint Michael Girls Basic School	32
Holy Cross international School	37
Adventist Preparatory Basic School	59
Redemption Baptist Basic School	43
Childcare international Basic School	28
George Ekem Ferguson Basic School	38
John Sackey International School	33
Total	491

Source: Field survey (2021)

Wilson, Voorhis and Morgan (2007) noted that practical facts which include time, access to samples and financial cost involved in a study enable researchers to choose a reasonable sample size. Moreover, Roscoe (as cited in Averiyire, 2015) emphasized that, the rule of thumb for determining sample size indicated sample greater than 30 and less than 500 is considered suitable for many studies. In addition to this, the sample size is considered appropriate for studies which has to deal with the behavior of humans. Therefore, a sample size of 491 is considered appropriate for this research. The purposive sampling

technique was used as a result of the particular characteristics of JHS 3 students in Ghana, specifically, Central Region. They were used for the study because there had been several yearly reports on teenage pregnancy in the Central Region among final year students before and during writing their Basic Education Certificate Examination (BECE) (GhanaWeb, 2018; Osman, 2017). Again, substance use among JHS students is also quite alarming particularly among final year students (Amuzu, Ankalibazuk & Abdulai, 2017; Asante, 2019).

Ethical Consideration

Permission letters from the University of Cape Coast Institutional Review Board ((UCCIRB) with reference number UCC/IRB/A/2016/930, and Department of Health, Physical Education and Recreation (HPER) were obtained. These letters were presented to the authorities of the selected schools to enable me gain legal permit to carry out the research effectively. The respondents were informed about the purpose of the study and the voluntary participation in the study. They were also informed on their rights to leave the research if they wish to do so.

Participants were informed not to write any additional information apart from the ones provided on the questionnaire in order to ensure confidentiality of their responses. For participants who were below the age of 18 years, parental consent and consent from heads of the schools were obtained when the purpose and the objectives of the study had been made known to them.

Data Collection Instruments

Questionnaire was the instrument used for the data collection. The instrument was adapted from (Aba, 2016; Berhane & Fantahun, 2005; Kronzu,

2018). The questionnaire of this study consists of 38 items. The first part labeled section A, comprised socio-demographic information of the participants like age, sex, and religion. The second part comprised Sections B, C, D, and E. Section B addressed the knowledge level and source of knowledge of adolescents on AFHSs. The types of questions that were asked in this section were closed ended questions which are "yes" or "no". A total of 12 items constituted this section. The participants were made to tick either "yes" or "no" responses.

Section C also covered the perception of adolescent on AFHSs. This is based on their thoughts and what they perceive of the AFHSs. In this section, nine "yes" or "no" type of closed ended questions was asked. The participants were to tick either "yes" or "no" response. Section D was based on the attitude and behaviors of adolescents on utilization of AFHSs. Closed ended questions which are yes or no type were used and 8 questions were asked. The participants were made to tick either "yes" or "no" responses. Section E was based on the adolescents' level of utilization of the AFHS. It included availability of the services, accessibility and affordability of the services. Nine 'yes' or 'no' items were asked in this section. The participants were to tick either "yes" or "no" response. In all, a total of 38 items were composed.

Validity and reliability of the instrument

Firstly, a copy of the instrument was submitted to my supervisors for review to ensure that; errors were corrected, content properly structured and questions asked in the instrument corresponded to the research questions. The review of the questionnaire by my supervisors enabled the validity of the instrument to be ensured.

Pre-test was conducted to ensure reliability of the instrument. The pre-test was carried out in selected JHS schools in the Cape Coast Metropolis which did not participate in the final study. In all, 200 students were sampled for the pre-test. Using the Kuder-Richardson Formula 20 (KR-20), the reliability coefficient of 0.9 was obtained. This informed the use of the instrument for the study.

Data Collection Procedures

Several contacts were made and dates for the administration of the questionnaires was arrived at. On the appointed dates, I explained the motive of carrying out the research to the respondents and confidentiality and anonymity of their responses were assured. The data collection lasted for a period of two weeks and started from 8th to 22nd March, 2022. The questionnaires were self-administered. The questionnaires were given to the participants during classes hours in their classrooms. An instrument took 30 minutes for respondents to respond to the items.

For each selected school, the data was collected in a single day and the collection of the data took place while their class teachers were absent in the class for privacy of the participants' responses. When they finished responding to the questionnaires, participants were requested to put them in a sealed carton box. This procedure ensured a 100% recovery rate. It also ensured that no questionnaire found itself in the hands of a person not involved in the research.

Data Processing and Analysis

In processing and analysis of the data, Statistical Package for Service Solutions (SPSS) version 26 was employed. An alpha level of 0.05 was used for statistical significance. Descriptive statistics of frequency and percentage was

used to analyse research questions 1-4 (which include; adolescents' knowledge level, attitude, perception and utilization of AFHSs in Cape Coast Circuit). The use of frequency and percentage employed in the study helped to ascertain the adolescents' knowledge level on AFHS, their attitude as well as their perception, and their rate of use of the services. Chi-square was used in the analysis of the socio-demographic factors which influenced adolescent's utilization of AFHS. With the use of chi-square test, the specific socio-demographic factors which affect use of the service was known. Multiple linear regression was used to analyse the influence of knowledge, perception, and attitude on utilisation of AFHSs.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

The purpose of this study was to find out the knowledge level of adolescents, perception, and attitude of Adolescent Friendly Health Services (AFHS) on their utilization of the services in Cape Coast Circuit. It covers factors such as: Awareness levels of adolescents on AFHS, Perceptions of adolescent on AFHS, Adolescents' attitude of AFHS, AFHS centers Utilization among adolescents, and Socio-demographic factors influence of adolescents on AFHS services utilization in the Cape Coast Circuit. This chapter presented and discussed the results of this study. This chapter has two sections. Section one covers the explanation of the results while section two borders on the discussions of the results.

Research Question 1: What are the Knowledge Levels of Adolescents on AFHS in Cape Coast Circuit?

This research question aimed at determining whether adolescents were aware of AFHS in Cape Coast Circuit. The scale of measurement of the items in this section is the nominal scale. The results were analysed by the use of frequencies and percentages. These tools were used because they present a picture of how the individual observations are distributed in the measurement scale (Manikandan, 2011). The results are presented in Table 2.

The two asterisk (**n = 214) from Table 2 was a follow up question of the first question for those who responded "yes." Table 2 also shows that most of the respondents (n = 277, 56.4%) when asked whether they know of AFHS indicated they do not know of AFHS, while 214 (43.6%) responded in the affirmative that they know of AFHS. Among those who responded in the affirmative, 76.6% indicated that they know some health facilities where AFHS

are available whereas 23.4% indicated otherwise. Further, most (n = 286, 58.2%) of the participants stated that AFHS education is not enough. Majority of the respondents (n = 415, 84.5%) indicated that they know of some adolescent health problems with few (n = 76, 15.5%) stating that they do not know about adolescent health problems.

Table 2: Knowledge of Availability of AFHS in Cape Coast Circuit (n = 214)

	Yes		No	
Statements	F	%	F	%
Do you know of AFHS?	214	43.6	277	56.4
Do you know the availability of AFHS at various health facilities? **	164	76.6	50	23.4
Do you know there are adolescent friendly service in some Cape Coast health facilities?	271	55.2	220	44.8
Do you know the service adolescent friendly health service offer in Cape Coast?	165	33.6	326	66.4
Do you know that adolescent friendly service can improve health?	407	82.9	84	17.1
Do you know of some adolescent health problems?	415	84.5	76	15.5
Have you had any education on AFHS?	398	81.1	93	18.9

Source: Field survey (2021); Note: **n= number of participants, F=frequency

With regards to whether respondents know of AFHS in some Cape Coast health facilities, 271 (55.2%) responded in that they know some AFHS centers in Cape Coast with 220 (44.8%) responding that they do not know of

AFHS centers in Cape Coast. Also, majority of the respondents (n = 326, 66.4%) responded in the negative when asked whether they know the service AFHS offer in Cape Coast whereas, 165 (33.6%) indicated that they know of the services provided by AFHS. It is again evident from Table 2 that a greater number of the respondents (n = 407, 84%) are cognizant of the fact that AFHS can improve health. However, 84 (17.1%) have a differing view that AFHS cannot improve their health. A greater proportion of the respondents (n = 398, 81.1%) indicated they have had some form of education on AFHS. Nevertheless, 93(18.9%) answered in the negative showing that they had not receive any education on AFHS.

Those who responded in the affirmative that they were aware of AFHS when asked whether they know of AFHS indicated the various sources of their knowledge. This is shown in Table 3.

Table 3: Source of Knowledge of AFHS (n = 214)

Source of information	**N**	**%**
School	168	38.8
Teacher	72	16.6
Health worker	54	12.5
Media	43	9.9
Church	40	9.2
Family	30	6.9
Friends	26	6.0

Source: Field survey (2021), Note: n= number of participants

From Table 3, the topmost AFHS knowledge source is the school (n = 168, 38.8%). This is followed by teachers (n = 72, 16.6%) and health workers

(n = 54, 12.5%). The least source of AFHS knowledge is friends (n = 26, 6.0%). Further, respondents who answered yes to the health problems were further asked to indicate the various adolescent health problems they know of. Presentation of their responses are shown in Table 4.

Table 4: Some Adolescent Health Problems (n = 415)

Adolescent health problem	Frequency	Percentage (%)
Teenage pregnancy	361	33.9
Sexually transmitted infection (STIs)	224	21.0
Substance use	180	16.9
Violence	151	14.2
Malnutrition	135	12.7
Others	14	1.3

Source: Field survey (2021), Note: n= number of participants

From Table 4, teenage pregnancy (n = 361, 33.9%) is the adolescent health problem that is predominantly known by the respondents. Second to that is sexually transmitted infections [STIs] (n = 224, 21.0%); followed by substance use (n = 180, 16.9%); violence (n = 151, 14.2%); and then malnutrition (n = 135, 12.7%). Fourteen of the respondents representing 1.3% also gave other adolescent health problems aside the already stated ones which are; mental disorders, homelessness, academic problems and school dropouts.

The respondents who indicated they have had education on AFHS identified the place they had those education from. Table 5 gives details of their responses.

Table 5: Place of Education on AFHS (n = 398)

Place of education	Frequency	Percentage (%)
School	283	42.3
Hospital	102	15.2
Church	86	12.9
Media	77	11.5
Friends	65	9.7
Family	56	8.4

Source: Field survey (2021), Note: n = number of participants, F=frequency

From Table 6, school (n = 283, 42.3%) was the major place respondents got their education on AFHS followed by the hospital (n = 102, 15.2%), church (n=86, 12.9%) and then media (n = 77, 11.5%). The family (n = 56, 8.4%) represented the least place for knowing about AFHS.

Research Question 2: **What are the Perceptions of Adolescents on Utilisation of AFHS in Cape Coast Circuit?**

This research question purpose was to ascertain the adolescents' perceptions on the utilisation of AFHS. For the research question to be answered, participants provided answers to some questions relating to utilization of AFHS. The scale of measurement of the items in this section was the nominal scale. The results were analysed using frequencies and percentages. These statistical tools were used in the analysis of the data because they give a fair interpretation of the entire data conveniently (Manikandan, 2011). Table 6 depicts the details of the responses given by the respondents.

Table 6: Perceptions of Adolescents on Utilisation of AFHS (n = 491)

	Yes		No	
Statements	F	%	F	%
Do you think the service provider will have enough time for you if you go to the adolescent friendly health center?	379	77.2	112	22.8
Do you think the attitude of the healthcare staff are friendly?	372	75.8	119	24.2
Do you think the location of the adolescent friendly service can make people see you going there?	265	54.0	226	46.0
Do you think service providers will keep every information private and confidential?	229	46.6	262	53.4
Do you think there is enough education on the adolescent friendly services?	205	41.8	286	58.2
Do you think the provider will attend to you if you go there without appointment?	196	39.9	295	60.1
Do you think the healthcare service providers will keep you off from using any of the service because of your age, sex, or religion?	168	34.2	323	65.8
Do you think adults in the community including your parents and teachers will see you as bad boy or girl if they get to know you accessed the service?	162	33.0	329	67.0
Do you think your culture beliefs will stop you from using the adolescent friendly health service?	85	17.3	406	82.7
Do you think your religious beliefs will stop you from using the adolescent friendly health service?	83	16.9	408	83.1

Source: Field survey, (2021), Note: n = number of participants, F = frequency

From Table 6, 379 (77.2%) respondents affirmed their perception that the service provider will have enough time for them when they visit AFHS centers. Although most (n = 372,75.8%) of the respondents perceive the attitude of healthcare staff are friendly, many (n = 265, 54.0%) are of the view that the service location can make people see them going there. Most of the adolescents (n = 262, 53.4%) think service providers will not keep their information private and confidential when they visit the AFHS centers. Many (n = 286, 58.2%) also think that there is no enough education on AFHSs.

Predominantly, 323 (65.8%) of the respondents perceive neither age, sex, nor religion could be used to keep them away from using the service. Majority of the respondents (n = 329, 67.0%) however, disagreed that people in their community which include parents and teachers will see them as bad boys or girls if they get to know they accessed the service.

Research Question 3: **What is the Attitude of Adolescents on Utilisation of AFHS in Cape Coast Circuit?**

The purpose of this research question was to find out the attitude adolescents have towards the utilisation of AFHS. In view of this, respondents provided responses to some items relating to utilization of AFHS. The nominal scale was the scale of measurement of the items in this section. Frequencies and percentages were used to analyse the results. These statistical tools were used because they show whether the observations are high, low, concentrated in one area or spread out the entire scale (Manikandan, 2011). Table 7 shows the details of the responses given by the respondents on various items.

Table 7: Attitude of Adolescent on Utilisation of AFHS (n = 491)

	Yes		No	
Statements	F	%	F	%
I would be visiting the adolescent friendly health service centers if the services were to be free.	432	88.0	59	12
I would be visiting adolescent friendly health service center if it were available within my community.	411	83.7	80	16.3
It would be better if services involve adolescents in their planning and monitoring.	409	83.3	82	16.7
It is best to visit health facility in an area where elderly people are not many in order not to see you as a bad boy/girl.	308	62.7	183	37.3
Most of the health facilities are not different from other health facilities, visiting any of them is as visiting adolescent friendly health services.	275	56.0	216	44.0
Most of the staff in adolescent-friendly health services devote much of their time into other people's business (stick their noses) and give out unsought advice.	271	55.2	220	44.8
Most of the staff at the adolescent friendly service constantly complains about the health conditions of a person when diagnosed of a health problem.	271	55.2	220	44.8

Source: Field survey, (2021), Note: n = number of participants, F = frequency

The main attitude of the participants was that they would visit the AFHS centers if the services were free (n = 432, 88.0%), within their communities (n = 411,83.7%) and if they are involved in the planning and monitoring of the service.

Another attitude of adolescents on AFHS that received tremendous mention was their quest to visit health facilities in localities where elderly people are not enormous so as not to be seen by them (n = 308, 62.7%). Adolescents are devasted when the staff of AFHS centers constantly complain about the health status of victims (n = 275, 56.0%).

Research Question 4: What are the Levels of Utilisation of AFHS among Adolescents in Cape Coast Circuit?

The purpose of this research question was to find out adolescents' utilisation level of AFHS. To provide answers to this research question, respondents were made to answer nine (9) items regarding their level of AFHS utilization and their responses are presented below. The scale of measurement of the items in this section was the nominal scale. The statistical tool used are frequencies and percentages. They were used because they indicate the predominant observation for the data points. Their responses are presented in Table 8.

Table 8: Visit to AFHS Centres (n = 491)

Response	Frequency	Percentage (%)
Yes	125	25.5
No	366	74.5
Total	491	100.0

Source: Field survey (2021), Note: n = number of participants, F = frequency

As seen in Table 8, a high percentage (n = 366, 74.5%) of the students have never visited to seek healthcare at any AFHS in Cape Coast Circuit. However, only 125(25.5%) responded in the affirmative that they have visited AFHS centre to seek healthcare before. This implies that adolescents' level of utilization of the AFHS is low. Subsequently, those who responded yes specified their reason(s) for visiting the centre. This is shown in Table 9.

Table 9: Reason for Visiting the AFHS Centre (n = 190)

Reasons	Frequency	Percentage (%)
General counseling	53	27.9
Nutritional education and management	39	20.5
STI screening	28	14.7
Pregnancy screening	26	13.7
Substance used educational and management	19	10.0
Abortion services	11	5.8
Contraceptive counselling	11	5.8
Others	3	1.6

Source: Field survey (2021) Note: n = number of participants

The respondents indicated that, predominantly, they visited the AFHSs centres for general counseling (n = 53, 27.9%). This general counseling involves pregnancy screening, STI screening, contraceptive counseling, nutritional education and management, and abortion services. On the other hand, some adolescents visited the AFHSs centers specifically for nutritional education and management (n = 39, 20.5%), STI screening (n = 28, 14.7%), pregnancy screening (n = 26, 13.7%), contraceptive counseling and abortion services (n =

11, 5.8%). Three (1.6%) respondents however stated reason other than the abovementioned. Again, the respondents indicated the rate with which they visited the AFHS center. Responses of the participants are shown in Table 10.

Table 10: Rate of Visit to AFHS Center (n = 142)

Rate	Frequency	Percentage (%)
Daily	17	12.0
Weekly	31	21.8
Monthly	52	36.6
Quarterly	18	12.7
Yearly	24	16.9

Source: Field survey (2021), Note: n = number of participants

On the frequency at which the students visited the AFHS in the circuit, the predominant rate of visit was monthly (n = 52, 36.6%).Other visiting rates were weekly (n = 31, 21.8%), yearly (n = 24, 16.9%), quarterly (n = 18, 12.7%), and daily (n = 17, 12.0%). Respondents further specified how long they spend at the AFHS center when they visit. Table 11 shows the results of the respondents' time spent at the centers.

As shown in Table 11, when asked the time spent at AFHS centers, most of the respondents indicated 1-30 minutes (n = 46, 36.8%). This is due to the fact that, since most of the students in the circuit do not visit the centers, there is always available space for those who visit the center hence no congestions to cause delays. A good number also indicated more than one hour (n = 41,32.8%). Few (n = 4, 3.2%) of the respondents mentioned times other than the abovementioned.

Table 11: Time Spent at AFHS Center (n = 125)

Time	Frequency	Percentage (%)
1-30 minutes	46	36.8
31-60 minutes	33	26.4
60+ minutes	41	32.8
Others	4	3.2
N/A	1	0.8
Total	125	100.0

Source: Field survey (2021), Note: n = number of participants

Respondents who had visited an AFHS center were again asked to indicate the availability of service product and the extent to which service providers engaged with them. Responses to these questions are presented in Table 12.

From Table 12, one major problem that students faced when they visited the AFHS centre was the unavailability of products to meet their requests. However, 72.0% responded affirmative to the question "were there enough products to meet your request." Again, 75.2% reported that the healthcare service providers listened to their concerns of their satisfaction. Whether or not the healthcare service providers in the AFHS centers allowed the students to ask questions bothering them, 78.4% agreed that they were allowed to ask bothering questions.

Table 12: Availability of AFHS Products and Engagement with Service Providers (n = 125)

	Yes		No	
Statements	F	%	F	%
Did provider allowed you ask questions bordering you?	98	78.4	27	21.6
Did the provider listen to your concern to your satisfaction?	94	75.2	31	24.8
Were there enough products to meet your request?	90	72.0	35	28.0

Source: Field survey (2021) Note: n = number of participants, F = frequency

The respondents who had visited the AFHS centres and had experienced the service they provide were further asked if they would like to visit the centres again. Their responses are detailed in Table 13.

Table 13: Plan to Re-visit Center (n = 125)

Response	Frequency	Percentage (%)
Yes	100	80.0
No	25	20.0
Total	125	100.0

Source: Field survey (2021), Note: n = number of participants

As shown in Table 13, after querying the experiences that the students have had when they visited to seek healthcare at any AFHS center in Cape Coast circuit, most of the respondents (n = 100, 80.0%) affirmed that they would like to visit the AFHS centres again, whereas 25 (20.0%) responded in the negative.

Finally, all respondents were asked to indicate where they think education on AFHS should be carried out. Results of the responses is shown in Table 14.

Table 14: Place for Education on AFHS (n = 791)

Reasons	Frequency	Percentage (%)
Schools	313	18.8%
Media	163	19.5%
Healthcare centers	157	18.8%
Homes	86	10.3%
Church	69	8.3%
Mosque	41	4.9%
Other	5	0.6%

Source: Field survey (2021) Note: n = number of participants

Among the places mentioned, the school (n = 313, 37.5%) is the place respondents deemed most suitable for education on AFHS. This was followed by the media (n = 163, 19.5%), healthcare centers (n = 157, 18.8%), homes (n = 86, 10.3%), then the church (n = 69, 8.3%). Based on the responses, the mosque (n = 41, 4.9%) is the least suitable place for effective AFHS education. Few (n = 5, 0.6%) of the respondents mentioned places other than the stated ones.

Research Question 5: Which Socio-demographic Factors are Associated with Adolescents' Utilisation of AFHS in Cape Coast Circuit?

The purpose of this research question was to find out the socio-demographic factors which affect AFHS utilisation. The factors examined include gender, age and religion. Details of the results on the association between gender and AFHS utilization is presented in Table 15.

Table 15: Socio-demographic Factors that Associate Utilization of AFHS (n = 1,469)

Factor	Category	Yes	No	χ^2	*Df*	*P*
Gender	Male	72 (26.6)	199 (73.4)	.393	1	.531
	Female	53 (24.1)	167 (73.4)			
Age	10-13 years	5 (12.2)	36 (87.8)	4.164	2	.125
	14-16 years	88 (26.5)	244 (73.4)			
	17-19 years	32 (27.1)	86 (72.9)			
Religion	No religion	6 (25.0)	18 (75.0)	.571	2	.752
	Christianity	113 (25.9)	324 (74.1)			
	Muslim	5 (19.2)	21 (80.8)			

Source: Field survey (2021); Note: n = number of participants

As presented in Table 15, gender has no significant association with one's utilisation of AFHS, χ^2(n = 491, df = 1) = .393, p = .531. Table 15 shows that there is no significant association between age category and utilization of AFHS, χ^2(n = 491, df = 2) = 4.164, p = .125. Results on religion and utilization of AFHS is presented in Table 15. This was done using Fisher's exact since some of the categories had frequencies less than 5 (Field, 2009). The results in Table 15 show that, religious category has no significant association with the utilisation of AFHS, χ^2(n = 487, df = 2) = .571, p = .752.

Research Question 6: What is the Influence of Knowledge, Perception, and Attitude on Utilization of Adolescent-Friendly Health Services?

This research question examined the influence of knowledge, perception, and attitude of adolescents on utilization of AFHSs. Data on this research question was tested using multiple linear regression analysis. The

predictor variables were knowledge, perception and attitude of adolescents on utilization of AFHS, and these were measured on continuous basis. The criterion variable utilisation of AFHSs was also measured on continuous basis. Table 16 presents the model summary.

Table 16: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.424[a]	.180	.175	3.85320	1.491

F (3, 487) = 35.56, $p < .001$

The results from Table 16 shows that the model containing knowledge, perception, and attitude of adolescents on utilization of AFHS was statistically significant F(3, 487) = 35.56, $p < .001$. The model accounted for 17.5% of the variance in utilisation of AFHSs. The results of Durbin-Watson's test (d = 1.5) showed no autocorrelation. This was because Durbin-Watson's coefficient (1.5) was greater than 1.4 but less than 2.5. Other assumptions such as linearity, homoscedasticity, and normality of residuals were adhered to. Table 17 presents the regression coefficients.

Table 17: Influence of Knowledge, Perception, and Attitude on Utilization of AFHS

	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model	B	S E	β	t	Sig.	Toler	VIF
(Constant)	-.626	.780		-.803	.423		
Knowledge	.350	.043	.340	8.226	.000	.989	1.011
Perception	.597	.106	.234	5.648	.000	.979	1.021
Attitude	-.082	.119	-.029	-.694	.488	.978	1.022

*Significant, $p < .05$, Criterion: Utilisation of AFHSs

From Table 17, the results indicated there was no multicollinearity since variance inflation factors (VIF) were less than 10. The results further showed that knowledge, β = .34, *t* = 8.23, *p* < .001 and perception, β = .24, *t* = 5.64, *p* < .001 of adolescents on utilisation of AFHS were significant predictors of the use of AFHS services. However, attitude β = -.03, *t* = -.69, *p* = .49 of adolescents on the use of AFHS did not predict the utilization of the AFHSs. Both knowledge and perception of adolescents on utilization of AFHS were positive predictors on the utilization of the AFHSs. Comparatively, adolescents' knowledge on utilization of AFHS (β = .34) had a higher influence on the utilization of the service than the perception (β = .24)

Discussions

The purpose of this study was to find out the adolescents' knowledge level, perception and attitude of AFHS on their utilization of the services in Cape Coast Circuit.

Knowledge levels of adolescents on AFHS in Cape Coast Circuit

The findings revealed that the proportion of adolescents who are aware of AFHS is low in the Cape Coast Circuit. Out of the total of 491 respondents, 277 of them representing 56.4% stated that they are not aware of AFHS. However, only 214 students representing 43.6% indicated that they know of AFHS. According to Hassanzoy (2019), for example, if the total number of opportunities is 100%, then the choices can be made as (75-100: highly aware, 49-74: moderately aware, 23-48: lowly/poorly aware, 0-22: not aware). The resultalso confirms the study by Kronzu (2018) on the knowledge, access and utilization of AFHSs in the Kumbungu District in Ghana, which indicated that adolescents have low knowledge level on AFHSs.

From Table 3 in relation to adolescents' source of information on AFHSs, 38.8% (n = 168) of the 433 respondents stated that they got to know about AFHS from the school. This could be due to the fact that most adolescents are taught on matters related to their health in school. The school as the major source of AFHS implies that adolescents spend many days and hours in school and so could be fortunate to obtain the knowledge on AFHSs from the community and school setting. This finding supports a similar study by Motuma (as cited in Odoi, 2017), which revealed that adolescent's main source of information on AFHS is the school. This study findings means that most adolescents are not aware of the AFHS in Cape Coast Circuit which affect their use of services.

This result has implications for the creation of public awareness on the availability or existence of AFHS at the various health centers in the Cape Coast Circuit. Schools, teachers and health workers should lead this crusade.

Perceptions of adolescents on utilization of AFHS in Cape Coast Circuit

The major perceptions of the adolescents were that service providers will not keep their information private and confidential (n = 262, 53.4%), AFHS staff will have adequate time for them when they visit the centers (n = 379, 77.2%), and that they are also friendly (n = 372, 75.8%). These perceptions are however not influenced by religious (n = 408, 83.1%) nor cultural (n = 406, 82.7%) beliefs.

This finding confirms the study conducted by WHO (2012) which emphasized that respect, privacy and confidentiality are the main qualities adolescents expect from the health facilities that will improve the using of the AFHSs. Again, (n = 265, 54.0%) respondents also indicated that the service

location can make people see them going there. Hence, students are bothered about the location of the AFHS. This finding is indifferent to the findings of Aaron and Anaba (2019), and Kuzma and Peters (2016) who revealed that adolescents perceived that if their parents find them using the AFHSs, they will stop using the service because they are afraid their parents would punish them for visiting the AFHS facility. The findings of this means that adolescents' perception with regard to privacy, confidentiality, and the location of the AFHS centers will affect their use of the service.

The findings of this study have implications for the creation of public awareness on adolescents' misconceptions of AFHS with regard to their privacy and confidentiality when they visit the centers. This activity should be carried out by health workers.

Attitude of adolescents on utilisation of AFHS in Cape Coast Circuit

The major attitudes of the adolescents were that they would visit AFHS centers if the services were free (n = 432, 88%), available within the community (n = 411, 83.7%), and if they were involved in planning and monitoring the service (n = 409, 83.3%). This finding supports a study by Aba (2016) whose finding indicated that adolescents would not visit AFHSs centers which are too far from their homes of residence because they lack money for transportation and have to wait for long time which keeps them away from home for too long. This finding is similar to a study by Petter (2021) where involvement of adolescents such as gathering their experiences and views could enhance their use of healthcare services. This means that adolescents are more concerned about the location of the AFHS centers, and that their consent must be sought on measures to improve their use of the service. The findings of the study have

implications for the putting up of adequate facilities in the community so that the adolescents can assess them without any hindrance. They should also be part in any policies involving planning and implementation concerning them.

Levels of utilisation of AFHS among adolescents in Cape Coast Circuit

Findings of the study implies that majority (n = 366, 74.5%) of the respondents do not visit to seek healthcare at any AFHSs centre in Cape Coast Circuit. Assuming the total percentage is 100%, then the standard measurement to categorise levels into high, moderate, low, and not utilize of the AFHS can be made as; 75-100: highly utilize, 49-74: moderately utilize, 23-48: lowly/poorly, 0-22: not utilize (Hassanzoy, 2019). This implies that the utilization level of AFHS among adolescents in Cape Coast Circuit is low. This confirms the results from a survey in Ghana, Malawi and Uganda in 2004, which showed that 12-19 years adolescents under-utilized AFHS services (Biddlecom et al., 2007). Again, a study by Aba (2016) and Odoi (2017) agreed to the fact that AFHSs centres are under-utilized. The results established that 36.6% of the total respondents visit the AFHSs monthly. This reflects the low knowledge of the students on the available AFHS in the various health facilities in the circuit.

Concerning duration spent at AFHSs, a high percentage (n = 46, 36.8%) of the students responded that they spend 1-30 minutes to be attended to. According to Creel and Perry (2002), adolescents may not utilize the AFHS if the services are time wasting and involve complex procedures. From Table 13, most (n = 100, 80.0%) of the respondents stated that they would like to visit AFHS centres again. This result is similar to the findings from the study by Aaron and Anaba (2019) which revealed that shortage of medicines and supplies influence adolescents' behaviors to utilize the AFHSs. This is due to the fact

that adolescents claimed that they will not get the drugs that would be prescribed to them and supplies like condoms from the AFHSs and had to buy them from pharmacy shops. This shows that the adolescents' level of utilization of AFHS services is low, but those who actually utilized the AFHS in the circuit showed high satisfaction and high levels of utilization of the AFHS in the Cape Coast Circuit. This result implies that the low use of the AFHS centers in Cape Coast is due to the fact that most adolescents do not visit to seek healthcare at the various healthcare centers. The results have implications for putting measures in place to attract adolescents to healthcare centers to seek AFHS services.

Socio-demographic factors' association on adolescents' utilization of AFHS in Cape Coast Circuit

From the results presented in Table 15, χ^2(n = 491, df = 1) = .393, p = .531, the utilisation of AFHS is not different among adolescents with respect to their gender. This study contradicts a similar study in Uganda by Bukenya et al. (2017). Bukenya et al. finding indicated that most (79%) boys aged below 15 years visited AFHSs centers for testing services involving STI treatment whereas only 21% females visited for STI treatment. However, as adolescents grow older, the females seek for STI services than males.

From Table 15 in relation to age and utilization, utilization of AFHS does not differ among adolescents in terms of their age categories χ^2(n = 491, df = 2) = 4.164, p = .125. This contradicts the study by Negash et al. (2017) on reproductive health utilization and its associated factors. The findings indicated that age of adolescents has influence on their utilization of AFHSs. The study showed that adolescents aged 19 years and below utilize the AFHSs. The result from Table 15 also indicates that religious affiliation does not influence adolescent's utilization of AFHS, χ^2(n = 491, df = 3) = .631, p = .920. This result

is in line with Odoi (2017) that AFHSs utilization is not influenced by religion. These results mean that no specified socio-demographic factor affect adolescents' utilization of the AFHS in Cape Coast Circuit. The results have implication for encouraging adolescents to use AFHS centers irrespective of their social, religious or cultural backgrounds.

Influence of knowledge, perception, and attitude on Utilization of AFHS

Findings from the study in Table 17 imply that, knowledge level on AFHS is a positive predictor (β = .34, *t* = 8.23) of AFHS utilization. This means when adolescent gain more knowledge on AFHS, they use the services. The findings of this is line with a study by Kronzu (2018) on knowledge level, access and adolescents' utilization of AFHSs in Kumbungu District which indicated that when adolescents have high knowledge level on AFHSs they utilize the services and vice versa. From the results, it was also found that perception of adolescents on utilization of AFHS was significant (β = .24, *t* = 5.64, *p* < .001) and therefore, influence the utilisation of the service. This confirms a study by Aaron and Anaba (2019) which emphasized that adolescents with positive perceptions on AFHSs, tend to utilize the services. However, attitude (β = -.03, *t* = -.69, *p* =.49) of adolescents on the use of AFHS did not predict the utilization of the services. This contradicts a study by Aba (2016) which indicated that, negative attitude of adolescents may affect their utilization of the service.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study was to find out the knowledge level of adolescents, perception and attitude of Adolescent Friendly Health Services (AFHS) on their utilisation of the services in Cape Coast Circuit. This chapter presents the summary of the study, the conclusions made from the findings, and recommendations. Suggestions for further studies was also covered.

Summary

This study was conducted to look at adolescents' knowledge level, perception, and attitude of AFHS and their utilization of the service in Cape Coast Circuit. The objectives of the study were to: identify the knowledge levels, perceptions, attitudes, and levels of utilization of AFHSs in Cape Coast Circuit. This study also sought to find outthe socio-demographic factors which influence adolescent's utilization of AFHS in Cape Coast Circuit. Five research questions guided the study. Data was collected from 491 JHS 3 students in the Cape Coast Circuit. The data collection instrument was an adapted questionnaire. A pilot study was conducted at the Pedu M/A JHS and the reliability coefficient was 0.897. Frequency counts and percentages, and Chi-square of Association were employed to aid in the analysis of the research questions using SPSS version 26.0 and the findings reported.

Key Findings

1. The awareness level of adolescents in Cape Coast Circuit on AFHS is low (n = 214, 43.6%). This awareness manifest from the school (n = 168, 38.8%).

2. The perceptions of the adolescents on the utilisation of the AFHS in Cape Coast Circuit are that staff at the AFH centers have adequate time for them (n = 379, 77.2%) and that they are friendly (n = 372, 75.8%). These perceptions are however not influenced by religious (n = 408, 83.1%) nor cultural (n = 406, 82.7%) beliefs.
3. The major attitudes of the adolescents were that they would visit AFHS centers if the services were free (n = 432, 88%), available within the community (n = 411, 83.7%), and if they were involved in planning and monitoring of the service (n = 409, 83.3%).
4. The level of utilization of AFHSs among adolescents in Cape Coast Circuit is low (25.5%). This is as a result of the fact that most of the respondents (n = 366, 74.5%) do not visit AFHS centers to seek healthcare.
5. None of the socio-demographic factors (gender, age, and religion) has association on adolescent's utilisation of AFHSs (P>.05).
6. Knowledge (β = .34, t = 8.23) and perception (.24, t = 5.64, p < .001) of adolescents has influence on utilization of AFHS. However, attitude (β = -.03, t = -.69, p =.49) of adolescents on utilisation of AFHS has no influence on the use of the service.

Conclusions

The following conclusions were made from the findings of the study:

1. Majority of adolescents in Cape Coast Circuit do not have knowledge on AFHS. For those who have had knowledge on AFHS, majority of them received it from the school. Also, majority of the students know about the existence of AFHS in the health facilities and most of them

are aware of the health problems of adolescents, such as teenage pregnancy and STIs.

2. Even though majority of the participants testified that the attitudes of the healthcare staff are friendly, many also think they will not keep their information private and confidential.
3. When AFHS are free and the centres are located in their communities, it encourages adolescents to subscribe to the services.
4. Just a small proportion of the students have ever visited to seek healthcare at any AFHS centre. Majority visited for general counselling, nutritional education and management, and pregnancy screening.
5. Socio-demographic factors have no association on adolescents' utilisation of AFHS. However, increase in the students' level of knowledge on AFHSs, good perceptions on AFHS, good attitudes towards AFHS are likely to influence level of utilisation of AFHS of adolescents in Cape Coast Circuit.
6. Knowledge and perception of adolescents influence the utilisation of AFHS. However, attitude of adolescents do not influence the utilisation of the service.

Recommendations

The following recommendations are made for implementation:

1. School authorities and community leaders should collaborate and strengthen school health education as well as community education on AFHS. This can be done by rolling out more educational campaigns on AFHS in communities and schools to increase knowledge and utilization of AFHS.

2. Healthcare providers should be encouraged to continue to be friendly and devote adequate time for their clients when they visit the AFHS centres. They must ensure that every information on adolescents are kept secret in order to improve their perceptions of the AFHS.
3. Health stakeholders must ensure that AFHSs are continuously free and also provided at places accessible to adolescents. Measures must be put in place and involve adolescents during planning and monitoring of AFHS in the Cape Coast Circuit.
4. Health workers, particularly public and community health nurses, should encourage adolescents to use AFHS at the various centres. This will ultimately improve the utilization rate.
5. Stakeholders in the health industry should target adolescents from all walks of life with AFHS irrespective of age, gender, religious and cultural affiliation to administer the services to them. An all-inclusive approach should be adopted and administered appropriately.
6. Healthcare staff and school authorities should work hand in hand to provide general education on AFHS to increase adolescent's knowledge on AFHS and impact them with positive perception on AFHS to increase their utilisation of the service.

Suggestions for Further Research

There is the need to conduct further study to explore the effects of attitude of service providers on AFHS utilization among adolescents.

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APPENDICES

APPENDIX A

QUESTIONNAIRE

Dear Respondent,

I am carrying out this research for the purpose of writing a thesis as a requirement for the award of M. Phil. Health Education at the University of Cape Coast. The purpose of this study is to find out adolescents' knowledge level, perception, and attitude of AFHS on their utilization of the service in Cape Coast Circuit. A questionnaire will take 30 minutes to respond to the questions stated in it. I will be grateful if you can provide answers to the questions asked. The information you supply for this study will be kept confidential.

PART 1

SECTION A: SOCIO-DEMOGRAPHIC INFORMATION

Tick the appropriate answer in the items below

Sex: Male[ ]

Female[ ]

Age: 10-13[ ]

14-16[ ]

17-19 [ ]

Religion: No religion [ ]

Christianity [ ]

Muslim [ ]

Other (specify)……..

PART 2

Please tick the appropriate responses to the questions below:

QN. NO.	SECTION B: Knowledge level of adolescent on adolescent friendly health services	YES	NO
1.	Do you know of adolescent friendly health service? If **yes**		
2.	How did you know of it?		
	School		
	Church		
	Media		
	Health worker		
	Friends		
	Family		
	Teacher		
3.	Do you know there are adolescent friendly health services at some various health facilities?		
4.	Do you know of some adolescent health problems? If **yes**		
5.	Which of this/these adolescent health problem(s) do you know of?		
	Substance use		
	Teenage pregnancy		
	Violence		

	Malnutrition		
	Sexually transmitted infection (STIs)		
	Other specify……..		
6.	Have you had any education on adolescent friendly health service?		
7.	If **yes,** from where?		
	Church		
	Media		
	Friends		
	Hospital		
	School		
	Family member		
8.	Do you think education on adolescent friendly service is enough?		
9.	Do you know there are adolescent friendly health services in some Cape Coast health facilities?		
10.	Do you know the services adolescent friendly health service offer in Cape Coast?		
12.	Do you know that adolescent friendly service can improve health?		
	SECTION C: Adolescent perception on adolescent friendly health service		
13.	Do you think your religious beliefs will stop you		

	from using the adolescent friendly health service?		
14.	Do you think your culture beliefs will stop you from using the adolescent friendly health service?		
15.	Do you think the attitudes of the healthcare staff are friendly?		
16.	Do you think the information disclosed to the healthcare providers will kept secret and confidential?		
17.	Do you think the location of the adolescent friendly service can make people see you going there?		
18.	Do you think because of your age, sex or religion healthcare service providers will keep you off from using the service?		
19.	Do you think adults in the community particularly your parents and teachers will see you as “bad boy or girl” if they get to know you accessed the service?		
20.	Do you think you will be attended to by healthcare staff if you visit the center without appointment?		
21.	Do you think the service providers will have adequate time for you if you go to the adolescent health friendly center?		
	SECTION D: Attitude of adolescents on utilization of adolescent friendly health service		

22.	I would be visiting adolescent friendly health service center if it were available within my community		
23.	It would be better if adolescents are involved in the planning and monitoring of the services		
24.	Most of the health facilities are not different from other health facilities, visiting any of them is as visiting adolescent friendly health services.		
25.	When I am confronted with difficult health problem, I first discuss with my friends before visiting the health facility.		
26.	Most of the staff in adolescent-friendly health services spend too much time mix into other people's business (stick their noses) and giving unsought advice		
27.	It is best to visit health facility in an area where there are not many elderly people in order not to see you as a bad boy/girl		
28.	Most of the staff at the adolescent friendly service constantly complains about the health condition of a person when diagnosed of a health problem.		
29.	I would be visiting the adolescent friendly health service centers if the services were to be free		
	SECTION D: Utilization of adolescent friendly services		

30.	Have you ever visited to seek healthcare at any adolescent friendly health service center in Cape Coast metropolis? If **yes**		
31.	Your reason for going there was what?		
	Pregnancy screening		
	Contraceptive counseling		
	Abortion services		
	Nutritional education and management		
	STI screening (HIV screening, syphilis screening,		
	Gornorrhoea)		
	Substance use education and management		
	General counseling		
	Other specify……. If **yes**		
32.	How regularly do you go there?		
	Daily		
	Weekly		
	Monthly		
	Quarterly		
	Yearly If **yes**		
33.	How long did you have to wait if any?		
	1-30 minutes		

	More than 30 minutes to 1 hour		
	More than 1 hour		
	Other specify If **yes**		
34.	Were there enough products to meet your request? If **yes**		
35.	Did the provider listen to your concerns to your satisfaction?		
36.	Did provider allowed you to ask questions bordering you?		
37.	Would you like to visit the center again?		
38.	Where do you think education on adolescent friendly health service should be carried out to make it more effective to adolescent?		
	Healthcare centers		
	Schools		
	Church		
	Mosque		
	Homes		
	Media (T.V, radio, internet, on notice board)		
	Other specify……		

Thank you for your cooperation.

APPENDIX B

UNIVERSITY OF CAPE COAST
INSTITUTIONAL REVIEW BOARD SECRETARIAT
TEL: 0558093143 / 0508878309
E-MAIL: irb@ucc.edu.gh
OUR REF: UCC/IRB/A/2016/930
YOUR REF:
OMB NO: 0990-0279
IORG #: IORG0009096

29TH MARCH, 2021

Mr. Isaac Appiah
Department of Health, Physical Education and Recreation
University of Cape Coast

Dear Mr. Appiah,

ETHICAL CLEARANCE – ID (UCCIRB/CES/2021/13)

The University of Cape Coast Institutional Review Board (UCCIRB) has granted **Provisional Approval** for the implementation of your research titled **Perception and Attitude of Adolescents on Utilization of Adolescent Friendly Services in Cape Coast Circuit, Ghana.** This approval is valid from 29TH March, 2021 to 28TH March, 2022. You may apply for a renewal subject to submission of all the required documents that will be prescribed by the UCCIRB.

Please note that any modification to the project must be submitted to the UCCIRB for review and approval before its implementation. You are required to submit periodic review of the protocol to the Board and a final full review to the UCCIRB on completion of the research. The UCCIRB may observe or cause to be observed procedures and records of the research during and after implementation.

You are also required to report all serious adverse events related to this study to the UCCIRB within seven days verbally and fourteen days in writing.

Always quote the protocol identification number in all future correspondence with us in relation to this protocol.

Yours faithfully,

Samuel Asiedu Owusu, PhD
UCCIRB Administrator

INSTITUTIONAL REVIEW BOARD
UNIVERSITY OF CAPE COAST

APPENDIX C

UNIVERSITY OF CAPE COAST
COLLEGE OF EDUCATION STUDIES
FACULTY OF SCIENCE AND TECHNOLOGY EDUCATION
DEPARTMENT OF HEALTH, PHYSICAL EDUCATION & RECREATION

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Our Ref: **ET/MHE/18/0001/12**

EMAIL: hper@ucc.edu.gh

Cables & Telegrams:
UNIVERSITY, CAPE COAST

26th April, 2021.

TO WHOM IT MAY CONCERN

INTRODUCTORY LETTER: ISAAC APPIAH (ET/MHE/18/0001)

The bearer of this letter is an MPhil student of the above department. In partial fulfilment of the requirements for the programme, he is collecting data on the topic" **Perception and Attitude of Adolescents on Utilization of Adolescents Friendly Health Services in Cape Coast Circuit, Ghana."** and would need assistance from your outfit. The information collected will be used for academic purposes only and its confidentiality is assured.

We would therefore be most grateful if he could be given approval to collect the data.

We count on your co-operation.

Thank you.

Daniel Apaak (Ph.D)
HEAD

APPENDIX D

GHANA EDUCATION SERVICE

In case of reply the Number and date of this Letter should be quoted

REPUBLIC OF GHANA

METROPOLITAN EDUCATION DIRECTORATE
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My Ref. No GES/MD/EPI/VOL.5/102

5TH MAY, 2021.

HEADTEACHERS CONCERN
CAPE COAST CIRCUIT
CAPE COAST

RE: PERMISSION TO COLLECT DATA IN SELECTED BASIC SCHOOLS

This is to inform you that, Management of Metropolitan Education Directorate has granted permission to Mr. Isaac Appiah, an M.Phil. Student at the Department of Health, Physical Education and Recreation, University of Cape Coast to collect data on **"Perception and Attitude of Adolescents on Utilization of Adolescents Friendly Health Services in the Cape Coast Circuit".**

By a copy of this letter, headteachers concerned are to grant him the courtesies and assistance he may require in collecting the data.

However, his presence in the schools should not unduly interfere with the schools' academic work and all Covid-19 protocols must be strictly observed.

Thank you.

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DORCAS BRENDA ASARE
METRO DIRECTOR OF EDUCATION
CAPE COAST

cc
Isaac Appiah
University of Cape Coast