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UTILIZATION OF THE ADOLESCENT FRIENDLY HEALTH SERVICES AT THE ASHAIMAN POLYCLINIC BY IN-SCHOOL ADOLESCENTS IN ASHAIMAN-GREATER ACCRA REGION OF GHANA.

BY

ABA APPIAH-MENSAH

(10551759)

THIS DISSERTATION IS SUBMITTED TO THE UNIVERSITY GHANA, LEGON IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF THE MASTER OF PUBLIC HEALTH DEGREE

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DECLARATION

I, Aba Appiah-Mensah the author of this dissertation declare that with the exception of references to other people's work which have been duly acknowledged, this work is my own work. This had not been submitted in part or whole anywhere for any degree.

……..…… ……

ABA APPIAH-MENASH DATE

STUDENT

……..…… ……

PROFESSOR AUGUSTINE ANKOMAH DATE

SUPERVISOR

DEDICATION

Dedicated to my lovely and supportive husband and to my father, mother and siblings.

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To God be the glory. I am grateful to Him for all the grace He has bestowed on me and how far He has brought me.

I am thankful to a lot people for the diverse ways they assisted me during this work. First of all to my supervisor, Professor Augustine Ankomah and my supervisor for his efficient guidance in shaping the course of the work that has really increased its quality and thoroughness. And also to Dr. Margaret Atuahene, School of Public Health.

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ABSTRACT

The adolescence period is a crucial stage where young people are particularly vulnerable to health risks especially those related to sexuality and reproduction such as early pregnancy and child bearing, STIs including HIV, sexual violence.

With the availability of adolescent friendly health services (AFHSs), it is expected that adolescents will go through this stage of development with minimal or no challenges at all. Adolescent's health challenges are still on the increase and this may be attributed to so many factors including non-use of these adolescent friendly health services which are available to meet them in their own comfort for professional counselling and guidance through this stage. This non-use may also be due to so many factors which can be from the side of the service providers, knowledge on the services and service provisions (services provided and attitude of service providers) among others. This study explored the utilization of the adolescent friendly health services at the Ashaiman polyclinic by in-school adolescents residing in Ashaiman. That is, whether the in-school adolescents visit and use the adolescent friendly health services.

The study was a descriptive cross-sectional design which employed quantitative data collection method. Adolescents between the ages of 10 and 19 years participated in the study. Self-administered structured questionnaire was used to collect data which were analysed with SPSS version 16.0. Pearson chi-square was used to test for statistical significance ($p < 0.05$ denoted statistical significance).

Four hundred and six (406) in-school adolescents participated in the study. The ages of the adolescents were categorized into three groups: 10-13 (early adolescents), 14-16 (middle adolescents) and 17-19 (late adolescents). The distribution of age of the participants indicated that most of the students who were interviewed were the middle

adolescents 191 (49.4%). They were predominantly females who constituted 62.2% of the total number.

The results showed that in-school adolescents under-utilized the adolescent friendly health services at the Ashaiman polyclinic. In-school adolescents who utilized the services were 7.6% even though very few of them (5.5%) indicated that they have no need for any of the services. One hundred and twenty five (125) representing 36.9% had knowledge on the AFHSs which significantly affected utilization. Knowledge on AFHSs, sex, distance of facility and cost were found to be associated with utilization of the AFHSs. Ghana Health Service in collaboration with the Ghana Education Service and NGOs in the municipality should intensify education on the AFHSs in the schools, community and through community durbars and media.

Keywords: in-school adolescents, adolescent friendly health services, Ashaiman polyclinic, utilization

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LIST OF ACRONYMS

ADHD	Adolescent Health and Development Programme
AFHSs	Adolescent Friendly Health Services
AIDS	Acquired Immuno Suppressive Syndrome
ANC	Antenatal Clinic
CWC	Child Welfare Clinic
DVD	Digital Compact Disc
FGD	Focus Group Discussion
GHS	Ghana Health Service
GMA	Ghana Medical Association
GSS	Ghana Statistical Service
HIV	Human Immune Virus
JHS	Junior High School
MDG	Millennium Development Goal
MoH	Ministry of Health
NGO	Non-Governmental Organization
OPD	Out Patient Department
PHD	Public Health Department
RCH	Reproductive and Child Health
SHS	Senior High School
STDs	Sexually Transmitted Diseases
STIs	Sexually Transmitted Infections
US	United States
VCD	Video Compact Disc
VCT	Voluntary counselling and testing
WHO	World Health Organization

DEFINITION OF TERMS

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

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

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

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

Environment: The location and decoration of the facility.

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

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background

Adolescence is defined as the period in human growth and development that occurs between childhood and adulthood from the ages of 10 to 19 years (WHO, 1997). Adolescents can therefore be defined as people between the ages of 10 and 19 years and are therefore neither children nor adults. Adolescents' health in developing countries including Ghana is a big public health issue. Adolescents in Ghana and elsewhere experience various health and behavioural challenges due to poor or wrong choice of food and negative patterns of eating and drinking, early initiation of sex, unprotected sexual practices and use of hard drugs (Asare, 2012).

Adolescents comprise 20% of the world's population, with more than 85% living in the developing part of the world (WHO, 1997). In Ghana, the 2000 population census data indicates that adolescents form 21.9% of the total population. (GHS, PHD, RCH UNIT, ADHD PROGRAMME, 2012). And these adolescents need special guidance in order to go through their transitional period with no or minimal health challenges which on the whole will benefit the country.

A study in Ghana showed that only 6.9% adolescents between 15-19 years use contraceptives, 45.7% have knowledge on sexually transmitted diseases (STDs), 97% are aware of HIV/AIDS, 4.3% of male adolescents 7.8% of female adolescents had sex before 15 years of age and 1.2% females, 3.1% males have multiple sex partners (GSS, GHS, ICF Macro, 2009). The 2003 Ghana Demography Health Survey also revealed that 38% of girls and 19.3% of boys between the ages of 15-19 years are sexually active (GHS et al., 2012). An autopsy study carried out at the Korle-bu Teaching Hospital

revealed abortion as the leading cause of maternal mortality among adolescents. (Akosa et al., GMA Sept. 2000 as cited in GHS et al., 2012). Those who escape death from the crude methods of abortion suffer from complications such as infections, excessive bleeding and pelvic inflammatory diseases.

When it comes to nutrition, a study in 6 districts in the Upper East and Northern Regions revealed that 7 out of 10 adolescents are underweight (Body Mass Index <18.5) (GHS et al., 2012). Adolescents have other nutritional and mental challenges such as depression. Another study also showed that 19% of adolescents use tobacco and 5% smoke cigarettes in Ghana (GHS et al., 2012).

The above adolescents' challenges can be dealt with or reduced if the adolescents are aware of special programs, places and laws that are put in place to guide them through their transitional period. Some parents and individuals do their best to counsel and guide their adolescent wards once a while when they are faced with one challenge or the other and they confide in them. But how professional are they and with parent- adolescent conflicts arising, how do they sit and solve issues? Some churches, schools and organizations are also doing their best by organizing some adolescent's forums once a while but where do these adolescents go to when they need neutral people to talk to? Where do those who do not have the time of their parents and other individuals go to? After the forums have been organized, where do those adolescents who have challenges and want to seek for professional guidance go to?

Over the past couple of decades, the high rates of adolescents health challenges such as adolescent pregnancy and motherhood, abortion and its consequences, STIs, alcohol and substance abuse, poor nutrition, risky sexual behaviours and violent lifestyles in developing nations like Ghana might have been associated with the lack of special

facilities and services with providers that are welcoming to the adolescents for them to share their challenges and get professional counselling. According to Baah-Wiredu (2004), Ghana lacked adequate adolescent friendly health services to deal with their reproductive health issues. He noted that even with the few adolescent friendly services available in the country, the providers are not adolescent friendly. The lack of adolescent friendly facilities, services and providers left the adolescents no choices but to seek help and guidance from peers who are also not knowledgeable in these issues.

The Adolescent Health and Development Program in Ghana was set up with the vision 'to have a well-informed adolescent adopting healthy lifestyle physically and psychologically and supported by a responsive team system.' The mission for this program is 'to make available appropriate information on young people's health and provide comprehensive adolescent health services including reproductive health. These services will be delivered in a humane, efficient and effective manner by – trained, friendly, highly motivated and client oriented personnel.' (Asare, 2012). With the setting up and implementation of adolescent friendly health services and trained providers in Ghana in recent times in our health facilities and the communities by GHS and various NGOs, it is expected that the rates of the adolescents' health challenges will be reduced but that has not been the case. The challenges still persist and some are even increasing year by year. For instance, results from a study indicated that only 37% of females between 12 and 14 years and 60% of those aged between 15 and 19 know that a woman can get pregnant after sexual intercourse. Twenty two percent females and 26% males between 12 and 19 thought a woman could not get pregnant if they had sex standing up. Ten percent of the adolescents reported that an infected HIV man can be cured after having sex with a virgin and only 2 out of 5 are aware of other STIs. Sixty percent of females and 48% of males felt it is embarrassing to buy or ask of condoms and 50% of

females were not confident to ask their partners to use condoms (Awusabo-Asare , Biddlecom, Kumi-Kyereme & Patterson, 2006).

Adolescent friendly health services are now available all over the country to render adolescent friendly services including counselling, provision of contraceptives, sexually transmitted Infections (STIs) testing and safe motherhood to curb the incidence rates of the adolescents' challenges mentioned above. Despite all these efforts by GHS and the various NGOs, these challenges still exist

Such services are available are at Ashaiman polyclinic and even though it is actively working, in-school adolescents in the Ashaiman municipality may not be using it as anticipated.

This study was to determine the level of utilization, the knowledge level and factors associated with the utilization of the adolescent friendly health corner and services at the Ashaiman polyclinic by in-school adolescents residing in Ashaiman.

1.2 Problem Statement

Adolescents' health in developing nations including Ghana is a very important public health issue. Adolescents worldwide have various challenges including contraception, reproduction, substance use, poor nutrition and perceptions of STDs and basic issues of life which if not dealt with will result in severe consequences later in life. Even though adolescents in the past themselves recognized these challenges in their lives and needed to seek help, they did not seek the help because of lack of their own special facilities.

Without the availability of special places with services to meet the health and behavioural needs of these adolescents, they might never seek professional counselling and guidance in this critical period of life hence the rising of adolescents' health

challenges worldwide. For instance, about 1.7 million young people aged between 10 and 19 years die each year mainly from accidents, violence, pregnancy related problems, or illnesses that are either preventable or treatable. Many also develop chronic illness that damages their chances of personal fulfilment. Harmful habits, e.g., smoking, alcohol and other substance abuse are acquired during adolescence (WHO, 2002).

In view of all these, governments and stakeholders are putting in lots of efforts to improve on the health of adolescents. These efforts had led to the setting up and implementing adolescent friendly health services in developed and developing countries including Ghana. Even though these special services have been made available to create an atmosphere which is very comfortable to the adolescents to meet their health and behavioural needs, adolescents in developing countries including Ghana may not be utilizing the services as anticipated because they may not be very knowledgeable on the existence of such services or the facilities are not adolescent friendly enough. The results from a survey in Ghana, Malawi and Uganda in 2004 showed that 12 to 19 year olds under-utilized youth friendly services (Biddlecom, Munthali, Singh & Woog, 2007).

This study was therefore to explore the utilization of the adolescent friendly health services at the Ashaiman Polyclinic by in-school adolescents residing in Ashaiman.

1.3 Conceptual Framework

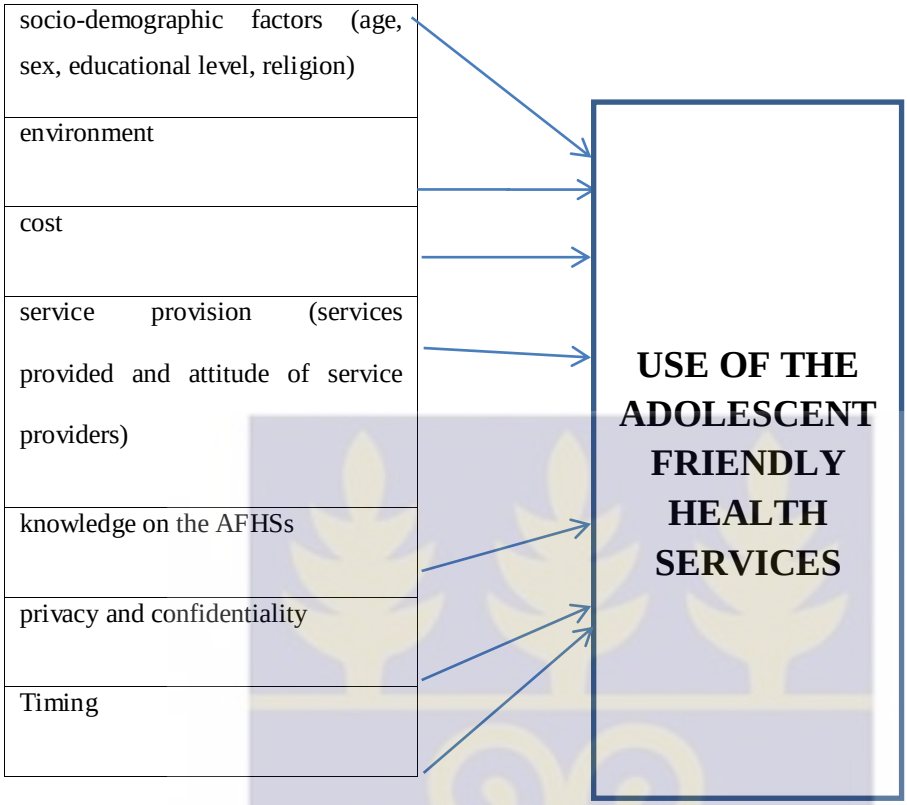

Figure 1.1: Conceptual Framework
Source: Author (synthesized from literature)

The conceptual framework describes the factors that contribute to the utilization of AFHSs. All the variables affect the utilization directly either in a positive way or negative way.

1.3 1 Socio-Demographic Factors

The socio-demographic factors are age, sex, level of education and religious background. These variables determine the adolescent's interest in seeking AFHSs. Examples are more adolescent girls are interested in seeking services on their health than adolescent boys. For instance adolescent boys may fear that using the services may be perceived as feminine (Creel & Perry, 2002). The individual' educational level will also determine his/her understanding of the services and then make him/her interested.

1.3 2 Environment

The location of the AFHSs is a very important factor in the utilization of the AFHSs. The AFHSs should be situated in a quiet and safe environment where the adolescents will feel free to go. It should not be too close or too far from the adolescents. There should be no stigma associated with the utilization of the services (MoH Kenya, 2005). There should be educational as well as recreational materials at the facility.

1.3.3 Cost

When the cost of the services are expensive, it will put the adolescents off from going to utilize the services even though they may be fully aware of the existence of such facilities. Most adolescents may not be working or earning much yet they have quite a number of things they deem very important to spend the little money they have or get from parents and other sources on. Seeking health care services may not be a priority to them because they believe they are at little or no risk of health problems (Creel & Perry, 2002). In a U.S. teen clinic, one most important reason given by young people for their initial attendance were that the services were free (Senderowitz, 1999).

1.3.4 Service Provision

Service provision comprises of the attitude of service providers and the services that are provided. Service providers are key determinants of the adolescents' use of the services. They are the people the adolescents meet when they go for the services. They are the people they confide in and share their problems with. Service providers who are not knowledgeable on adolescents' health and do not have the adequate skills to meet the adolescents, counsel them and assure them of their trust will always drive them away. If the providers are not empathetic and so not show the young people respect, they will not

come back for services of any kind. Providers who are hostile to the adolescents automatically drive them away. In a Youth Information Centre, established as a pilot project by the Planned Parenthood Association of South Africa, young people identified the most important factor in clinic choice as staff attitude (95%) (Senderowitz, 1999).

The services provided should be simple and adolescent friendly and procedures must be explained to them to alley their anxieties. Adolescents are scared of complex procedure and may think that those procedures may affect them later in life (Creel & Perry, 2002). If services are complex and time consuming, they may not return for services.

1.3.5 Knowledge on adolescent friendly health services

Knowledge here can be interpreted as awareness of the existence and location of the facilities, knowledge on the availability and provision of the services, the need to seek and use these services and how important these services will be to them. (Senderowitz,1999). This knowledge could either be more, that is the adolescents being more knowledgeable on these things and this will facilitate their utilization of the services or they may have little or no knowledge on them at all which will of course not trigger them in any way to access such services. Knowledge on such issues can be sought from health providers, media or peers.

1.3.6 Privacy and confidentiality

Privacy and confidentiality rank extremely high among young people. A common fear expressed by young people is that the nurse or any person who sees them will tell their mothers that they came to the clinic for reproductive health care. According to a study about adolescents' access to reproductive health information and services in Nicaragua and Kenya, researchers reported that young people want confidential services and

according to research with adolescents in Africa, Asia, Latin America, and the Caribbean, the International Center for Research on Women recommends that reproductive health services should be private and confidential (Senderowitz, 1999).

1.3.7 Timing

Having clinics opened at times when adolescents can conveniently attend is a very important determinant of the patronage level of the corners and services. Such times include late afternoons when they had returned from school or work, weekends and holidays. In a Caribbean study, young people discussed an ideal center as one that is opened in the afternoon and evening to serve those who cannot access them in the mornings (Senderowitz, 1999). When there are varieties of scheduled times to access services, the adolescents find the services more convenient to use but when the time ranges are limited, the adolescents may not have the time to seek the services even though they have the desire to.

1.4 Justification of the Study

Adolescent health and behavioural issues are a public health challenge globally, nationally, regionally and locally. Issues of adolescents are important for everyone including parents/guardians, health providers, teachers, governments, communities, churches and Stakeholders. Adolescents need special, professional and urgent attention to their needs else they would seek help from peers and other unprofessional areas which will go a long way to affect them in future. The wrong decisions and choices that adolescents make based on the inner adulthood feelings result in many preventable outcomes like teenage pregnancies and motherhood, STDs, abortions, school drop outs, nutritional disorders and death. Everybody is involved here because parents/guardians

don't want to lose their wards, teachers don't want to fail by losing their students, communities and governments don't want to lose their energetic future leaders who would in turn become a burden on them instead of working to keep the economy growing. This concern for adolescents has pushed the government of Ghana and some NGOs to establish and implement and AFHSs to meet the health and behavioural needs of the adolescents in their own familiar environments because adolescents don't want to mix up with adults when seeking services on some health issues especially those relating to reproduction and contraception.

This current study on the utilization of the AFHSs will answer these questions and findings will be very helpful to stakeholders in that it would create awareness for policymakers to consider what the adolescents want in terms of seeking health care especially about sexuality when designing programs on adolescent health.

It would also help stakeholders to know if more campaigns need to be done to intensify the awareness of these AFHSs and services and the approaches to use and how to make it friendlier to the adolescents.

Findings from this study will also help stakeholders to know what more they need to do to make the community accept the AFHSs.

All these will go a long way to benefit the country as a whole since most of the adolescents' health challenges would be minimized.

1.5 Study Objectives

1.5.1 General Objective

The general objective of this study was to examine the utilization of the adolescent friendly health services at Ashaiman polyclinic.

1.5.2 Specific Objectives

The specific objectives of this study are to determine;

1. The level of usage of the adolescent friendly health services by the in-school adolescents.
2. The knowledge level of the in-school adolescents on the adolescent friendly health corner and its services.
3. The factors associated with the use of the adolescent friendly corner and services by the in-school adolescents.

1.6 Research Questions

1. What is the level of utilization of the adolescent friendly health services by the in-school adolescents in Ashaiman?
2. What is the knowledge level of the in-school adolescents in Ashaiman on the adolescent friendly health services?
3. What are the factors associated with the use of the adolescent friendly services by the in-school adolescents?

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This chapter comprises of theoretical data as well as data from works that has been done in relation to the subject under study. It reviewed literature on adolescent health, adolescent health services (AFHSs), characteristics of the AFHSs, utilization of AFHSs, attitudes of the adolescents towards the utilization as well as facilitators and barriers to the utilization of the AFHSs.

During the period of adolescence, the various changes such as psychological, physical and sociological that occur shape the individual's life either negatively or positively. Globally all adolescents are faced with various health issues which need to be dealt with in the right way.

It is a period when the decisions, behaviour and relationships of the adolescent determine their health and development. That is, what happens or does not happen during this transitional period of life has significant implications at the individual, family, community and national level at large (GHS, PHD, RCH UNIT, ADHD PROGRAMME, 2012).

2.2 Adolescent health

Adolescent health can be defined as the physical, mental and social well-being and not merely the absence of disease or infirmity during the period of adolescence (GHS et al., 2012). Adolescents face a number of health problems as they grow. Some of the health challenges they face are;

Early pregnancy and childbirth. Eleven percent of all births worldwide are to girls aged 15 to 19 years (WHO, 2011) and the majority is in the developing countries like Ghana. One of the Millennium Development Goals, MDG 5 was to achieve universal access to reproductive health and one indicator was the pregnancy rate among the 15 to 19 age group (WHO, 2014). There are a number of risks associated with early pregnancy and childbirth. Some of the risks are maternal death, unsafe abortion, low birth weight, poverty, social stigma, anaemia, school dropout, and still birth. For instance, maternal conditions accounts for about 15% of death in female adolescents globally (WHO, 2013). An estimated 2.0-4.4 million adolescents in developing countries undergo unsafe abortion each year (WHO, 2013). Still births and death in the first week of life are 50% more in babies born to adolescent mothers than older women (WHO, 1997).

STIs including HIV. More than 2 million adolescents are living with HIV globally. Half of all people living with AIDS acquired HIV between the ages of 15 and 24 and it causes 11% of adolescent deaths (WHO, 2013). In 2012, 82% of the 2.1 million people aged 10 – 19 years living with HIV lived in Sub-Saharan Africa (Idele, P., et al., 2014). In Sub-Saharan Africa, only 10% of males and 15% of females aged between 15 and 24 years are aware of their HIV status (WHO, 2014). In Ghana, 0.5% males and 1.3% females between the ages 15 and 24 years are living with HIV (GSS, 2009). Adolescents seem to neglect STIs and so do not take interest in getting tested. They unknowingly live with these STIs which cause severe problems for them later in life.

Mental health. Psychological challenges are more common during adolescence. Some common ones are depression, anxiety, adolescent stress, panic disorders, post traumatic disorders, obsession, phobia, kleptomania and mood disorders (GHS, PHD, RCH UNIT, ADHD PROGRAMME, 2012). In a given year, about 20% of adolescents experience mental health problems, commonly depression and anxiety and half of all mental

disorders in adulthood start around age 14 (WHO, 2013). Depression is the top cause of illness and disabilities among adolescents. Suicide is the 3rd cause of death whereas violence, humiliation and poverty can increase the risk of developing mental health problems (WHO, 2014).

Violence and injuries. Violence is the number one leading course of adolescent deaths. About 180 adolescents die globally every day as a result of violence. About 1 out of 3 deaths among adolescent boys in low- and middle-income countries is due to violence (WHO, 2014). Thirty percent of girls between the ages of 15 and 19 years experience violence by their partners. Unintentional injuries are also a leading cause of death and disabilities among adolescents. In 2012, about 120,000 adolescents died as a result of road traffic accidents (WHO, 2014). In 2010, the Ghana Statistical Service reported that the total death of adolescents in Ghana between the ages of 12 and 14 was 2,068 out of which 384 (18.6%) was through violence and that of 15 -19 years was 4,399 out of which 721 (16.4%) was through violence (GSS, 2014).

Malnutrition and obesity. Many adolescents move into the adolescence period undernourished, exposing them more to disease and early death. The number of overweight or obese adolescents is increasing in developing countries (Levy, 2012)

Other challenges that adolescents face in this critical period of life are menstrual disorders and breast disorders in females and makes disorders like impotence, pre-mature ejaculation, concern about genital size and priapism. There are other nutritional disorders as well as lack of exercises

Some key facts on adolescent health from WHO, (2014) are that; an estimated 1.3 million adolescents died in 2012 mostly from preventable causes. Road traffic injuries were the leading cause of death in 2012 with 330 adolescents dying every day. Other

causes of adolescent deaths include HIV, suicide and violence. There were 49 births per 1000 girls between the ages of 15 and 19. Half of all mental disorders start by age 14 (WHO, 2014).

2.3 Adolescent friendly health services (AFHSs)

AFHSs can be defined as a broad based health and its related services that are made available to adolescents to meet their individual health needs in a manner and environment to attract interest and sustain their motivation to utilize the services rendered to them (MoH Kenya, 2005). World Health Organization, (2001), describes AFHSs as those services that are accessible, acceptable and appropriate for adolescents. They are found at the right places, at the right affordable costs and sometimes free and delivered in the right styles to be acceptable to adolescents. They are effective, safe and meet the needs of the adolescents.

2.4 Services provided

The AFHSs are grouped into two sections. They are

1. Health and lifestyle, under which we have
    - General health services
    - Referral system
    - Contraceptive services which involve counselling on importance, choice and correct use of contraceptives.
    - STI management including testing, counselling, and treatment.
    - Maternal health services including antenatal care, postnatal care, safe abortion services and post abortion care.
    - HIV related services including VCT

- Management of sexual violence such as rape
- Nutritional, dietary and eating disorders management such as obesity, anaemia, anorexia nervosa, bulimia nervosa and compulsive overeating.
- General counselling

These services are usually available at a 'one stop shop' that is the centers for the adolescents so that they wouldn't have to be moving from unit or place to the other. The services are also provided based on the needs of the adolescents.

2. Recreational services such as
    - Sports
    - Games (GHS et al., 2012).

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

2.5 Characteristics that make the adolescent health services friendly

2.5.1 Confidentiality and privacy

There should be adequate and sufficient privacy. Ample space should be made available for counselling, examination and provision of information, education and communication on health. Providers should treat every adolescent individually and keep information about them confidentially (WHO, 2002). Privacy must be arranged for counselling sessions and examinations; young people must feel confident that their important and sensitive concerns are not retold to other persons.(Senderowitz, 1999).

2.5.2 Cost

Cost for services should be acceptable and affordable to the adolescents and even free where necessary because they might not have enough funds to pay for services when they are expensive and this will prevent them from utilizing the corners and services. (MoH Kenya, 2005).

2.5.3 Environment

The AFHSs should be rendered at a quiet and safe environment where the adolescents will feel free to go. It should not be too close or too far from the adolescents. There should be no stigma associated with the patronage of the AFHSs (MoH Kenya, 2005). Young people sometimes express a desire to go out of their neighbourhoods so they will not be seen by family and neighbours. At the same time, young people do not want to or cannot travel too far to reach service sites. The location should be in a safe surrounding and, ideally, should be at a place where public transports easily go (Senderowitz, 1999). The facilities should also have recreational materials such as ludo, oware, playing cards, scrabbles, television set and DVD players to entertain the adolescents once a while when they come around.

2.5.4 Knowledge

The community should be well informed of the existence of the AFHSs Adolescents should themselves be aware of the existence of the AFHSs (GHS et al., 2012). Community members should be told the benefits of the services (Tylee et al., 2007). Educational materials on AFHSs like posters, leaflets, flyers magazines and VCDs should be made available. The adolescents can take some of these to their homes to read or even share with others who are not aware of the AFHSs

2.5.5 Providers

Providers should be professionally competent in adolescent health promotion. They should have interest in adolescent issues, be considerate, trustworthy, empathetic and non- judgmental. They should treat clients individually but equally. Providers should provide information and support to enable each adolescents make the right free choice for his/her unique needs. Peer counsellors should be available to be involved in counselling and provision of services because peers seem to understand themselves better and others also feel at home and a sense of belongingness among their peers (MoH Kenya, 2005). Most of these providers have been taken through special counselling training on adolescent health to equip them with the necessary knowledge and skills to aid them in providing the services. For the past few years, Marie Stopes International, an NGO had trained various healthcare professionals in Ghana on adolescents' health to equip them in the service provision.

2.5.6 Services

Procedure should be simple and not time consuming. Waiting for a long time to be served in a clinic, particularly with an increased chance that someone will see them there, is unappealing to the adolescents. They may wait initially, but if they do, this situation will be a barrier to their return (Senderowitz, 1999).There should be no restriction of services because of age, disability, gender, social class or ethnicity (MoH Kenya, 2005). The facility must always have enough supply of products so that adolescents wouldn't be disappointed and lose interest due to lack of supply anytime they visit the facilities. The services should be provided at one place so that the adolescents wouldn't have to be moving from one place to another. In case of referral for specialized health care effective working arrangements should be established to ensure

youth receive the services they are referred to and assure that referral sites provide appropriate youth-friendly treatment (Senderowitz, 1999).

2.5.7 Timing

Convenient hours- Most adolescents may be in school or learning trade and so might not be able access services at the usual working hours so special sessions during late afternoons, after school/work, during weekends or holidays should be set aside for such adolescents. Drop- in/phone in clients should be welcomed. Some adolescents also do not like rigid booking of appointments. They want to come in and access services at their own time. There should be adequate time for client and provider interaction because adolescents value attention and appreciate it when they are given the needed attention. They feel free to express themselves and talk more. Waiting time should be short (MoH Kenya, 2005). Young people tend to need more time than adults to open up and reveal very personal concerns. Time is needed to bring myths (such as girls cannot get pregnant at first intercourse) to the surface, to discuss them, and counsel them appropriately (Senderowitz, 1999).

2.6 Knowledge on adolescent friendly health services

Knowledge on the services is viewed as awareness of the existence and location of the facilities, knowledge on the availability and provision of the services, the need to seek and use these services and how important these services will be to them. (Senderowitz, 1999). The broad knowledge on AFHSs aids the adolescents to seek help and make informed decisions and choices. Adolescents are aware of reproductive services that are available to the general public in the various health facilities but the question is ‘are they aware of the special AFHSs?

Henderson, Wight and Parks (2004), in their study reported that one- third of 5747 teenagers in Scotland was aware of adolescent health services and had used them before. A study by Biddlecom, Munthali, Singh and Woog (2007), indicated that adolescents between the ages of 12 and 19 years in Ghana, Malawi and Uganda do not know of any source to obtaining services.

Education on the services can also be done at the OPDs, ANCs and CWCs at the hospital. In this ways, more information on the AFHSs reach out to more people in the public including the adolescents.

2.7 Utilization of the adolescent friendly health services

AFHSs have come to stay and its utilization by the adolescents guide them through the transitional stage of life however adolescents may not be utilizing the services as stakeholders expected. That is they may not be visiting and using the services even though they may have the need for it. This may account for the various reasons why adolescents' health challenges are still on the increase globally.

As stated earlier, only one- third of 5745 teenagers studied in Scotland had ever visited adolescent friendly health corners and used the services (Senderowitz, 1999). In Zimbabwe, only 40% of adolescents living in areas where campaigns have been made on youth centers and services attend the adolescent clinics and 14% of those living in no campaigned areas attend the clinics (Henderson et al., 2004). In a study in Uganda, it came out that only one quarter of the (5/20), adolescents used in FGDs reported ever seeking services at the health facilities for sexual and reproductive health services (Atuyambe et al., 2015).

The results from a survey in Ghana, Malawi and Uganda in 2004 showed that 12 – 19 year olds under- utilized youth friendly services (Biddlecom et al, 2007).

2.8 Facilitators and barriers to utilization of adolescent friendly health services

AFHSs have come to stay and stakeholders will work towards maintaining them and improving on them from time to time. Stakeholders would like to know what makes the adolescents have interest in the services and utilize them. The level of utilization of AFHSs by the adolescents depends on a number of factors. These factors can affect it either positively (facilitators) for high level of utilization or negatively (barriers) for low level of utilization.

In a United State teen clinic, the reasons given by the teens for their initial attendance were that the clinic was for teens only and services were free, convenient location and scheduling, friendly staff and confidentiality and fourteen of fifteen top-ranked items pertained to providers. (Senderowitz, 1999). In a study at the Caribbean, young people described an ideal Adolescent Friendly health centers as one that offers many services, opened in the afternoons as well as evenings and has empathetic, knowledgeable and trustworthy providers and does not look like a clinic (Senderowitz, 1999). In a youth center established by Planned Parenthood Association in South Africa, young people identified the most important contributors in clinic choice as staff attitude 95%, environment (location, décor) 89%, contraceptive method 85% and operating hours 81% (Senderowitz, 1999). A study in Kenya found out that young people prefer services outside their locality for confidentiality and providers who are trustworthy and specialized in dealing with the youth (Senderowitz, 1999).

Some barriers to the utilization of AFHSs are that; many facilities are either too close or too far from the adolescents' homes. When the centers are too close, adolescents would feel shy going there for the fear that people might see them and stigmatize them or relatives might find them. They will also feel reluctant to seek services if the corners are far from them for lack of transportation or the troubles to go through before getting there. Another important barrier to the utilization of the services is providers' attitudes which are not welcoming to the adolescents (Moya, 2002).

Tylee et al. (2007), mentions other barriers as inconvenient opening hours of the corners, lack of knowledge of AFHSs, inconvenient environment, fear about lack of confidentiality and fear of parents or guardians finding out about their patronage.

Senderowitz, Hainsworth and Solter (2003), in their report stated some barriers as; inconvenience working hours, lack of convenient transportation, high cost of services, poor understanding of their changing bodies and needs, little knowledge of available services, belief by the adolescents that the services are not meant for them, judgmental and hostile providers, lack of privacy and confidentiality, fear of procedures and contraceptive methods, fear of parents getting to know of their utilization of the services and lack of peer educators.

WHO (2002), gave additional barriers as lack of knowledge on the adolescents' part, legal or cultural restrictions, lack of medical supplies and gender barriers. Some reasons for barriers given by adolescents in Ghana are unavailability of drugs, luck of funds to access treatment, unavailability of service provider and distance (GSS, 2009). Biddlecom et al, (2007), in their findings indicated that the adolescents between the ages of 12 and 19 in Ghana, Malawi and Uganda gave the following as reasons; fear,

embarrassment, lack of confidentiality, accessibility and cost as why they do not attend the youth clinic.

Some other contributing factors may be sex, age, religious background and level of education

2.9 Conclusion

The review has revealed a number of adolescent challenges that may be ignored by the adolescents themselves, their parents/guardians or even their teachers or even their general medical practitioners. It also revealed that generally, most adolescents are not aware of the AFHSs and the services are under patronized. Attitude of service providers, location of the centers, working hours, high cost, privacy and confidentiality among other factors were found to be the contributing factors to the utilization of the services.

CHAPTER THREE

3.0 METHODOLOGY

This chapter represents research methodology and procedures that were employed in this study. It includes study design, study population, sample size, sampling techniques, data collection technique and tools, ethical considerations, and data processing and analysis.

3.1 Study design

The study was a descriptive cross-sectional which used quantitative data collection method to determine the level of use, knowledge and factors associated with the use of the AFHSs by in-school adolescents in the Ashaiman Municipality.

3.2 Study area

The study was conducted at Ashaiman which is located about 4 kilometres to the north of Tema and about 30 kilometres from Accra. Its boundaries are; Kpone- Katamanso to the east and north, Tema metropolis to the south and west. It has a total land area of 45 kilometres square.

The 2010 population census of Ghana reported Ashaiman's population to be 190, 972 with about 31.9% of the population between the ages of 0 and 14 years. About 40.8% of the population aged 12 years and older is married. Eighteen thousand, three hundred and eight (9.6%) of the total population is between the ages of 10 and 14 years and 18,772 representing 9.8% of the population between the ages of 15 and 19 years (GSS, 2014).

There are about 50 different ethnic groups from all the 10 regions of Ghana residing in Ashaiman including Ga- Damgbe, Ewe, Guans, Hausa, Dagomba, Asante, Fante and

others. The area is known for multi- traditional dances that are usually performed during festivals (GSS, 2014).

The main occupations of the people of Ashaiman are; farming, livestock and poultry raising, food processing, fishing, manufacturing and quarrying. 50% of the population above 15 years is self-employed, 34.4% are employees, 2.6% family workers, 3% casual workers and 0.5% domestic employees (house helps) (GSS, 2014)

There are 37 public basic schools and 290 private basic which comprises of nursery, primary and junior high schools in Ashaiman. There is only one public senior high school and 7 private senior high schools. Out of the population of 11 years and above, 87.8 are literate and 12.2 are non- literate. 34% of the population above 3 years is currently attending school, 11.1 had never been to school and 54.9% have attended school in the past (GSS, 2014).

Ashaiman polyclinic is the only public health facility in the municipality with 16 private clinics and several maternity homes. The referral point is the Tema General Hospital which is about 30 minutes' drive from Ashaiman. There are over 100 traditional healers in Ashaiman who have formed the Ashaiman Traditional Healers Association (GSS, 2014).

The Ashaiman polyclinic has an adolescent friendly corner where the AFHSs are provided. The corner was set up by FOCUS Region (an NGO) in collaboration with Ghana Health Service in the year 2012. The adolescent Friendly Health Corner is situated at a quiet spot at the polyclinic. The corner is furnished with educational materials, furniture, television set with a DVD player, an examination bed, examination lamp and samples of modern contraceptives. The walls of the corner are decorated with

educational posters on adolescent health. There are two trained service providers who provide services at the corner. The corner is opened from Monday to Friday.

There are a variety of services offered at the AFHSs at the Ashaiman polyclinic. Among them are referral services, contraceptive services which involve counselling on importance, choice and correct use of contraceptives, STI management including testing, counselling, and treatment, maternal health services including antenatal care, postnatal care, safe abortion services and post abortion care, nutritional, dietary and eating disorders management such as obesity, anaemia, anorexia nervosa, bulimia nervosa and compulsive overeating, general counselling and recreational services such as sports and games.

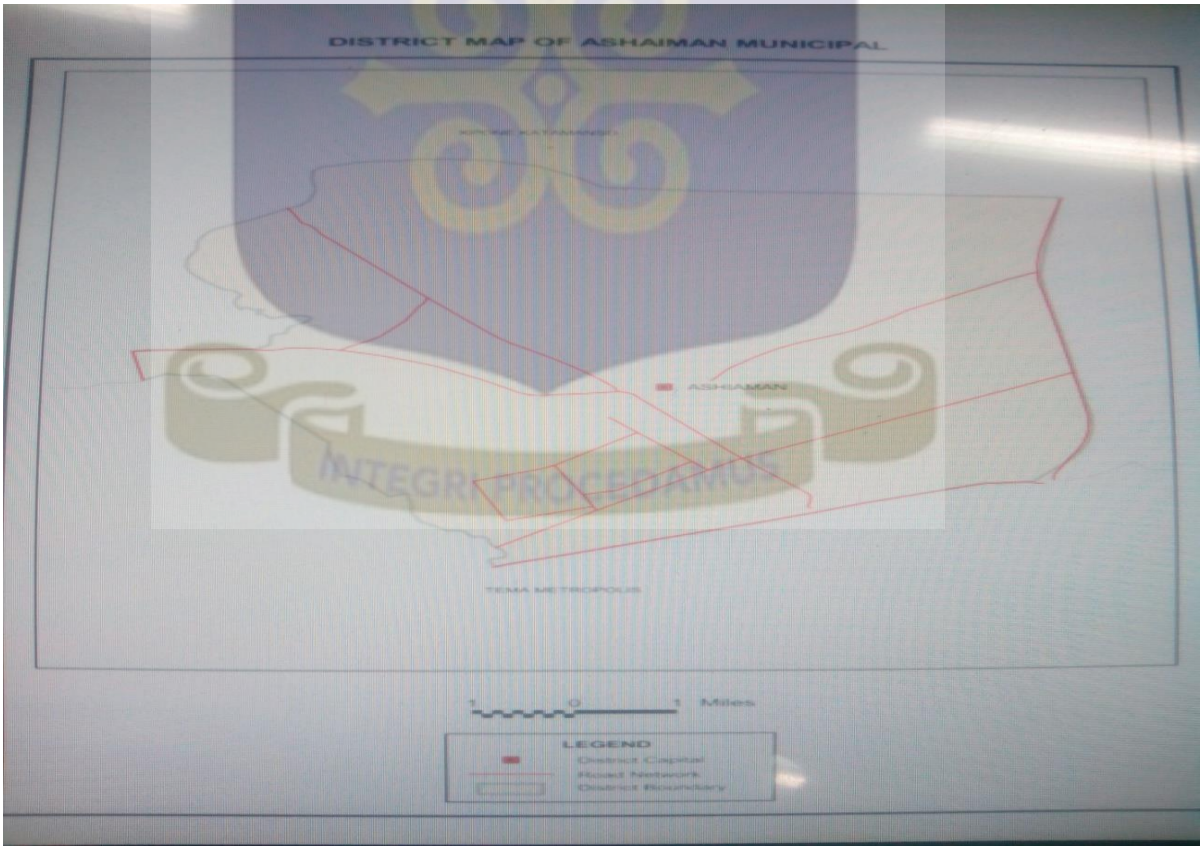

Figure 3.1: Map of Ashiaman Municipality

3.3 Variables

3.3.1 Dependent Variable

The outcome variable was utilization of the adolescent friendly health services which was measured by whether the adolescents have ever visited and used the AFHSs at the Ashaiman polyclinic.

3.3.2 Independent Variables

The independent variables that determined the utilization of the AFHSs are; environment of the centers, knowledge on the AFHSs, cost, service provision, confidentiality and privacy, timing and socio-economic factors (age, sex, educational level, religious background). These variables will make the adolescents visit the AFHSs or not and also will determine if those who have ever utilized the services will visit the services again or not.

3.4 Data collection techniques and tools

Multi-stage sampling method was used in selecting the respondents for the study. A list of all the basic schools in Ashaiman was obtained from the Ashaiman municipal education directorate. A balloting was done to randomly select one school each from the public, mission and private schools. The only public SHS in the municipality was also selected. The populations of the four selected schools were obtained from the Ashaiman education directorate.

A sample size was proportionately allocated to each school based on the population of the schools selected. Based on the sample size per school, again, proportionate allocation was used to determine the number of pupils and students per class. In each class, those within the ages of 10 and 19 years and reside in Ashaiman were identified. A YES or NO

balloting was done to randomly select the required respondents for the study. Adolescents who picked YES were interviewed.

A structured questionnaire with both closed and opened ended questions was administered to the adolescents. The questionnaire had three sections titled sections A, B and C. Section A dealt with the demographic characteristics of the respondents. Section B addressed the knowledge and education on adolescent health and the adolescent friendly health services. Section C which had three parts covered the utilization of the adolescent friendly health services.

The first part of section C was for the respondents who have ever utilized the services. The second part was for those who have never utilized the service. The third part which addressed community involvement and general suggestions from the respondents on how to improve the adolescent friendly health services was to be answered by both respondents who have ever utilized and those who have never utilized the adolescent friendly health services. The questionnaires were self-administered.

3.5 Study population

The population used for this study were adolescent boys and girls aged 10- 19 years in private, mission and public basic schools (ie primary and Junior High Schools (JHS)) and Senior High Schools (SHS) who reside in Ashaiman. Four schools were used, one each from private basic school, public basic school, public basic school and the only senior high school in the Ashaiman municipality.

3.6 Inclusion and exclusion criteria

3.6.1. Inclusion criteria

The inclusion criteria were basic school pupils and SHS students who were between the ages of 10 and 19 years and resided in Ashaiman.

3.6.2 Exclusion criteria

The exclusion criteria were basic school pupils and SHS students who were below 10 years and those above 19 years in the selected schools and also those within the adolescent age group who were in the selected schools but were not residents of Ashaiman.

3.7 Sampling Procudures

3.7.1 Sample size calculation

A sample size of 406 was used.

The sample size for this study was determined taking into consideration the following factors;

- An estimated proportion of the outcome variable (utilization of the services) based on a study in Zimbabwe on the use of the adolescent services (40%) Henderson et al., (2004).
- A confidence interval of 95% (standard value of 1.96)
- An acceptable margin of error of 5% (0.05)

Using the formula $n = \frac{Z^2 p (1-p)}{d^2}$

(Chocran 1977)

where n = minimum required sample size

z = critical value on standard normal distribution at 95% confidence interval (1.96)

p = patronage (proportion of population who had ever used the services from literature. (40%) Henderson et al., (2004).

d = margin of error desired around p to be estimated (5% / 0.05)

$$n = \frac{1.96^2 * 0.4 * (1-0.4)}{0.05^2}$$

n= 368.8

which was rounded off to 369

10% of 369 = 36.9 = 37

So 369 + 37 = 406

3.8 Ethical considerations

Ethical clearance was sought from the Ethical Review Committee of the Ghana Health Service, Research and Development Division, Accra. Permission was taken from the Ashaiman Municipal Education Service, head teachers of the schools selected as well as the management of the Ashaiman polyclinic. Adolescents were given consent or assent forms. Those aged 10 to 17 years were given assent forms to take to their parents/guardians to give their consents on behalf of their wards while those aged 18 and 19 were given consent forms to sign for themselves.

3.8.1 Study procedure

The objective of the study was explained to all the study respondents. Those who signed their consent forms or parents/guardians that gave their assent for were enrolled in the study. The questionnaires were given to the respondents and the technical terms were explained to all respondents.

3.8.2 Privacy and confidentiality

All respondents were assured of privacy and confidentiality in answering the questions. They were assured that information gathered from them will be accessed only by the principal researcher and research supervisor.

3.8.3 Informed consent/assent

Consent forms were given to the adolescents who were 18 and 19 years. Assent forms were given to the adolescents between the ages of 10 and 17 years to take home for their parents/ guardians to give their consents.

3.8.4 Conflict of interest

The researcher had no conflict of interest of any form in the study.

3.8.5 Possible risks/discomfort

The only risk of the research was the discomfort respondents will have in answering some of the personal questions. It was explained to them that they had the right to decline from participating even in the middle of it.

3.8.6 Compensation

There was no compensation of any form available to the respondents.

3.8.7 Possible benefits

This study has no direct benefit for the respondents but the results obtained from it will be recommended to policymakers and stakeholders who will use it in improving the AFHSs in the Ashaiman Municipality and Ghana as a whole.

3.8.8 Voluntary participation

It was explained to the participants that it was entirely voluntary to participate in the study and at any point in time that he/she wanted to quit, it was acceptable.

3.9 Data collection

Information was collected by the principal investigator and two trained research assistants. This was done through the use of structured questionnaires which was self-administered.

3.10 Quality control

To achieve a quality work, a well-designed structured questionnaire was developed with all the necessary questions to achieve the study objectives. One day training was organized for the research assistants to equip them with the requisite knowledge and skills to aid them in collecting data on the field. All the answered questionnaires collected were checked manually on daily basis by the principal investigator for completeness and consistency.

A one day training session was organized for two research assistants to equip them with knowledge on the objective of the study, sampling methods, ethical issues, data collection techniques, study methods and tools.

3.11 Data collection and analysis

Data entry and analysis for were done using SPSS version 16.0. Chi-square test was used to measure association between dependent and independent variables. A P-value of less than 0.05 ($p < 0.05$) indicated statistical significance. Data were cleaned by checking each questionnaire manually before entering its information.

CHAPTER FOUR

4.0 RESULTS

4.1 Demographics of the participants

A total sample size of four hundred and six (406) was selected through proportionate random sampling approach. The ages of the adolescents were categorized into three groups: 10-13 (early adolescents), 14-16 (middle adolescents) and 17-19 (late adolescents). The distribution of age of the participants indicated that most of the students who were interviewed were middle adolescents (47.0%) followed by the late adolescents (31.3%) and then the early adolescents (16.7%). The participants that undertook the survey were predominantly females who constituted 247 (60.8%).

Out of the total number of students interviewed, 222 (54.7%) were selected from the senior high school in Ashiaman. Respondents selected to partake in the study also included students from primary and junior high schools who made up 88 (21.7%) and 83 (20.4%) respectively. Out of the number interviewed, 86.0% were Christians. (Table 4.1)

Table 4.1: Demographics of the participants

Attribute	Frequency	Percent (%)
Age		
10-13	68	16.7
14-16	191	47.0
17-19	127	31.3
Unspecified	20	5.0
Total	**406**	**100**
Sex		
Male	150	37.0
Female	247	60.8
Unspecified	9	2.2
Total	**406**	**100**
Educational level		
Primary	88	21.7
JHS	83	20.4
SHS	222	54.7
Unspecified	13	3.2
Total	**406**	**100**
Religion		
Christian	324	79.8
Muslim	53	13.1
Unspecified	29	7.1
Total	**406**	**100**

4.2 Utilization of AFHSs

Utilization was measured by whether the in-school adolescents have ever visited and used the AFHSs at the Ashaiman polyclinic. Results from the interview indicated that 31 (7.6%) respondents reported to have ever utilized any form of AFHSs offered at the Ashiaman polyclinic, 322 (79.3%) have never utilized the services at the polyclinic. (Table 4.2)

Table 4.2: Utilization of AFHSs

Attribute	Frequency	Percent (%)
Ever utilized the AFHSs at Ashaiman		
Yes	31	7.6
No	322	79.3
Unspecified	53	13.1
Total	**406**	**100**

4.3 Services accessed by the adolescents at the AFHSs

There are various services that are available at the AFHSs at the Ashaiman polyclinic and the adolescents who have ever visited accessed one or more of the services available there. Table 4.3 below shows the types of services the respondents who have ever utilized the AFHSs accessed when they went there. Thirty one of the respondents have ever utilized the services at Ashaiman polyclinic. Out of the thirty one, 10 (32.2%) went there for STI management, 8 (25.8%) went for STI screening with only 1 (3.2%) respondent went in for substance abuse management. Services such as antenatal care, postnatal care and other motherhood related issues were not patronized. (Table 4.3).

Table 4.3: Services accessed by the adolescents at the AFHSs

Attribute	Frequency	Percent (%)
Contraceptive counselling and purchase	5	16.1
Nutritional management	2	6.5
STI screening	8	25.8
STI management	10	32.2
General counselling	3	9.7
Substance abuse management	1	3.2
Recreational services	2	6.5
Total	**31**	**100**

4.4 Knowledge and education on adolescent health challenges and the AFHSs at the Ashiaman Polyclinic

Awareness of services affects the extent to which people utilize it. Results from the study show the education and knowledge base of students with respect to adolescent health challenges and the adolescent friendly health services offered at the Ashiaman polyclinic. Majority of the respondents (69.2%) stated that they knew some adolescent health challenges whiles 81 (20.0%) did not know any of the health challenges as indicated in table 4.4.

The results again showed that 125 (30.8%) of the total population knew of adolescent friendly health services at the Ashiaman polyclinic. A larger percentage (52.7%) of the students who were interviewed said they had no knowledge of the services available at the polyclinic. One hundred and ninety one (47.0%) of the adolescents who were interviewed reported they have had some education on AFHSs and 177 (43.6%) have

had no education on the AFHSs while 38 (9.4%) did not specify if they have had education on the AFHSs or not.

Results from the study also showed that, even though most of the students did not know of the existence of AFHSs, those who knew about it got to know through the schools (25.9%), health workers (6.4%), media (5.2%) and other channels as indicated in table 4.4. Over half of the respondents (57.1%) said that the education on AFHSs is not enough whiles 103(25.4%) of the study population said there is enough education on AFHSs. (Table 4.4)

Table 4. 4: Knowledge and education on adolescent health challenges and the AFHSs at the Ashiaman Polyclinic

Attribute	Frequency	Percent (%)
Knowledge on adolescent health Challenges		
Yes	281	69.2
No	81	20.0
Unspecified	44	10.8
Total	**406**	**100**
Know of the AFHSs		
Yes	125	30.8
No	214	52.7
Unspecified	67	16.5
Total	**406**	**100**
Ever had education on AFHSs		
Yes	191	47.0
No	177	43.6
Unspecified	38	9.4
Total	**406**	**100**
Source of education on AFHSs		
School	105	25.9
Church	3	0.7
Media	21	5.2
Friends	8	2.0
Family member	8	2.0
Health Worker	26	6.4
Unspecified	235	57.8
Total	**406**	**100**
Enough education on AFHSs		
Yes	103	25.4
No	232	57.1
Unspecified	71	17.5
Total	**335**	**100**

4.5 Factors affecting the utilization of AFHSs

Participants gave various reasons for not ever utilizing the services at the Ashaiman polyclinic. Eighty two (20.2%) of the adolescents gave the reasons that they never knew the services existed followed by those who indicated that the polyclinic was too far from their homes (17.2%) then those who said the cost was too much (11.1%). Only a few

attributed the reasons to service providers not being friendly, the facility located too close to their homes, the place is not adolescent friendly, they waste time there, someone might see them and judge them, the provider might think they are too young, the provider might think they are bad and some utilize the AFHSs at other places. Most importantly, only 15 (3.7%) reported that they have never utilized the services because they do not have any need for them. (Table 4.5)

Table 4.5: Factors affecting the utilization of AFHSs

Factors	Frequency	Percent (%)
Cost is too much	45	11.1
It is not adolescent friendly	11	2.7
It is far from my house	70	17.2
It is too close to my house	1	0.2
The providers are not friendly	1	0.2
They waste time	6	1.5
Someone might see me and judge me	5	1.2
The provider might think I am too young	11	2.7
The provider might think I am a bad boy or girl	13	3.2
I access the service at other place	10	2.5
Do not know AFHSs exist	82	20.2
No need for the services	15	3.7
Unspecified	136	33.6
Total	**406**	**100**

4.6 Community involvement and suggestions to improve on the AFHSs

Respondents again reported on how some adults in the community including their parents and teachers will react towards them when they get to know that these adolescents utilize the AFHSs. As shown in table 4.5 below, two hundred and eleven (51.9%) of the respondents reported that the adults will be angry with them and 162, (40.0%) of them also stated that the adults will think they are bad. Only 9 (2.2%) of the adolescents reported that the adults will encourage them to continue utilizing the services. To help solve the negative attitudes of the adults in the community towards the utilization of the AFHSs, 312 respondents (76.8%) suggested that the community should be educated the AFHSs.

The respondents again suggested some ways to improve on the utilization of the AFHSs. Majority of them (60.6%) stated that there should be more education on the AFHSs in the schools whiles 80 (19.7%) think more education should be done on the media. A few of them (2.0%) suggested that the AFHSs should be set up in the schools. (Table 4.6)

Table 4.6: Community involvement and suggestions to improve on the AFHSs

Attribute	Frequency	Percent (%)
Attitudes of adults towards adolescents who utilize the AFHSs		
No idea	3	0.7
Happy	15	3.7
They will think I am bad	162	40.0
Angry	211	51.9
They will encourage me	9	2.2
Unspecified	6	1.5
Total	**406**	**100**
Suggestions to change adults' negative Attitudes		
Educating the community on AFHSs	312	76.8
Unspecified	94	23.2
Total	**406**	**100**
suggestions to improve on AFHSs		
More education in the schools	246	60.6
More education on AFHSs in the communities	68	16.7
More education on the media	80	19.7
Set up AFHSs in the schools	8	2.0
Unspecified	4	1.0
Total	**406**	**100**

4.7 Association between utilization of the AFHSs and independent variables

The results presented in table 4.7 show that majority of those who have ever utilized the services were in the middle adolescent group (64.5%). Only 6 (20.7%) of the respondents who have utilized the AFHSs were males and 23 (79.3%) were females. Seventeen females more than males utilized the AFHSs from the Ashiaman polyclinic. Four (13.8%) students from primary, 13 (44.8%) from JHS and 12 (41.4%) from SHS have ever utilized the services at the Ashaiman polyclinic. Majority (85.7%) of the respondents were Christians. (Table 4.6).

All the 31 respondents who have ever utilized the services are those who had knowledge on the services.

Contrary to the notion that closeness of the Ashiaman polyclinic is to homes of adolescents who might want to utilize the services would deter them due to factors like

shyness, the study shows closeness of the Ashiaman polyclinic did not affect non-utilization of AFHSs. The study reveals the students who stated that the facility was too close to their homes (31.0%) are more likely to visit the AFHSs than those that leave far (69.0%) off from the Ashiaman polyclinic.

The statistics also revealed that there was no significant relationship between high cost and utilization of the AFHSs. This was also explained by the p value which was 0.868 ($p > 0.05$).

The statistical analysis show that respondents who reported that service provision at the Ashaiman polyclinic was good and adolescent friendly (82.8%) are more likely to visit the AFHSs than those who said the services are poor and not adolescent friendly. However there is no significant association between service provision at the Ashaiman polyclinic and the utilization of the AFHSs at the polyclinic (p-value> 0.05). The statistical analysis again show that the respondents (100%) who stated that their information with service providers would be kept private are more likely to utilize the AFHSs at the Ashiaman polyclinic. In table 4.5, below the value of p is 0.99 ($p > 0.05$) which means that confidentiality and privacy do not lead to non-utilization of the AFHSs at the Ashiaman polyclinic. Again, there is no significant association between timing and utilization of the AFHSs at the Ashaiman polyclinic. (P-value > 0.05). (Table 4.7)

Table 4.7: Association between utilization of the AFHSs and independent variables

Attribute	Have utilized N = Total (%)	Have Not utilized N = Total (%)	Pearson Chi Square	
			Chi Square	**P – value**
Age Groups				
10 – 13	4 (12.9)	64 (19.9)		
14 – 16	20 (64.5)	156 (48.4)	0.021	0.885
17 – 19	7 (22.6)	102 (31.7)		
Total	31 (100)	322 (100)		
Sex				
Male	6 (20.7)	131 (39.6)	3.804	0.051
Female	23 (79.3)	200 (60.4)		
Total	29 (100)	331 (100)		
Education-al Level				
Primary	4 (13.8)	82 (25.1)	0.028	0.868
JHS	13 (44.8)	64 (19.6)		
SHS	12 (41.4)	181 (55.3)		
Total	29 (100)	327 (100)		
Religion				
Christian	24 (85.7)	269 (85.1)	0.007	0.933
Muslim	4 (14.3)	47 (14.9)		
Total	28 (100)	316 (100)		
Knowledge on AFHs				
Yes	31 (100)	93 (31.6)	0.000	0.994
No	0 (0)	201 (68.4)		
Total	31 (100)	294 (100)		
Environment				
Very close	9 (31.0)	8 (26.7)	0.137	0.711
Very far	20 (69.0)	22 (73.3)		
Total	29 (100)	30 (100)		
Cost				
High	16 (55.2)	4 (26.7)	3.095	0.079
Moderate	13 (44.8)	11 (73.3)		
Total	29 (100)	15 (100)		
Service provision				
Good	24 (82.8)	19 (90.5)	0.587	0.444
Poor	5 (17.2)	2 (9.5)		
Total	29 (100)	21 (100)		

Table 4.8: Association between utilization of the AFHSs and independent variables(cont'd)

Attribute	Have utilized N = Total (%)	Have Not utilized N = Total (%)	Pearson Chi Square	
			Chi Square	**P – value**
Privacy & confidentiality				
Yes	1 (100)	180 (73.2)	0.000	0.997
No	0 (0)	66 (26.8)		
Total	1 (100)	246 (100)		
Timing (days)				
Weekdays	1 (100)	54 (22.8)	0.000	0.994
Weekends	0 (0)	94 (39.7)		
Holidays	0 (0)	89 (37.6)		
Total	1 (100)	237 (100)		
Timing (time)				
Morning	1(100)	116 (38.7)	0.000	0.996
Afternoon	0 (0)	103 (43.3)		
Evening	0 (0)	19 (8.0)		
Total	1 (100)	238 (100)		

CHAPTER FIVE

5.0 DISCUSSIONS

This chapter further explains results on utilization of adolescent friendly health services (AFHSs) at the Ashiaman polyclinic with reference to other studies done by some scholars in the past.

5.1 Utilization of adolescent friendly health services

In-school adolescents under-utilize the adolescent friendly health services at the Ashiaman polyclinic. Only 31 (7.6%) of the total number (406) of respondents stated that they have utilized one form of AFHSs or the other at the polyclinic. This confirms the study by Biddlecom et al (2007), which concluded that 12-19 year olds from Ghana, Malawi and Uganda under-utilized youth friendly services. The level of utilization of the AFHSs at Ashaiman polyclinic from this current study is not different from all the other studies conducted in Ghana, Africa and globally. The implication of this under-utilization is that more of the adolescents may not have the necessary and professional guidance during this critical period of life. This may result in the various adolescent health challenges such as early pregnancy and childbirth, violence, STI including HIV/AIDS, mental health, unsafe abortion, substance abuse, etc (WHO 2011) and (WHO 2013).

From this current study, majority of the students mentioned early pregnancy as one of the major adolescent health challenges in the Ashaiman municipality which is in line with the WHO (2011) report.

5.2 Knowledge on adolescent friendly health services

Knowledge on the services is viewed as awareness of the existence and location of the facilities, knowledge on the availability and provision of the services, the need to seek and use these services and how important these services will be to them. (Senderowitz, 1999).

The study by Biddlecom, Munthali, Singh and Woog (2007), stated that adolescents between the ages of 12 and 19 years in Ghana, Malawi and Uganda do not know of any source to obtaining services. This may be due to the fact that the adolescents may not be aware of the need to seek health services. They also may not know how different these services are from what they receive from peers especially the counselling aspect.

The study by Biddlecom, Munthali, Singh and Woog (2007) was confirmed as it was found in this study that only 125 (30.8%) of the 406 respondents were aware of adolescent friendly health services. This really affected utilization of adolescent friendly health services offered at the Ashiaman polyclinic which may lead to the adolescents facing any of the adolescent health challenges which will go a long way to affect the nation as a whole. Adequate knowledge on the adolescent friendly health services has been proven in this study to increase utilization as 214 of the respondents (52.7%) have never utilized the AFHSs because they have never heard of it and never knew of its existence.

The major sources of information for those who had knowledge on the AFHSs in descending order were the school followed by health workers, media, friends, family members and the church. However, a study by Tegegn, Yazachew and Gelaw (2008) spelt out the radio (80.4%), television (73%) and school teachers (71.8%) as the major sources of information on AFHSs. This is in line with the findings from this current

study because both studies have school and media in the first three major sources of information on AFHSs.

5.3 Services accessed by the adolescents at the AFHSs

The respondents who have utilized the AFHSs went there to access one or more of these services. This is in accord with the services spelt out by GHS et al., (2012) as the services offered at the AFHSs. Almost all the services available at the AFHSs at Ashaiman polyclinic were accessed by one or more in-school adolescents who have ever utilized the services with the exception of those services related to maternal issues such as antenatal care, postnatal care and abortion services. These may be due to the fact that the adolescents are in school and have employed means of preventing pregnancies.

5.4 Education on adolescent friendly health services

The students indicated that there was very little education on the AFHSs. Some of them stated the reason why they have never utilized the services is due to the fact that they are not aware of the AFHSs and this is because no one has ever informed them about it. They have never heard of it anywhere before.

The adolescents suggested that more education should be done in the schools as well as the community to make adolescents aware of the services. This is in line with a study by GHS et al (2012) which suggested that the community should be well informed of the existence of the services and adolescents should themselves be aware of the existence of the services. The sources of education on AFHSs the adolescents mentioned in descending orders were school, hospital, media, friends, family members and church. This has earlier been confirmed by the study by Tegegn, Yazachew and Gelaw (2008).

Some of the suggestions the adolescents gave to help intensify the education on the AFHSs were frequent education on AFHSs in the schools, churches, communities and using the media. This is in agreement with the studies by Temin et al (1999) and GHS et al (2012).

Majority of the respondents (77.6%) are knowledgeable on the health challenges that adolescents face. They mentioned some of the challenges as early pregnancy, substance abuse, HIV/AIDS, STI and peer pressure which have been mentioned in the following studies; WHO (2011) and WHO (2013). This development implies that intensive education on the adolescent friendly health services need to be done. Both adults and the adolescents in the community need to be educated on the services. This education should be done in the schools and in the communities including the churches and youth clubs in the community.

5.5: Factors that affect the utilization of adolescent friendly health service

The level of utilization of the AFHSs by the adolescents depends on a number of factors. These factors can affect it either positively (facilitators) for high level of utilization or negatively (barriers) for low level of utilization.

5.5.1 Demographics

From this study, majority of the middle adolescents (14-16) were found to have utilized the AFHSs at the polyclinic followed by those in the late adolescent group (11-19) and then those in the late adolescent group (10-13). Almost all studies on AFHSs involve all the age group and this is because adolescent health challenges affect all adolescents. WHO, (2002) confirmed that adolescent health challenges affect all adolescent groups.

The study recorded more females (79.3%) have utilized the AFHSs at the Ashaiman polyclinic. This is consistent with the study by Creel & Perry (2002).

From the study, both JHS and SHS had almost the same number of respondents (44.8% and 41.4& respectively) utilizing the services with a few (13.8%) from the primary level and majority (85.7%) were Christians and (14.3%) were Muslims.

5.5.2 Knowledge on the AFHSs

One major factor that affects the level of utilization of the AFHSs is knowledge of the AFHSs. Tylee et al. (2007) mentioned in their study that lack of knowledge of the AFHSs is one of the barriers to utilization of the services. Majority of the students (79.3%) who were interviewed did not know that the Ashiaman polyclinic had any adolescent friendly health services and so have never utilized it. All those who had ever utilized the services are those who knew of the services. This is again in agreement with studies by Henderson et al (2004) and Booth et al (2004). This shows that where both the adolescents and public are aware of the AFHSs, the level of utilization is high and this will help curb the rates of adolescent health challenges.

5.5.3 Environment

The environment refers to the location of the AFHSs. It looks at how far or close it is from the homes of the adolescents. Young people sometimes express a desire to go out of their neighbourhoods so they will not be seen by family and neighbours. At the same time, young people do not want to or cannot travel too far to reach service sites. Majority of the respondents (69.0%) who have utilized the services stated that the Ashiaman polyclinic was far from their homes and it is of an inconvenient to them. This is in agreement with studies by Moya (2002) in which closeness of facility was mentioned

and Senderowitz (1999) which also mentioned closeness of facility and easy transportation to the facility. Some (27.4%) of those who have not utilized the services before stated their reason for not utilizing it was the fact that Ashaiman polyclinic where the services are located is far from their homes, again confirming the study by Senderowitz (1999).

5.5.4 Cost

One of the major determinants of utilization of adolescent friendly health services is cost. Senderowitz et al (2003). Even though there was not much difference between those who mentioned that the fees charged at the AFHSs at Ashaiman polyclinic was high and those who believed it was moderate. More (16) of the respondents believed the charges were high. Some of the respondents who have never utilized the services (45) stated high cost as the reason. This also confirms the study by Senderowitz et al (2003). Cost is a major factor affecting the adolescents utilizing the services because they are all in school and will find it difficult asking their parents for money to utilizes such services taking into consideration the fact that most of the adolescents think adults in the community will react negatively to them utilizing the services. The government and other NGOs should subsidize the cost of the AFHSs to make the cost moderate or even free for the in-school adolescents to utilize them.

5.5.5 Service provision

From the study, it was made clear that service provision was a factor that affected the utilization of the AFHSs at the polyclinic. While some of the adolescents think the providers might think they are too young to utilize the services, some also think the providers might see them as bad to utilize the service. This is in agreement with the study

by MoH Kenya (2005). The adolescents feel comfortable with their peers or younger people. This concur the study by MoH Kenya (2005).

5.5.6 Privacy and confidentiality

Privacy and confidentiality are also other factors that affect the utilization of AFHSs. Senderowitz (1999), explained that privacy must be arranged for counselling sessions and examinations; young people must feel confident that their important and sensitive concerns are not retold to other persons. It came out that only one respondent who have utilized the services mentioned that the information shared with service providers at the Ashiaman polyclinic would not be shared with other people. Again, this does not give a clear association between privacy and confidentiality in this study.

5.5.7 Timing

Timing is one major determinant of utilization of adolescent friendly health services. A study by MoH Kenya (2005), also suggested that waiting time for adolescents to utilize health services should be short. Results from the study indicated that many in-school adolescents do not utilize the adolescent friendly health services at the Ashiaman polyclinic. Only 1 out of the number of in-school adolescents who knew of the existence of the AFHSs and have utilized it talked about timing. The respondent stated that there was no delay when she visited the services at the Ashiaman polyclinic.

From the study, the respondent preferred to utilize the services in the mornings of weekdays. This does not give a clear association between timing and utilization in this study.

All the above factors are greatly affected by the adolescents' need for the services. The adolescents will initially think of utilizing the services if they have a need for them before considering other factors. If they don't have any need for the services, they will not utilize them so one cannot conclude that it the AFHSs are under-utilized but the results from the study reported that only 5.5% of the respondents have no need for the services yet the utilization level is low.

5.6 Community involvement and ways on improving utilization of AFHSs

All the adolescents who were interviewed expressed their views on how the adults in the community including their parents and teachers will react should they know they the adolescents utilize the services. They also suggested ways to solve the negative attitudes of the adults in the community as well as ways to improve the utilization of the AFHSs.

Majority of the respondents stated 'anger and disappointment (adults will think they are bad)' on the part of their parents, teachers and other adults in the community. Only a few of the students who were interviewed stated that their parents and teachers would be happy with the fact that they utilize the AFHSs and encourage them to continue utilizing the services. They would rather consult peers who will rather give them unprofessional counselling which may lead to any of the adolescent health challenges that is being fought globally.

To help curb the negative attitudes of the adults in the community towards the utilization of the AFHSs, the adolescents suggested that the community should be educated on the services. This is in line with a study by Temin et al (1999). By so doing, parents, teachers and other adults would support decisions of their wards and students respectively to access adolescent friendly health services when the need arise. Almost all the students

who were interviewed deemed it extremely important for every adolescent to access the AFHSs.

The adolescents also suggested that there should be more education on the AFHSs in the schools, communities (including the churches, market and youth clubs), on the media. A few of them also suggested that the AFHSs should be set up in the schools for easy access. When the education on the AFHSs are intensified through the media, in the schools and communities, it will increase utilization because the adolescents will know and understand the services and see the need to utilize them. This corresponds with the study by Henderson et al.,(2004) which stated that 'in Zimbabwe, only 40% of adolescents living in areas where campaigns have been made on youth centers and services attend the adolescent clinics and 14% of those living in no campaigned areas attend the clinics'. Education will also make the community understand the services and how important it is to the adolescents and so will encourage them to use the services.

5.7 Limitations

Most of the respondents did not answer some of the questions and if they had answered the questions, it could have influenced the results.

At the SHS level, only those who were in forms one and two participated in the study because the form three students had completed school and were out of school. Their participation could have influenced some of the results. This is because most of them may have been in the late adolescence and might have ever utilized the services.

CHAPTER SIX

6.0 CONCLUSIONS AND RECOMMENDATIONS

This chapter comprises of the conclusions drawn from the results of the study and makes recommendations that will help deal with the challenges identified.

6.1 Conclusions

The study revealed that the in-school adolescents residing in Ashaiman under-utilized the AFHSs at the polyclinic. Most of the in-school adolescents in the Ashaiman municipality have never visited the AFHSs at the polyclinic even though they have a need for the services and know the services will be beneficial to them. The very few adolescents who utilized the services were mostly the female in-school adolescents.

The study also revealed that the in-school adolescents do not have enough knowledge on the AFHSs in the Ashaiman municipality. From the study, it was noticed that there is very little education on the AFHSs. The adolescents would have utilized the AFHSs if they had idea of its existence.

The study again showed that adolescents who have ever visited and those who would like to visit the AFHSs will decide to visit there again or not based on some factors such as timing, cost, service provision, privacy and confidentiality and these same factors were the reasons why most of the adolescents have never utilized the services.

6.2 Recommendations

Based on the findings of this study, there should be recommendations to address the problem of under-utilization of the AFHSs. The following recommendations are provided to address the issue.

6.2.1 Health and education sector

The Municipal Health management team should intensify public education and awareness on AFHSs through the media, youth and social clubs, community and school durbars.

The Municipal Health Service and Municipal Education Service should collaborate to intensify the education on the AFHSs in the schools.

6.2.2 Community and opinion leaders

There is the need to educate and increase awareness of AFHSs in leaders and elders in the municipality. This will help them understand the importance of the AFHSs and clear their minds off any myths about it and they will in turn influence the people to understand and accept the AFHSs.

6.2.3 NGOs and private sector

NGOs and private sectors should get involved in the policy making and education on AFHSs in the Ashaiman municipality. They should also organize programs on the AFHSs to make it more attractive to the adolescents.

NGOs should in collaboration with Ghana Health Service set up corners in the communities where the AFHSs can be utilized by the adolescents.

6.2.4 Religious bodies

Religious bodies must get involved in the education and awareness on AFHSs in the municipality. They must create the platform for young people to be educated on AFHSs and adults also to understand and accept it.

6.2.5 Research

There should be further studies on this subject involving all adolescents in the Ashaiman municipality (both in and out of school) since this study was only on in-school adolescents. This will help establish whether adolescents in the municipality utilize the AFHSs or not.

Further studies should also be done on the same subject at the same study area to determine other factors that contribute to the under-utilization of the AFHSs in the Ashaiman municipality.

REFERENCES

Akuffo, F.O., (1987). Teenage pregnancies and school drop-outs. The relevance of family life education and vocational training to girls' employment opportunities. *POPLINE*, (055230), 154 – 64. Retrieved September 18, 2015 from www.popline.org/node/367498.

Asare, G. Q. (2012). GHS develops strategic plan to address adolescent health problems in Ghana, 1–14. www.ghananewsagency.org/health/ghs-develops-strategic-plan-to-address-adolescent-health-health-problems-in-ghana--46879.

Awusabo-Asare, K., Biddlecom, A., Kumi- Kyereme, A., & Patterson, K. (2006). *Adolescent sexual and reproductive health in ghana : results from the 2004 national survey of Adolescents*. ocassional report, no 22.

Baah- Wiredu, K. (2004). Ghana lacks youth- friendly reproductive health services, *Ghana News*. Retrieved September 18, 2015 from mobileghanaweb.com/GhanaHomePage/NewsArchive/Ghana/Ghana-lacks-youth-friendly-reproductive-health-services-Baah-Wiredu-58276.

Biddlecom, A. E., Munthali, A., Singh, S.,&Woog,V. (2007). Adolescents' views of and preferences for sexual and reproductive health services in Burkina Faso, Ghana, Malawi and Uganda.*African journal of reproductive health* vol 11 p 99-110. Retrieved September 20, 2015 from http://reference.sabinet.co.za/sa_epublication_article/ajrh_v11_n3_a8.

Booth, M. L., Bernard D. and Bennett D. (2004). Access to health care among Australian adolescents young people's perspectives and their sociodemographic distribution. *Journal of Adolescent Health*. Vol. 34 (1): 97-103, doi:10.1016/j.jad. Retreived September 18, 2015 from www.sciencedirect.com/science/article/pii/S1054139X03003045.

Creel, L. C., & Perry, R. J. (2002). Improving the quality of reproductive health care for young people. *Population Council and Population Reference Bureau(English Edition)*, *28*(4), 1 –8.

Dc, W., & Senderowitz, J. (1999). Making reproductive health services youth friendly, (February).

Ghana Statistical Service. (2014). *2010 Population and Housing Census. District Analytical Report. Ashaiman Municipality*.

GHS/PHD/UNIT/ADHD. (2012). *Youth friendly service Training manuel for healthcare providers in Ghana National Adolescent Health & Development Programme*. (S. W. K. Adadevoh, Ed.) (first edit). Accra.

GSS, GHS, ICF Macro, (2009). 2008 Ghana demographic health survey

Idele P., et al. (2014). Epidemiology of HIV/AIDS Among Adolescents: Current status, inequities and data gaps. Journal of Acq Imm Def Synd 2014; 66:S144-153.

Ipas,(2015). The youth- friendly corner: Where all young people find safe, respectful health care. Retrieved from http://www.ipas.org/org/en/News/2015/August/ The-youth-friendly-corner--Where-all-young-people-find-safe--respectful-health-care.aspxS.

Levy, S., (2012). Obesity in adolescents MSD MANUAL Retrieved September 28, 2015from www.msdmanuals.com/home/children-s-health-issues/problems-in-adolescents/obesity-in-adolescents o.

McIntyre, P. (2002). Adolescent friendly health services — an agenda for change.

Ministry of Health, Kenya, (2005). National guidelines for provision of adolescent youth-friendly services (YFS) in Kenya. ministry of health division of reproductive health.

Moya, C. (2002). Creating youth- friendly sexual health services in sub- Saharan Africa. Retrieved October 7, 2015 from www.popline.org/node/235634.

Oppong-Odiseng, A. C. K. & Heycock, E. G., (1997). Adolescent health services-through their eyes. Article of Archives of Disease in Childhood. Arch Dis Child 1997;77:115- 119 doi:10. 1136/ adc.77.2. 115. Retrieved from http://m.adc.bmj.com/content/77/2/115.full.

Saraiya, M. & Hariri, S., (2011). The Global Burden of Disease in 10-24-year-olds Published Online June 7, 2011 DOI:10.1016/S01406736(11)60618-1 pp 2093.

Senderowitz, J., (1999). Making reproductive health services youth friendly. focus on young adults 1201 connecticut avenue NW, Suite 501 Washington DC 20036 202-835-0818 retrieved from http://www.pathfind.org/focus.htm.

Senderowitz, J., Hainsworth, G. & Solter , C.(2003). A Rapid Assessment of Youth Friendly Reproductive Health Services. Rapid Assessment of Youth Friendly Services. *A journal of Pathfinder International.*No 4. Retrieved from www.pathfind o r g / p u b li c a t i o n.

Tegegn, A., Yazachew, M., & Gelaw, Y., (2008). Reproductive Health Knowledge and Attitude among Adolescents: A community based study in Jimma Town, Suothwest Ethopia. Ethioia J. Health Development. 2008; 22(3)

Temin, M. J. et al. (1999). Perception of Sexual Behavior and Knowledge About Sexually Transmitted Diseases Among Adolescents in Benin City, Nigeria. *International Planning Perspsctives* Vol. 25, No 4 (Dec 1999), pp. 186-190+195. Guttmacher Institute Publication. DOI: 10.2307/2991883. Retrieved from http://www.jstor.org/stable/2991883.

Tylee, A., Haller M. D., Graham T., Churchil R., & Sanci L., (2007). Youth-friendly primary-care services: how are we doungand what more needs to be done? *ScienceDirect, 369(9572),* 1565–1575. http://doi.org/10. 1016/SO140-6736(07)60371-7.

WHO: (1997). Maternal, newborn, child and adolescent health. Retrieved September 28, 2015 from http://www.who.int/maternal_child_adolescent/topics/adolescnce/dev/en/

WHO: (2011). Guidelines on Preventing Pregnancy and Poor Reproductive Outcomes Among Adolescents in Developing Countries.

WHO/FCH/CAH/02.14. Retrieved from http://www.who.int/child-adolescent-healthWHO.

WHO: (2013). WHO Fact sheet.

WHO: (2014). Adolescents: health risks and solutions Fact sheet N°345. Retrieved September 28, 2015 from http://www.who.int/mediacentre/factsheets/fs345/en/.

APPENDICES

APPENDIX 1: Inform Assent by Parent/Guardian (10-17 years)

Permission

Your child has been selected to be part of this study but your permission is required before proceeding. I am exploring the 'Utilization of the Adolescent Friendly Health Services at the Ashaiman polyclinic by in-school adolescents residing in Ashaiman.' He/she has the right not to answer questions to which he/she is embarrassed and the responses will be kept till the end of the study.

Right to Refuse or Withdraw

Your child has the right to refuse to participate in this study can also withdraw along the line from the study if he/she wishes to do so.

Confidentiality

All information collected will be kept confidential

Benefits

This study seeks to determine the use, the knowledge level and factors associated with the use of the adolescent friendly health services at the Ashaiman polyclinic. The outcome will help to address the adolescents' concerns regarding the adolescent friendly health services in Ashaiman and Ghana at large.

Certificate of Assent

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

……..... …….

Name/Initials of Parent/Guardian Name/Initials of participant

……..... …….

Relationship to child Name of researcher/research assistant

…… ……

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

…… …….

Date Date

For further information or clarifications, please contact the following:

Principal Researcher:

Aba Appiah-Mensah

moonlitebabs@yahoo.com 0244044098

APPENDIX 2: Consent form (18-19 years)

Permission

You have been selected to be part of this study but your permission is required before proceeding. I am exploring the 'Utilization of the Adolescent Friendly Health Services at the Ashaiman Polyclinic by in-school adolescents residing in Ashaiman.' If you agree to participate in this study, you are free not to respond to some questions if you are embarrassed and your responses will be kept till the end of the study

Right to Refuse or Withdraw

You have the right to refuse to participate in this study if you wish not to. You can also withdraw along the line from the study if you wish to do so.

Confidentiality

All information collected from you will be kept confidential

Benefits

This study seeks to determine the use, the knowledge level and factors associated with the use of the adolescent friendly health services at the Ashaiman polyclinic. The outcome will help to address the adolescents' concerns regarding the adolescent friendly health services in Ashaiman and Ghana at large.

Certificate of Consent

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

……..... ……

Name/Initials of Participant Name of researcher/research assistant

……..... …….

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

…… ……

Date Date

For further information or clarifications, please contact the following:

Principal Researcher:

Aba Appiah-Mensah

moonlitebabs@yahoo.com 0244044098

APPENDIX 3: Questionnaire

1. Date ……/……../……..
2. Questionnaire No……
3. School Code……

Section A: Demography characteristics		
1. Age at last birthday		
2. Sex		
Male		
Female		
3. Educational level		
Primary		
JHS		
SHS		
4. Religion		
Christian		
Muslim		
Traditionalist		
SECTIO N B: Knowledge on Adolescent health and AFHSs	**YES**	**NO**
1.Do you know of some adolescent health challenges?		
2. Mention some of them		
3. Have you heard of Adolescent Friendly Health Services?		
4. Where did you hear it from it?		
School		
Church		
Media		

	YES	NO
Friends		
Family member		
Health worker		
5. Have you had any education on Adolescent Friendly Health Services?		
6. If yes, from where?		
Church		
Media		
Friends		
Family member		
Hospital		
School		
7. Do you think there is enough education on the adolescent friendly health services?		
8. What do you think can be done to intensify the education on the adolescent friendly health services?		
9. Mention some locations of adolescent friendly health services		
10. Do you know there are adolescent friendly health services at the polyclinic?		
11. Do you know the adolescent health services offered at the polyclinic?		
12. Name some of the services available		

	YES	**NO**
13. Do you think it is important for every adolescent to access the services?		
SECTION C: Utilization of the AFHSs		
1.Have you ever accessed the adolescent friendly health services at the Ashaiman polyclinic?		
IF YES **Services and providers**		
During your last visit		
2. What was your reason for going there?		
Pregnancy screening		
Antenatal care		
Post natal care		
Abortion services		
Post abortion care		
Contraceptive counselling and purchase		
Nutritional management		
STI screening		
STI management		
HIV testing and counselling		
Management of sexual violence		
General counselling		
Substance abuse management		
Recreational services		
3. How often do you go there?		
Daily		

Weekly		
	YES	**NO**
Monthly		
Quarterly		
Yearly		
4. Did you wait too long in a queue for it to get to your turn?		
5. Did you receive the information and services you wanted?		
6. Were there enough products to meet your request?		
7. Did the service provision take too much time?		
8. Was the time for consultation with the service provider adequate?		
9. Was the service provider welcoming and friendly?		
10. Did the provider listen to your concerns to your satisfaction?		
11. Did the provider respond to your questions to your satisfaction?		
12. Was the fees charged for the services too much for you?		
Convenient days and times for the adolescents		
13. What day of the week would you prefer to come for services?		
Weekdays		
Weekends		
Holidays		
14. What time of the day is convenient for you to come for the services?		
Morning		
Afternoon		
Evening		

Facility environment		
	YES	**NO**
15. Is the facility too close or far from your home?		
16. Do you think the location can make people see you going there?		
17. Did you find the consulting room attractive?		
18. Were there educational materials available? (posters on the walls)		
19. Were there recreational materials available? (ludu, tv, dvd)		
Privacy and confidentiality		
20. Did anything or anyone interrupt your time with the provider?		
21. Did you feel that anyone could overhear the conversation you had with the provider?		
22. Do you think your conversation with the provider will be kept in confidence?		
Support policy		
23. Did the provider tell you that you were too young to receive any of the services?		
24. Did the provider set a date for your next visit?		
25. Do you think the provider will attend to you if you go there without appointment?		
26. Would visit the facility again?		
27. Explain why		
If NO (question 1)		
1.Why?		

Cost is too much		
It is not adolescent friendly		
It is far from my house		
It is too close to my house		
The providers are not friendly		
	YES	**NO**
They waste time		
Someone might see me and judge me		
The provider might think I am too young		
The provider my think I am a bad boy/girl		
I access the services at other place		
I had no idea that it existed		
I don't have any need for the services		
2. What day of the week would you prefer to go there?		
Weekdays		
Weekends		
Holidays		
3. What time would be best for you if you wanted to go there?		
Morning		
Afternoon		
Evening		
Services and providers		
4. Would you access the services if they were free?		
5. Do you think there are some adolescent health services you wish to have but are not offered at the facility?		
6. Do you think every adolescent of any age and sex should access		

the services?		
7. Do you think that the service providers at the facility will be welcoming?		
8. Do you feel that the providers will listen to your concerns and answer all your questions if you go there?		
9. Do you think the providers at the facility will have enough time for you if you go there?		
	YES	**NO**
10. Do you think the providers will restrict you from any of the services because of your age, religion or sex?		
11. Do you feel the providers will keep every information private and confidential?		
12. Do you think the provider will attend to you if you go there without appointment?		
Community involvement		
1. How do you think adults in the community including your parents and teachers will behave if they get to know you accessed the services		
2. If responses are negative, how do you think adults can be made to change their attitudes?		
3. What general comments/suggestions do you have to improve on these AFHSs?		

GHANA HEALTH SERVICE ETHICS REVIEW COMMITTEE

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

My Ref. GHS/RDD/ERC/Admin/App
Your Ref. No.

Research & Development Division
Ghana Health Service
P. O. Box MB 190
Accra
Tel: +233-302-681109
Fax + 233-302-685424
Email: Hannah. Frimpong@ghsmail.org

4th March, 2016

Aba Appiah-Mensah
University of Ghana
School of Public Health
Legon, Accra

ETHICS APPROVAL - ID NO: GHS-ERC: 20/12/15

The Ghana Health Service Ethics Review Committee has reviewed and given approval for the implementation of your Study Protocol titled:

"Utilization of the Adolescent Friendly Health Services at the Ashiaman Polyclinic"

This approval requires that you submit yearly review of the protocol to the Committee and a final full review to the Ethics Review Committee (ERC) on completion of the study. The ERC may observe or cause to be observed procedures and records of the study during and after implementation.

Please note that any modification without ERC approval is rendered invalid.

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

You are requested to submit a final report on the study to assure the ERC that the project was implemented as per approved protocol. You are also to inform the ERC and your sponsor before any publication of the research findings.

Please note that this approval is given for a period of 12 months, beginning 4th March, 2016 to 3rd March, 2017. However, you are required to request for renewal of your study if it lasts for more than 12 months.

Please always quote the protocol identification number in all future correspondence in relation to this approved protocol

SIGNED.....

PROFESSOR MOSES AIKINS
(GHS-ERC VICE-CHAIRPERSON)

Cc: The Director, Research & Development Division, Ghana Health Service, Accra

GHANA EDUCATION SERVICE

In case of reply, the number and date of the letter should be quoted

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Email: gesgarashmeo09@gmail.com
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REPUBLIC OF GHANA

MUNICIPAL EDUCATION OFFICE
P. O. BOX AS 309
ASHAIMAN
Tel: 020-6600166

4TH MAY, 2016

ABA APPIAH-MENSAH
P. O. BOX A.N. 6823
ACCRA NORTH

PERMISSION TO CONDUCT INTERVIEW FOR RESEARCH WORK IN SCHOOLS IN THE ASHAIMAN MUNICIPALITY

With reference to your letter dated 27th April, 2016 on the above subject permission has been granted to you to conduct interview for your research work on the topic "utilization of the adolescent health service at the Ashaiman polyclinic" in some selected schools in Ashaiman Municipality.

This should be within 23rd – 27th May 2016.

The head teachers concerned are to ensure that classes are not disrupted doing the exercise.

Thank you.

Pattegn

PATTY E. ASSAN (MRS)
DIRECTOR OF EDUCATION

Cc: The Headteacher, Presby 'A' JHS – Ashaiman
The Headteacher, Presby 'A' Primary – Ashaiman
The Headteacher, Ashaiman No. 5A Basic school
The Headteacher, Ashaiman Senior High School
Circuit Supervisor, Ashaiman West
Circuit Supervisor, Ashaiman East
Basic School/SHS Coordinator, MEO – Ashaiman