UNIVERSITY FOR DEVELOPMENT STUDIES

REPRODUCTIVE HEALTH AMONG YOUNG ADOLESCENT GIRLS IN APPRENTICESHIP TRAINING IN THE TAMALE METROPOLIS

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A DISSERTATION PRESENTED TO THE DEPARTMENT OF COMMUNITY HEALTH AND FAMILY MEDICINE, SCHOOL OF MEDICINE AND HEALTH SCIENCES, UNIVERSITY FOR DEVELOPMENT STUDIES IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF PUBLIC HEALTH DEGREE

2021

DECLARATION

Student

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

Alhassan Iddrisu Abdullai	.....	23-11-2020
(Student name)	**Signature**	**Date**

Supervisor

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

Dr. Paul Armah Aryee	.....	23rd Nov. 2020
(Supervisor)	**Signature**	**Date**

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DEDICATION

I dedicate this work to my wife and kid, Madam Fuseini Memuna and Mohammad Al-Miftah Idrees.

ABSTRACT

Reproductive health is a human right issue that has become a priority among priorities for states, nations, regional blocks and continents. The choices young adolescent girls make relative to sexual reproductive health is heavily influenced by knowledge of the subject matter and availability of services thereof. Attitudes and behaviours on the other hand are thought to be premised on knowledge. This finds mention in the policies of most health organisations and health policy institutions and the study thus researched along these lines of thinking and for that matter modelled the study around the theory of planned behaviour.

The study type used was a mixed method. A cross-sectional design was employed in the study to draw responses from 255 young adolescent girls between ages 15-25 in apprenticeship training as seamstresses. Bivariate analysis was performed on DVs and IVs using the chi-square, Fisher exact test. A binary logistic regression was then performed on variables found significant to determine the extent of the predictive effect.

The study finds that knowledge among girls on reproductive health was generally fair except to say that there was no much corresponding effect on behaviours. The mean score of knowledge of RHC (M□3.6, SD□1.6); given t□89.2 at a p-value<0.001. The logistic regression between the combined score for knowledge and attitudes was found significant (P-value□0.032, OR□0.716, C.I: 0.254 - 0.94).

It is the recommendation of the study therefore that efforts at providing knowledge are sustained by relevant stakeholders and besides, attention should be given to attitudinal transformative education and behaviour change communication as knowledge alone was found not to have proven sufficient for good behaviour.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

Index	Word Abbreviation	Full Meaning
1	AIDs	Acquired Immuno Deficiency Syndrome
2	ASRH	Adolescent Reproductive Health
3	BECE	Basic Education Certificate Examination
4	CDC	Center for Disease Control and Prevention
5	CIP	Costed Implementation Plan
6	DHIMS2	District Health Information Management System 2
7	DV	Dependent Variables
8	FGDs	Focused Group Discussions
9	FMOH	Federal Ministry of Health
10	FP	Family Planning
11	GDHS	Ghana Demographic and Health Survey
12	GFPCIP	Ghana Family Planning Costed Implementation Plan
13	GHS	Ghana Health Service
14	GMSA	Ghana Muslim Students Association
15	GPH	Global Public Health
16	GSS	Ghana Statistical service
17	HIV	Human Immune Virus
18	ICPD	International Conference on Population and Development
19	IPAS	Health Based NGO
20	IPPF	International Planned Parenthood Federation
21	IUD	Intra Uterine Devices
22	IV	Independent Variables
23	LGBT	Lesbianism Gay Bisexual and Transgender
24	LI	Legislative Instrument
25	LMIC	Lower Middle Income Countries
26	MAF	Millennium Accelerated Framework
27	MDGs	Millennium Development Goals
28	NGO	Non-Governmental Organisation
29	NRC	Norwegian Refugee Council
30	PATH	Programme for Appropriate Technology in Health
31	RH	Reproductive Health
32	SDGs	Sustainable Development Goals
33	SHS	Senior High School
34	SRH	Sexual Reproductive Health
35	SRHS	Sexual Reproductive Health Services
36	STD	Sexually Transmitted Disease
37	STIs	Sexually Transmitted Infections

38	UN	United Nations
39	UNDPA	United Nations Department of Political Affairs
40	UNESCO	United Nations Education Scientific and Cultural Organisation
41	UNDPA	United Nations Department of Political Affairs
42	WASSCE	West African Senior Secondary Certificate Examination
43	WHO	World Health Organisation
44	YFS	Youth Friendly Services

OPERATIONAL DEFINITIONS

Reproductive Health: It is defined as a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity, in all matters related to the reproductive system and to its functions and processes (WHO, 2015).

Reproductive Health Choices: these refer to the decisions people make regarding their sexual and reproductive behaviour especially with respect to their health.

Young adolescent girls: In context this includes young girls between 15 and 25 years of age as used for the study. Ordinarily the study would have focused on adolescent girls, but considering the setting within which the study is conducted, it becomes materially necessary to include in a rather smaller percentage those above the WHO standard definition of adolescents.

Apprenticeship Training: those currently learning a trade in fashion design as apprentices.

Sexuality: Attitudes and behaviours around sexual intercourse

Poor: Any level of knowledge, attitude or behaviour below the mean scores of the theme in question after various statistical analyses.

Fair: Any level of knowledge, attitude or behaviour that fits the mean scores of the theme in question after various statistical analyses.

Good: Any level of knowledge, attitude or behaviour that is above the average scores of a theme in question after various statistical analyses are performed

CHAPTER ONE

GENERAL INTRODUCTION

1.1 Introduction

The research work aimed at the assessment of young adolescent girls' knowledge, attitudes and behaviours on reproductive health, particularly, those that are adolescent girls in apprenticeship training within the Tamale Metropolis. An in-depth assessment was therefore conducted. This became necessary because of the projected increased concern for adolescent reproductive health with a seemingly ever-increasing rate of unplanned pregnancies among young adolescent girls and its attendant consequences. Previous studies on the subject matter have sought to either primarily focus on in-school youth or streamline itself to the assessment of contraceptive utilisation rather than the broader picture of reproductive health. The descriptive cross-sectional study method was employed and both qualitative and quantitative approaches were used to gather data. The research setting was aggregated based on clusters upon which appropriate sample size was determined using epi-info version 7. Cluster, systematic random and purposive sampling methods were used to select participants. The study among other things determined the relationship between socio-demographic characteristics, knowledge of reproductive choices, attitudes on reproductive health (exposures) on one hand and reproductive behaviours (outcomes) on the other hand.

1.2 Background to Study

Reproductive health choices refer to the decisions people make regarding their sexual and reproductive behaviour especially with respect to their health. Reproductive health is largely seen as a human right issue which has earned global attention among states and interest

groups (ICPD, 1994). It finds mention in the policies of most health organisations and health policy institutions (ICPD, 1994). Be that as it is, the World Health Organisation (WHO) characterizes reproductive health as a "state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity, in all matters related to the reproductive system and its functions and processes" (Glasier et al., 2006). Reproductive health for that matter infers that individuals can have a safe and fulfilling sexual coexistence and have the capacity to initiate and the opportunity to choose if, when and how regularly to do as such (WHO, 2015). Certain in this are the rights of people to be educated regarding access to safe, effective, productive, reasonable and acceptable strategies for fertility regulation of their preference (ICPD, 1994). The right of access to proper health care products will empower ladies and young adolescent girls to securely experience their sexual life, p pregnancy and childbirth and provide couples with the best chance of having a healthy baby in the event they choose to do so (ICPD, 1994).

Young women like their other older counterparts of fertile age have the right to sound and safe reproductive health. They have accrued right to be able to protect their selves from sexual harassment, unwanted sexual intercourse, unmet need (undecided pregnancy), early child bearing, risky abortions and "sexually transmitted infections" (STIs). Refusal of such rights may well lead to wrongful decisions such as unprotected and unrestricted sexual activities and unsafe termination of pregnancies (GPH, 2015). For instance, anecdotal accounts at Akontombra Senior High School (SHS) has shown, three (3) of the final year students were pregnant whilst writing the 2019 session of the West African Secondary School Certificate Examination (WASSCE). Two of the three girls had still not find the need

to be on contraception for fear of difficulty of conception in later life (Personal Communication).

The strategic goal for reproductive health captured in the 2008 - 2011 strategic plan by the Ghana Health Service (GHS) aim to bring improvement in the health and quality of life of persons of reproductive age and their new borns. This is to be ensured by providing high-quality reproductive health services. Young adolescent girls who are burdened with intimate demands coupled with being a sexually active group need to make decisions on how to meet the physiological needs of sex sensitive parts. They must manage also the social cravings associated with young adolescent girls. They, therefore, need to effectively decide on when to and when not to start a sex life. When they decide to, it should be of interest whether it will be done protected or unprotected, to become pregnant or otherwise, and to decide on the mode of dealing with an unmet need of family planning should it arise. The availability of reproductive health services such as adolescent-friendly health services where young adolescent girls can go for family planning services is to make sure that young girls make the right choices through the right and appropriate guidance. For if they are not guided by the right agencies, there is the tendency that they would be guided by their equally uninformed peers.

Studies indicate that numerous nations are yet to achieve significant progress in deferring marriage and childbearing, bringing down the rate of unintended childbearing, narrowing sex differences that put young ladies at the danger of poor Sexual Reproductive Health (SRH) outcomes, growing health mindfulness or empowering them to gain access to Sexual Reproductive Health Services (GPH, 2015). Millennium development goal 4 aimed at reducing under-five mortality by two-third, goal 5 targeted reducing maternal mortality by

three-quarters and goal 6 focused on reversing the spread of Human Immunodeficiency Virus and Acquired Immune Deficiency Syndrome (HIV and AIDS), and other diseases. Significant strides had been made in this regard over the fifteen-year period. Nonetheless, in countries like Ghana and many developing countries, these continue to be major developmental challenges. HIV and AIDS in particular remain serious public health threat as there exist weak monitoring systems and structures to manage and prevent further transmissions. It is therefore not strange that the Sustainable Development Goals still directly dedicate about eight (8) of its goals to addressing challenges concerning sexual reproductive health and health in general. That is SDGs goals 1, 2, 3, 4, 5, 8, 10 and 16 (GM, 2019). A rapid and uncoordinated rate of population growth without corresponding improvement in overall development and policy planning has potential negative consequences for the Tamale Metropolis, the region and the country at large going into the future. Rigorous birth control measures should therefore be pursued by way of family planning and promotion of positive young adolescent girls' sexual and reproductive health through the encouragement of informed choices, attitudes and behaviours particularly for girls in apprenticeship training. This means therefore that steps must be taken to include the facilitation of all-inclusive access to affordable family planning services in the Metropolis if not available and demystify the cultural barriers preventing young girls their right of sound reproductive and sexual health.

It is noteworthy to state that, the regional fertility prevalence rate in Northern Region (including Savannah and North-East Regions) is reportedly 6.6% (GSS, GHS, & GDHS -ICF International, 2015). This is the highest in Ghana and 10.8% as the lowest in women using modern family planning methods. The rate of distribution of currently married and unmarried

women sexually active and aged between 15 - 49 years by contraceptive methods currently used indicates that northern region has the lowest usage in contraceptive methods of 11.2% (GSS & GHS, 2015). The use of contraceptives can ensure that girls enjoy their sexual life without necessarily any fear of unplanned pregnancy and be protected against sexually transmitted diseases (Personal Communication with Mr. Boakye Yiadom, 2016).

The use of contraception depends on the knowledge about it, its availability and the decision to use them. Natural methods include abstinence, ovulation method (cycle beads), and coitus-interruptus. Modern or artificial contraceptive methods include oral pills, injectables, implants, barriers among others (Personal Communication with Dr.Vida, 2015). The reproductive choices made by girls have effects on their present and future lives, especially their health with some implications on families and the nation altogether (Personal communication). This study thus far assessed the reproductive health choices, attitudes and behaviours of young adolescent girls or adolescent girls in the Tamale Metropolis with key focus on those in apprenticeship training at various shops and centers as fashion and design apprentices.

1.3 Problem Statement of Study

Knowledge of proper and appropriate reproductive choices in any nation especially among the youth will most likely translate into positive attitudes and behaviours. This consequently may well help to reduce cases of STIs, unwanted pregnancies, illegal abortions, high rate of population growth rate and its attendant consequences such as high rates of maternal and infant mortality, joblessness and poverty, as well as deal profoundly with human rights issues associated with sexual and reproductive health (UNFPA, 2019).

Hundreds of thousands if not millions of women worldwide languish in the difficulty of choices relative to sexual and reproductive health (UNFPA, 2019). In Ghana for instance, over 20% of births are purportedly by young adolescent girls somewhere in the range of fifteen and nineteen years of age, with most happening out of ignorance, as sexual and reproductive health education is viewed as insufficient or even not accessible. STIs are believed to be rampant among this age group (GSS & GHS, 2015). Besides, it was published by the Ghana Health Service in June 2015 that a total of 750,000 teenage girls became pregnant in the year 2014 alone, this figure is believed to be the annual average figure of teenage pregnancies even up to date (Ghana Coalition Of NGOs In Health, 2020). Consequent to that, a former Member of Parliament for the Savelugu Constituency and leader of women's caucus in Parliament (1992-2017) said, "a critical examination of the issue of teenage pregnancy show that it is like a culture now everywhere, so we have to come together and raise the issue with one voice". Information is available for instance that in the 2014 session of Basic Education Certificate Examination (BECE), all ten regions recorded high figures for pregnant teenagers sitting the examination. It emerged from a related report that girls as young as ten years can get pregnant as a test of their ability to give birth and their colleagues contribute to financing abortion of the foetus (IPAS Ghana, 2015). Only two years ago, it was broadcast on the major news bulleting of Zaa Radio in Tamale that, more than thirty (30) adolescent girls in Tolon Senior High School had become pregnant in the year (Zaa Radio,15th, November, 2018). It is equally a matter of record that 10.1% of young adolescent girls have begun child bearing in the Northern Region, the highest country-wide (GSS & GHS, 2015). All these situations as aforementioned is not different from the Tamale Metropolis it is argued that the Tamale Girls SHS had up to 8 or more of its students on

average becoming pregnant each year and one was even delivered off a baby whilst in school in the 2017/2018 academic year (Personal Communication with GMSA Patron and Form Master). It is noteworthy that nearly two thousand five hundred teenagers have given birth in the Tamale Metropolis alone between 2018 and 2019 (GHS-DHIMS2, 2020).

This study investigated how informed this category of young adolescent girls is on the subject of reproductive choices. It looked at their behaviours towards RH, availability and accessibility of reproductive health services among others. The question of effects of choices relative to health and safety, preferred choices of young girls, and to what extent their choices impacted on them in terms of the general picture of reproductive health. Also, in some limited extent the research also dealt with the socio-economic consequences of choices girls make as regards their RH.

Most available works adolescent RH focused on in-school youth whether at the junior high school (JHS) or SHS level and in some instances combined schooling and out of school young adolescent girls. The study, therefore, sought to focus on the assessment of knowledge, attitudes and behaviours on reproductive health among young adolescent girls and adolescent girls in particular in apprenticeship training in the Tamale Metropolis.

1.4 Research Questions

1. What is the level of knowledge among young adolescent girls in relation to reproductive health?
2. What are their attitudes in terms of Reproductive health?
3. What are their behaviours relative to reproductive health?
4. What are the factors affecting reproductive health choices among young adolescent girls?

1.5 General Objective

The goal of this study was to do an assessment knowledge, attitudes and behaviours on reproductive health choices among women in apprenticeship training in the Tamale Metropolis.

1.5.1 Specific Objectives

The study aimed to achieve the following;

1 To assess the level of knowledge of among young adolescent girls on reproductive health.

2 To assess the attitudes of among women on reproductive health.

3 To assess the behaviours of among women on reproductive health.

4 To identify factors that affect reproductive health decisions and behaviour among young adolescent girls in the Metropolis.

1.6 Significance of Study

The study tried to unearth the level of knowledge of reproductive choices, attitudes and behaviours of young adolescent girls in apprenticeship training. This information is relevant for reproductive health policy planners and implementers in their activities aimed at improving reproductive health among young adolescent girls. With findings from this study, solutions can be proposed to provide a remedy for the identifiable RH problems among this crop of young adolescent girls and adolescent girls in particular.

Data gathering processes of this study largely helped girls participating in the research to acquire more information on the subject matter. It will as well help Non-Governmental Organisations (NGOs) design tailor-made interventions to address the reproductive health

needs of young adolescent girls in apprenticeship trade and young adolescent girls in the Metropolis in general. It may well also guide and stimulate media adverts in advocating for modern contraceptive use and the need for young adolescent girls to become conscious of their reproductive health, adopt attitudes and behaviour patterns that will protect them against sexually transmitted infections and unmet needs of family planning.

1.7 Organisation of the Thesis

The study comprises of six areas. Chapter one stated the background to the study, the problem statement, research questions, objectives of the study, and significance of the study. The rest of the study was organised into five chapters. Chapter Two contained a review of both theoretical existing findings on the subject matter. The methodology and data collection process and sampling techniques and method are all considered in chapter Three. Chapter Four looked at the results, analysis and findings therein. Chapter five contained the discussion of results and analysis and lastly chapter six encompasses conclusions and recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The literature review herein discussed looks at the relationships between what is termed awareness and knowledge, attitudes and their effects thereof on behaviours relative to reproductive health. It discussed also the factors underpinning knowledge, mentalities and practices just as accessibility and availability to Reproductive Health (RH) services and the conceptual remits of this investigation. It is imperative to reemphasise that RH is currently a basic freedom issue and has been given a worldwide attention generally across states, countries and continents. this has been very much caught in the Sustainable Development Goals (SDGs) and the arrangements of most worldwide associations (UNFPA, 2019). Adolescent sexual and reproductive health (ASRH) specifically is a worldwide public health concern. This is because of the way that young adult sexual activities have been on the increase in many nations around the globe (Wellings et al., 2006).

RH as has been characterized by the World Health Organization, "is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system, functions and processes" (Glasier et al., 2006). This definition suggests that people ought to have the option to have a safe fulfilling sexual life, and as such access to safe, viable, reasonable and worthy methods for family planning dependent on educated decisions, and wellbeing driven. It remains said that extensively sexual related challenges are high most particularly in non-developed nations and among the young. ASHR evaluations inform that sexual and RH conditions represent 18.4%

of the worldwide burden of sicknesses and 32% of the weight of infections among ladies who are between 15 - 44 years old (WHO, 2008). Appropriately, records accessible in Ghana show that 16% of births are undesirable, 40% are spontaneous and 24% mistimed. Nonetheless, it has been assessed that maternal passings would decrease by between 25 - 35% if contraception were open to all and utilised reliably and effectively by ladies who need to stay away from pregnancy (GSS/GHS/ Macro International, 2009). The burden might even be serious for young adults most particularly and interventions at that stage more results sacrosanct.

Emphasis on RH was made by the International Conference on Population and Development stating the need to offer SRH information and services to young adolescent girls (ICPD, 1999). Reproductive health services (RHS) that are adolescent-friendly have been found to be effective in addressing ASRH needs (Horwitz, 2018; UNFPA, 2003). However, “most Sub-Saharan African (SSA) nations have a dearth of young adult neighborly health services and lacking strategies to address juvenile health needs” (WHO, 2010).

A substantial number of young girls aged 20 and below are reported sexually active, however, many of them face challenges in acquiring RH care (WHO, 2003). Added to this is the fact that, youths are commonly inadequately educated about how to shield themselves from pregnancies and STIs (WHO, 2003). Allusions are made to the effect that around the world teenagers access health services less often than anticipated (NMADU, 2017). In spite of the fact that teenagers in both advanced and non-developed nations face difficulties in getting access to Reproductive Health Services (RHS), local contrasts exist with young people in non-developed nations confronting more noteworthy difficulties. Exploration has indicated that in countless nations in SSA, youngsters face huge hindrances to getting Sexual

Reproductive Health (SRH) services bringing about the under-usage of the services (NMADU, 2017). A survey led by (Woog et al., 2015) in four African nations found that youngsters between 12-19 years of age underutilised services, for example contraception and Sexual Transmitted Infections (STIs) prevention and treatment including Human Immune Virus (HIV) testing. Poor access and low utilization of RHS by teenagers have been ascribed to the absence of accessibility of administrations, absence of information by young adolescent girls on availability of services, and socio-social standards precluding their access to sexual and reproductive wellbeing services (Sedgh et al., 2009; Kamau, 2006).

2.2 Girls Awareness and Knowledge on Reproductive Health Choices

In an examination conducted by Askew et al., (2003), it finds that virtually all young people met (99.6%) in the said study had known about FP with no huge distinction among male and female respondents (99.6% for each situation). Essentially, 97% of the teenagers had known about HIV/AIDS. Be that as it may, a lower extent of the youths (65%) had known about STIs (Askew & Berer, 2003). The superior levels of awareness about FP and HIV/AIDS among young people in the study are consistent with public patterns and trends. For example, as per the 2008 GDHS, 93% of young adolescent girls aged 15 - 19 years had found out about FP (GSS et al., 2009). Additionally, 98% of young adolescent girls and a comparable extent of young men had found out about HIV/AIDS (GDHS, 2008). Among youths in the examination who had known about FP, the most regularly known technique was the condom (96% of guys and 84% of females). Other very familiar strategies were pills.

Teenagers and for that matter young adults confronted peculiar RH weaknesses with various health needs in the change from puberty to adulthood (UNFPA, 2007). Youths require RH

offers that are customized to their needs, appropriate, available and easy to understand to viably and proficiently address their SRH needs (WHO, 2012). Services that are given to young adolescent girls should be harmonious, secret, private, and with their educated assent. The religious convictions and socio-cultural values of young ladies must be regarded and these Services ought to adjust to applicable existing peaceful accords and conventions (UNDP, 1994). The International Conference on Population and Development (ICPD) called for public and global endeavors to be aimed at meeting the health needs of young ladies (ICPD, 1999). Apart from ICPD arrangement, ARHS incorporate in addition to other things:

- Provision of data, training and guidance on sexuality, RH and parenthood to reduce unsafe conducts.
- Provision of data, counseling and services, for example pregnancy prevention, and avoidance and treatment of HIV and other STIs to lessen the destructive impacts of risky conducts.
- Management of abortion-related services where there is a legal framework to ensure safe and technical assisted abortion services; prenatal, postnatal and delivery care (UNDP, 1994).

2.2.1 Sources of Information on Reproductive Health Choices

There are numerous sources for accessing the information on reproductive health services, the only challenge is whether those channels best represent the access needs of the adolescent. For instance, A longitudinal investigation of 12 – 14-year-old virgins in Tanzania demonstrated that 27% announced conversing with their folks about sex and HIV, yet that these conversations were not related with the circumstance of sexual inception. Curiously,

nonetheless, correspondence with teachers was linked with postponed sexual commencement (J & Fatusi, 2008). Different studies positioned the family (guardians, siblings and sisters) as the most minimal source of information on sexuality (Odimegwu & Adedini, 2013).

In addition, an examination in Ghana demonstrated that school-going youth who reported parent-youngster correspondence about HIV and AIDS were bound to have utilised condoms at their most recent sexual commitments, correspondence with parents was nonetheless, not related with the beginning of sexual activity (Adu-mireku, 2003).

2.3 Attitudes of Adolescent Girls on Sexual Reproductive Health

A number of literature in a wide range of media seem to recognise the relationship between what is knowledge and its attendant effect on influencing attitudes and ultimately behaviour. This widely held view finds expression in the documented report of the Ghana Family Planning Costed Implementation Plan (GMoH, 2016). The report shows that government-driven public education programmes on FP have been effective in creating awareness and mending misinterpretations; in any case, changes in attitudes and practices have not been encouraging, as there are still high incidences of undesirable births among Ghanaian ladies, and both men and women actually inclined toward keeping large families. It further links high maternal mortality to weaker health systems in the country and compounded by low access to quality health services, including among other things high unmet requirement for FP. Family planning services is noted to have expanded in Ghana over the last 50 years through public and private service providers. It posits a certain cognizance of low coverage and utilisation of Family Planning services in Ghana, and thus alludes to efforts Government of Ghana (GoG) has made and making in an attempt to cover more ladies, youth, and young

people by making these products moderate, available, and equitable for all population strands. The state according to the report has put in place a far-reaching multi-sector Family Planning project to expand interest for and utilization of FP as a priority intervention in the Millennium Development Goals (MDG) then and most recently the Sustainable Development Goals (SDGs) Acceleration Framework (MAF). The government essentially viewed as building up the Costed Implementation Plan (CIP) as a component of the exhaustive multi-sectorial procedure to reposition Family Planning programmes in Ghana and transform from strategic aim into practical actionable programme targets and exercises (GMoH, 2016). In this particular study the research intends to do an assessment of attitudes of adolescent girls especially those of them in apprenticeship training within the Tamale Central Business District in particular and the Tamale Metropolitan area at large.

A probe by Nigerian scientists uncovered that an impressive populace of young adolescent girls are sexually active and are associated with unprotected sexual episodes with numerous accomplices which open them to a host of RH risks (Sedgh et al., 2009; Okereke, 2010). It is worth noting that Nigerian young adolescent girls like their counterparts in Ghana are equally confronted with social and cultural settings which probably influence their access to and utilization of RHS (Alemayehu, 2015). Sexuality matters are viewed as no go areas for youths since sex is viewed consecrated and seen as a subject for the old and wedded only (Ogundipe, 2015).

Truth be told that condom use is one of the common metrics one could use to measure attitudes and for that matter behaviour. Its use is not as common as knowledge and awareness about it as a contraceptive method indicative of the findings of Askew et al., 2015. Nonetheless studies in northern Ghana have found it be used predominantly by young

adolescent girls, closely followed by pills, injectables and calendar methods. Percentage-wise, it is 14.4%, 12.8%, 12.2% and 10% respectively (Abdulai, 2015). Methods like the intra uterine device and implants are less prevalent among adolescents and women of reproductive age (Abdulai, 2015). She reported however, that some girls think condoms are expensive and as well some are easy to break especially those that are relatively cheap to buy. This suggests cost-related issues affect attitudes towards contraceptive methods.

In addition, even though the government of Ghana made an attempt to introduce what it termed as comprehensive sexuality education targeting attitudes and orientation similar to efforts of the government of the federal republic of Nigeria, it saw a massive resistance from faith-based organisations and a wider section of the stakeholder community in Ghana. The agitations were much exacerbated by poor stakeholder engagement from the onset and probably the view such groups and institutions that having sexuality and HIV training supports kids and youngsters to explore different avenues regarding sexual actions and inactions (UNESCO, 2010). Not overlooking their fears that such activities might be at the beheads of people and groups promoting Lesbianism Gay, Bisexual and Transgender (LGBT) rights. These fears may not be farfetched and may need further study to measure the actual effect of such interventions on the sex and sexuality of young people. The socio-cultural, religious and stakeholder contexts bring about young people purportedly being deficiently educated about sexuality matters, as they depend on their peers for information and often are presented with off base information and myths as communicated in attitudinal terms (Ahlberg et al., 2001).

The findings of the study undertaken by Askew *et al.,* (2003) in Ghana suggests the need to increase strides to inform and teach youths living in the ghettos about mindfulness and solid

attitudes towards sexuality, the need to postpone the initiation of sexual activity and to reduce dangerous sexual practices. The study identified early sexual practice by young adolescent girls as a major issue. It recommends that young adolescent girls ought to be focused on the right information on sexuality when they are still fairly youthful, and particularly before sexual maturation. Additionally, endeavors ought to be heightened to expand access to a more extensive blend of contraceptives for sexually dynamic teenagers for the prevention and control of HIV and AIDS specifically, STIs generally and undesirable pregnancy. Such projects need to consider restricted access to services and resources among urban ghetto residents (Askew & Berer, 2003). to gauge young ladies' attitudes towards SRH issues, a number of articulations which evoked true or false reactions were asked. The outcomes demonstrated, almost three-quarters of the juveniles (64%) concurred that a lady can get pregnant the first occasion when she has sex while a similar proportion disagreed.

2.4.1 Behaviours of Adolescent Girls on Sexual Reproductive Health

It is reported on a study relative to behaviour that 33% of the young people had ever had sex with no critical contrast among male and female respondents (32% and 34% individually; p = 0.47). The extent of juvenile ladies in the finding that had ever had sex is like that of young adult ladies aged 15-19 years in the 2008 GDHS report stated at 37% (GSS et al., 2009). The median age from the outset of sex among teenagers in the investigation was 15 years among guys and 16 years among females. The median age from the outset sex among young ladies in the study was likewise that of juvenile young ladies aged 15-19 years in the 2008 GDHS (16 years)(GDHS, 2008).

Teenagers are youngsters between the age of 10 and 19 years, and they are made up of about a fifth of the world's population (WHO, 2010). Puberty is viewed as when youngsters participate in increased risk-taking conducts that opens them to numerous health challenges (NMADU, 2017). In the overall viewpoint, the highest paces of STIs happen among 20 - 24 year-olds, trailed by 15 - 19 year-olds (Johnson et al., 2014). From a projected 22 million risky abortions happening yearly, 15% happen among young ladies aged 15 - 19 years (WHO, 2011). In non-developed nations, the greater part of new instances of Human Immunodeficiency Virus (HIV) diseases is among youngsters aged 15 - 24 years (WHO, 2015). Besides, STD rates have been believed to be the highest in Africa with sub-Saharan Africa (SSA) having 110 million new cases for every year (WHO, 2 0 11).

2.4.2 Reproductive Health Choices among Ghanaian Young adolescent girls

There is lack of information on RH decisions of Ghanaian young adolescent girls. (Afenyadu *et al*., 2005) completed an investigation among 398 young people drawn from middle school (JHS) and senior secondary school (SHS) at Dodowa, Ghana. The outcomes demonstrated that, early sex by young ladies was very common. Around 9 of every 10 (88%) of all sexually experienced young ladies were rarely hitched to a legal husband. Around 33% of the sexually active young ladies and 13% of the sexually dynamic guys demonstrated that, they had intercourse for monetary reward.

Multiple times more male young people than females detailed having multiple sexual partners over the previous years. The outcomes likewise uncovered that, unprotected sex was a common practice. Once more, among the 195 sexually active juvenile respondents, 41% didn't utilize a condom, 34% didn't utilize any modern contraceptive (for example vaginal

foaming tablets, pills, condom, IUD, injectables, Norplant) and 30% didn't utilize any FP technique whatsoever during their last sexual experience. The condom was the preventative technique known to most teenagers.

With respect to juvenile pregnancy, 19% of 195 sexually active female young ladies had a youngster. Despite the fact that 19% of the sexually active young female showed that they had a baby, 29% demonstrated they had ever been pregnant, proposing that a few pregnancies didn't advance to birth. Nearly 10% of all SHS females showed they had ever been pregnant. Another study in Ghana uncovered that four out of 10 Ghanaian ladies and two out of 10 men aged 15 - 19 years have ever had intercourse. By age 20 years, 83% of ladies and 56% of men have engaged in sexual relations; the middle age from the outset intercourse is 17.4 for ladies and 19.5 for men. Among the individuals who have had intercourse, four of every 10 ladies and six out of 10 men matured 12 - 24 have had more than one sexual accomplice (DHHS, 2007).

2.4.2.1 Healthy Sexuality among Adolescent Girls

Sound sexuality ought to incorporate the idea of volition and educated choice (Tsui et al., 1997.). Sound sexuality is an essential segment of RH and a reproductive right for young people. Notwithstanding, this reproductive objective is farfetched from achieving in numerous nations, particularly in non-developed nations. This is on the grounds that sex before marriage is progressively reported among young people and some discoveries have learnt credence to this. Pachauri *et al.* (2002) conducted an investigation in Bangladesh and discovered high rates of early sexual activity among teenagers in rural territories. It found that 38% of unmarried guys and 6% of unmarried females were sexually active by age 18. A

similar report (in Bangladesh) additionally uncovered that 14% of wedded and 11% of unmarried juvenile guys announced early sexual action.

In another investigation in the District of Nepal, it was demonstrated that, one of every ten rural unmarried individuals in the ages 15 - 19 years reported having indulged in sexual activity. Also, a study in Vietnam among rural unmarried students (17 - 24 years) contended that 15% of youngsters and 2% of young ladies reported sexual encounters. Once more, 20% of youngsters and 6% of young ladies had encountered sex in Indonesia. In addition, they interviewed students on premarital sexual conducts among guys in India (Pachauri & Santhya, 2002). The study called attention to that, the vast majority of young men and young ladies engaged in unprotected sex even with business bound sex workers.

Another finding in Sri Lanka found that, less than one of every five sexually active unmarried youths utilised contraceptives. In a follow-up study including youth (13 - 22 years) in six regions in Vietnam, indicated that 41% of unmarried sexually active guys announced utilising present-day contraceptive procedures.

2.4.2.2 Young adolescent girls, Contraceptive Use and Barriers

Among sexually active youth, contraceptive use lessens the number of incidental pregnancies. Notwithstanding, before utilising a prophylactic, youth should initially know about various techniques. An examination has reported among unmarried young adolescent girls, that current prophylactic use goes from 21% to 64%; for the wedded, the range is significantly more extensive, that are 6% to 67%. Rates having un-catered need range from 34% to 67% for the unmarried and 7% to 62% for the wedded (Woog *et al*., 2015;Chandra-Mouli et al., 2014).

The low pregnancy preventative technique use among youths has frequently been ascribed to socio-social hindrances. One of such unmistakable boundaries has been accounted for as the conventional office based delivery of RH services. Young adolescent girls in numerous spots are reluctant to visit outlets providing contraception since they see them as non-confiding. In many nations, laws and regulations confine the provision of contraception to unmarried young people or those under a specific age. This has additionally been accounted for as a boundary (Origanje et al.,2009). This is the case particularly in nations that the Islamic faith is predominant.

Furthermore, the prevailing difficulty may forestall the utilization of contraceptives by youths. In numerous places young adolescent girls are under duress to conceive and bear kids not long after marriage. Contraception is viewed as simply after a first youngster is conceived (Osei, Mayhew, Biekro, & Collumbien, 2014). An investigation in the Northern Sector of Ghana uncovered that ladies particularly the individuals who had never conceived an offspring were apparently encouraged to stop from contraceptive use as it could prompt fruitlessness as regards attempts at conception (Tabong & Adongo, 2013).

Traditions and thought patterns like these have been related to the low pregnancy preventative technique use among youths particularly in the northern region of Ghana. A few specialists contend that RH services are given mostly by the Nigerian government through maternal and child wellbeing programmes (NMADU, 2017). This assertion may well remain constant for the overall circumstance in sub-Saharan Africa. These services are normally not focused on the needs of teenagers and there are likewise issues of insufficient knowledge among health service providers with respect to ASRH services. Young adult lenient RHS has been to a great extent lacking in nations in the sub-region, particularly in rural areas (WHO,

2011). Insights showed RHS inclusion rates are low, new HIV infection rates are high, contraception use low and pregnancy rates are high among youths in the sub-Saharan Africa area and west Africa specifically (Sedgh et al., 2009; UNFPA, 2013).

Unmistakably, young ladies need SRHS, and access to required services is fundamental in forestalling unfavorable sexual and RH outcomes. It is additionally important for shielding people in the future from negative wellbeing outcomes (NMADU, 2017). Instances of success effective youth-accommodating assistance (YFS) execution programmes in Africa that have demonstrated expanded usage, interest for and utilization of such youth-accommodating services include: the National Adolescent-Friendly Clinic Initiative in South Africa (Ashton, Dickson, & Pleaner, 2009); the Youth-Friendly Service Component of the African Youth Alliance (AYA) venture (Daniels, 2007) and the Innovate Youth-Friendly activity in Ghana (Moya, 2002). Spare to state, further factors influencing ASRH service access and usage among young adolescent girls in apprenticeship training is imperative to improve ASRH service use and consequently decrease the weight of juvenile infection, handicapping and other negative results related with ASRH.

2.5 Factors Affecting Reproductive Health Choices of Young adolescent girls

Between 1969 and now a lot has happened with respect to contraceptives and contraceptive use, there has been an unmatched scale in the production and dispensation of contraceptive methods but challenges with accessibility lingers. “Notwithstanding the expanding accessibility of contraceptives throughout the long term, countless ladies today actually have no access to them and to the reproductive decisions that accompany them. Without access, they do not have the ability to settle on choices about their own bodies, including whether or

when to get pregnant. The absence of this power which impacts so numerous different facets of life, from training to income to safety leaves ladies unable to shape their own prospects" (UNFPA, 2019).

2.5.1 Socio-Demographic Characteristics and Reproductive Health Choices

In discussing reproductive health choices, the demographic element is a matter of serious emphasis as it brings to bare at what time an individual probably becomes sexually active. There is a study that indicates that, most people become sexually active during youthfulness (Glasier et al., 2006). Ongoing proof from the Demographic and Health Surveys and the AIDS Indicators Surveys demonstrated that median age from the outset of sex among 20 - 24 year old ladies goes from a low of 16 years or younger youthful in Chad, Mali and Mozambique to a high of 19.6 in Senegal (Khan *et al*., 2008). Generally speaking, the median age in the remainder of Sub-Saharan Africa is about 18.5 years. Among youngsters of a similar age-batch in Sub-Saharan Africa, the median age from the outset of sex goes from a low of 16.9 in Mozambique to a high of 19.6 in Ghana.

Contraceptive use by young adolescent girls has been seen to be impacted by different elements, including, financial status, information about contraceptives, mentalities about issues identified with contraceptives, residential area, educational status, counseling received about contraceptives, perspectives of contraceptive suppliers, socio-cultural beliefs and convictions (Kanku et al., 2014). Contraceptive usage increases with the advancement in education and is profoundly critical with secondary and advanced education than with primary instruction. This is halfway clarified by the way secondary education permits a lady to remain in school longer along these lines decreasing the danger of presentation to

marriage. Educated ladies are additionally bound to acquire extra income, comprehend their physiology and social necessities, and embrace proper contraceptive health conducts (Khan et al., 2007; Ojakaa, 2008) preceding marriage.

2.5.2 Factors Influencing Access to and Utilisation of Adolescent Reproductive Health Services

A series of multifaceted issues preclude good SRH for young ladies. Sexual and contraceptive practices are represented by complex social, financial, social and psychosocial factors (*WHO, 2 0 11*). The accessibility of the RHS and their strategies for use somewhat determined youthful women's access to the services (Hock-Long et al., 2003). As indicated by Cohen (2002), young ladies living in non-developed nations where health services are not many or in any event, lacking face greater prominent difficulties getting RHS (Awusabo-Asare et al.,2004). With the end goal of this literature review, the elements that influence youthful women's usage of RHS are ordered into three primary categorizations: individual, social and health system factors as written extensively on by writers such as Biddlecom et al., (2008), Mbeba et al., 2012, and Kabiru et al., (2013).

2.5.2.1 Individual Factors

On an individual level, humiliation in looking for RHS has been accounted for in different studies as obstructions to juvenile's access to RHS (UNDPA, 2015; Regmi, van Teijlingen, Simkhada, & Acharya, 2010). Timidity was the most regularly announced explanation among juvenile young men (69%) and the second commonest purpose behind juvenile ladies for not accessing RHS in an examination conducted in Nepal (UNFPA, 2015). This included

hesitance to talk about delicate issues identified with SRH and the humiliation related with physical/genital assessment especially if there was just a supplier of a method is known to be a member of the other gender or if the supplier was somebody known to the family the service utilising young woman. Studies have written about the inclination of young ladies see health suppliers of similar sex presence as an obstruction to the usage of services (Ghafari, Shamsuddin, & Amiri, 2014; Newton-Levinson, Leichliter, & Chandra-Mouli, 2016). For instance, an investigation in Malawi revealed young ladies not getting services since they had issues with disclosing genital issues to a supplier of gender (Munthali, Zakeyo, & Bsoc, 2011).

2.5.2.2 Social Factors

A portion of factors at the social level known to dissuade girls from the use of RHS incorporate sex tied inequity and monetary dependence (UNDPA, 2007). Young ladies and women in general often experience the ill effects of conceptive infirmity which influences their health in a negative way, because of curious gendered boundaries to getting access to RH and medical care (Abdulai, 2015). With respect to sex imbalance, in numerous nations around the globe, ladies and young ladies have still been found to have lower status, less chances and lower pay, less command over assets and less force than men and young men. These sex roles may debilitate the young ladies' capacity to ensure to themselves an even and equitable access services they need (Woog et al., 2015). Young adolescent girls are customarily expected to be submissive so they lack autonomy and ability to make decisions on SRH issues and this builds weakness which has been found to restrict their access to RH information, services and contraceptives (Mbeba et al., 2012; Morris & Rushwan, 2015).

2.5.2.3 Health System Factors

In many developing nations, giving general access to sexual and RH care for youths is beyond the health frameworks' ability. At times even where the care facilities exist, there isn't sufficient trained staff willing and able to offer the required types of assistance and supplies of medications and contraceptives are restricted (Woog et al, 2015). Chronic weaknesses in health care delivery frameworks with frail foundation for sexual and RH, poor communication and transport systems can make access to services in rustic areas especially troublesome (Kabiru et al., 2013). For instance, in Nigeria a primary obstruction to giving sufficient and far reaching ARHS has been the absence of arrangement of satisfactory resources as same can be referenced about Ghana (funding, faculty and personnel, infrastructure and supplies) particularly at the sub-public level for execution of the ICPD-adjusted approaches, programmes and administrations (Mandara, 2012; USAID, 2010).

There is the contention that the main obstruction to RHS care is the disposition of health professionals (Morris & Rushwan, 2015). Many young people are deterred from utilising services due to critical attitudes of health professionals and their lack of of keeping information as classified as it ought to be. Investigations of the attitudes of health workers to juvenile service seekers on SRH issues in Kenya and Zambia is not a palatable narrative (Warenius *et al.,* 2006), Swaziland and Uganda gives similar indications as health workers are confirmed to exhibit disapproval of adolescent sexual activity, including contraception and abortion. (Mngadi et al., 2003)

Health workers practices can likewise essentially ruin young people's use of RHS. Services should be furnished in a young neighborly climate with health professionals that are inviting

and demonstrate strong professional commitment towards youths looking for care (Jonas et al., 2018). It is crystal clear that interventions which aim to deal with the negative attitudes of professional workers are likely to improve adolescents' RHS utilisation (Jonas et al., 2018).

2.6 Consequences of Wrong Reproductive Choices

Certainly, there has been and continue to be serious effects and negative consequences associated with wrong choices with respect to adolescent reproductive health. A portion of the consequence of unwise RH decisions include exposure to getting HIV and AIDS and other sexually transmitted diseases (STDs), unintended pregnancies, premature births and maternal entanglements thereof (Rani & Lule, 2004).

Adolescents bear the risk of more vulnerability to STIs and HIV/AIDS because they indulge in multiple short-term relationships and practice unsafe sex. Unplanned pregnancies will often be terminated through unsafe methods. Adolescents are predisposed to complications of abortion because they delay in seeking help as a result of fear of social sanctions, ignorance, and high cost of medical services. Available records indicate that about two hundred and nineteen adolescent girls aged 15-19years had undergone an abortion in the Tamale metropolis alone between 2018 and 2019 (GHS- DHIMS2, 2020). Reference is made to appendix 4.

The complication of premature birth can be separated into early inconveniences and late complications. Difficulties from pregnancy and labor are the main source of death in young ladies aged 15 - 19 years in Low and Middle Income Countries (LMIC) where practically the entirety of the estimated 3 million dangerous premature births in each year happen (Lopez,

Hiller & Grimes, 2010). This thusly has ramifications in Ghana accomplishing MDG 5 at the end of 2015 (UNDP, 2005) and be changed from MDG to SDG (Sustainable Development Goals). These youths, who are the future leaders and human assets, end up as school dropout because of pregnancy and its intricacies. Those unlucky often end-up losing their lives because of the adventurous but unhealthy methods of ending the pregnancy, for example, addition of sticks, ingestion of herbs, concoctions, and placement of synthetic substances and herbal solutions into their vagina or uterus (Bernstern *et al.,2006).*

Unintended pregnancy had been a significant reason for exiting school pre-maturely and for that matter subsequently restricting their education, economic chances and career decisions for both male and female teenagers (Okereke, 2010). Those that conceive an offspring often cannot cater enough for them, bringing about an endless loop of neediness. Additionally, offspring of young adult guardians may end-up in the cities as juvenile deadbeats which lead to extreme monetary burden on the country. A prior examination has uncovered that girls of young mothers are bound to become teen mothers in future while their male children have a significant likelihood of police detainment as grown-ups (CPO, 1992).

The adolescent is especially are in danger for STIs, among which HIV and AIDS, whose incidence has been on the expansion spree in Ghana since 2000, after appearing to decrease in the last part of the nineties. HIV and AIDS predominance rate expanded from 2.3% in 2000 to 3.6% in 2003 between15-24 years of age groups (GSS, 2003). The highest average for HIV predominance was recorded in the 25-29 years of age group (4.5%), while the mean pervasiveness in the 15-19 years bunch was 2.0% and in the 15-24 years bunch was 2.5% (Martin-Odoom, 2014) and (Akwei-Addo, 2004). Considering the delays in terms of periods of HIV and AIDS infection and indication, it relates that countless diseases happen during

youth. Consequently, great RH decisions are imperative to enhance the negative impacts of undesirable decisions.

2.7 Approaches to Improve Access and Utilisation of Adolescent and Sexual Reproductive Health Services

Ways to deal with improving ARHS utilization adopted universally is to incorporate school-based wellbeing services, activities tending to the accessibility of more viable techniques for contraceptives, production of viable young adult pregnancy and STD counteraction methodologies, and foundation of youth-friendly juvenile centers (Hock-Long et al., 2003). An efficient audit of interventions that expanded utilization of RHS in developing nations incorporated those that gave training to specialist organizations and helped advance the services with teenagers and gatekeepers in communities (Ashton et al., 2009). Other intercessions that have been found to help noteworthy access to and usage of RHS by youths incorporates those that explicitly work to change the basic standards and perspectives that sustain health outcomes for young people (Ashton et al., 2009; NMADU, 2017). Mass communications activities and information, instruction and correspondence systems are likewise interventions that have been utilised to improve access and usage of ARHS in low-pay nations (Denno, Hoopes, & Chandra-Mouli, 2015).

2.7.1 Youth-Friendly Services (YFS)

Youth-congenial products are often designed to make the use of existing RHS more acceptable and appealing to young people. Based on years of research and expert consultations, the WHO (2009) identified five key dimensions of YFS: Equitable, accessible,

acceptable, appropriate and effective services and products. The WHO found that ASRH interventions could increase young peoples' utilisation of services provided that the service providers were trained, health facilities were juvenile-friendly, demand is built and community support is attained through actions like extensive community mobilisation and targeting of key stakeholders (Hryshchenko, 2010).

In conclusion, in analysing of the related studies on adolescent reproductive health choices, it appears most of them were done outside Ghana. Mostly, these studies were done in Asia. One important obstacle to this is the fact that, most of these findings cannot be generalized to a large extent in Ghana. This is so because sexual behaviour or reproductive health choices are influenced by socio-cultural undertones. Therefore, what is reinforcing in one culture may not be reinforcing in another. Different cultures tend to have different values, marriage practices, birth control methods and even social conditions that push people into early sexual activities. A few studies have focused on adolescents in southern Ghana. This therefore makes this study very relevant in northern Ghana. Attached herein figure 1 is the conceptual framework of the study.

2.8 Conceptual Framework

The study is modeled around the theory of planned behaviour. It references a great deal of relationship between intent, attitudes and behaviour. While intentions are heavily predicted by knowledge and information, behaviour on the other hand is thought to be predicated by attitudes. Notwithstanding, the exact nature of these relations is still uncertain (Ajzen, 1991). The model however, has a limitation of not factoring socio-demographic variables in to modeling, in an attempt to in part deal with this limitation, the study herein under taken takes

into consideration not only attitudes but also socio-demographic factors in unearthing behavioural outcomes (Wayne, 2019). So it draws a cyclical relationship instead of the linear relationship the theory of planned behaviour illustrates. It baseline is from socio-demographic factors to knowledge, attitudes, and behaviours which intend influenced by socio-demographic factors.

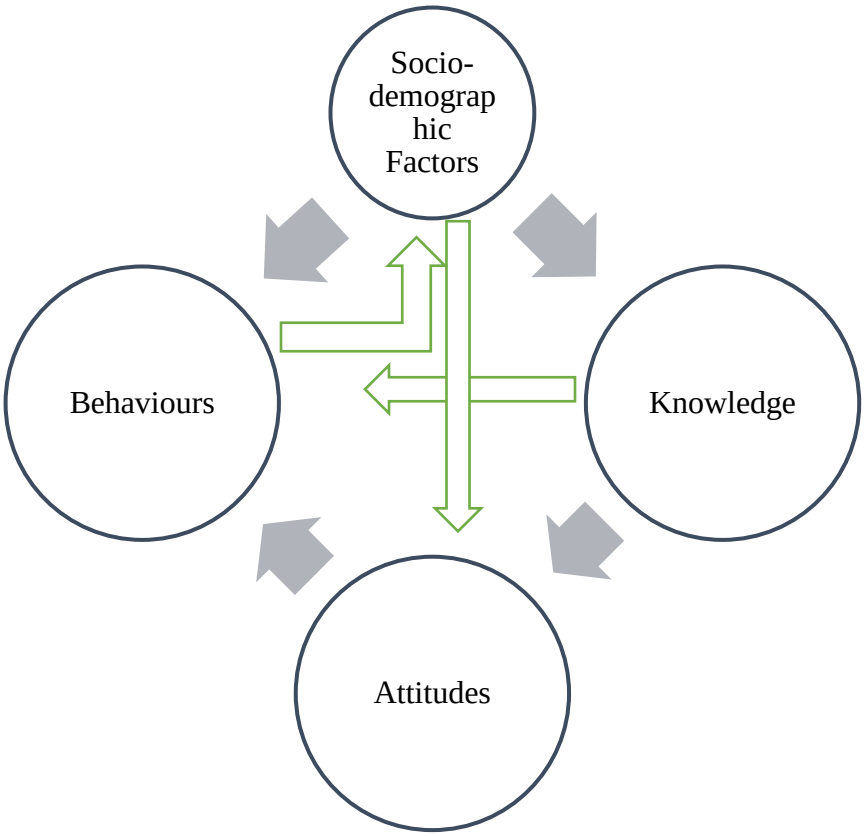

Figure 2. 1: Conceptual Framework

CHAPTER THREE

METHODOLOGY

3.1 Introduction

In the ensuing paragraphs, instruments and procedures used to conduct the study are discussed. These include the study area, research design, population, methodological approaches, sample and sampling procedures, research instruments, quality assurance instruments, data collection procedures as well as data analysis plan.

3.2 Study Area

The research setting was Tamale Metropolis. In this study, data was collected in the Tamale Metropolis mainly from apprenticeship shops in the Tamale central, central market and Aboabo zones. The Tamale Metropolitan Assembly was established by a legislative instrument (LI 2068) which elevated it from the then Municipal Assembly into a Metropolitan Assembly in the year 2004. At present, it is one of the six Metropolitan Assemblies in the country and the only one in the five regions of the North namely: Upper East, Upper West, North East, Savannah and Northern regions. It has Tamale as the Metropolitan capital city and at the same time the regional capital of the Northern Region. It is a cosmopolitan community with several adjourning villages as seen in Figure 2.

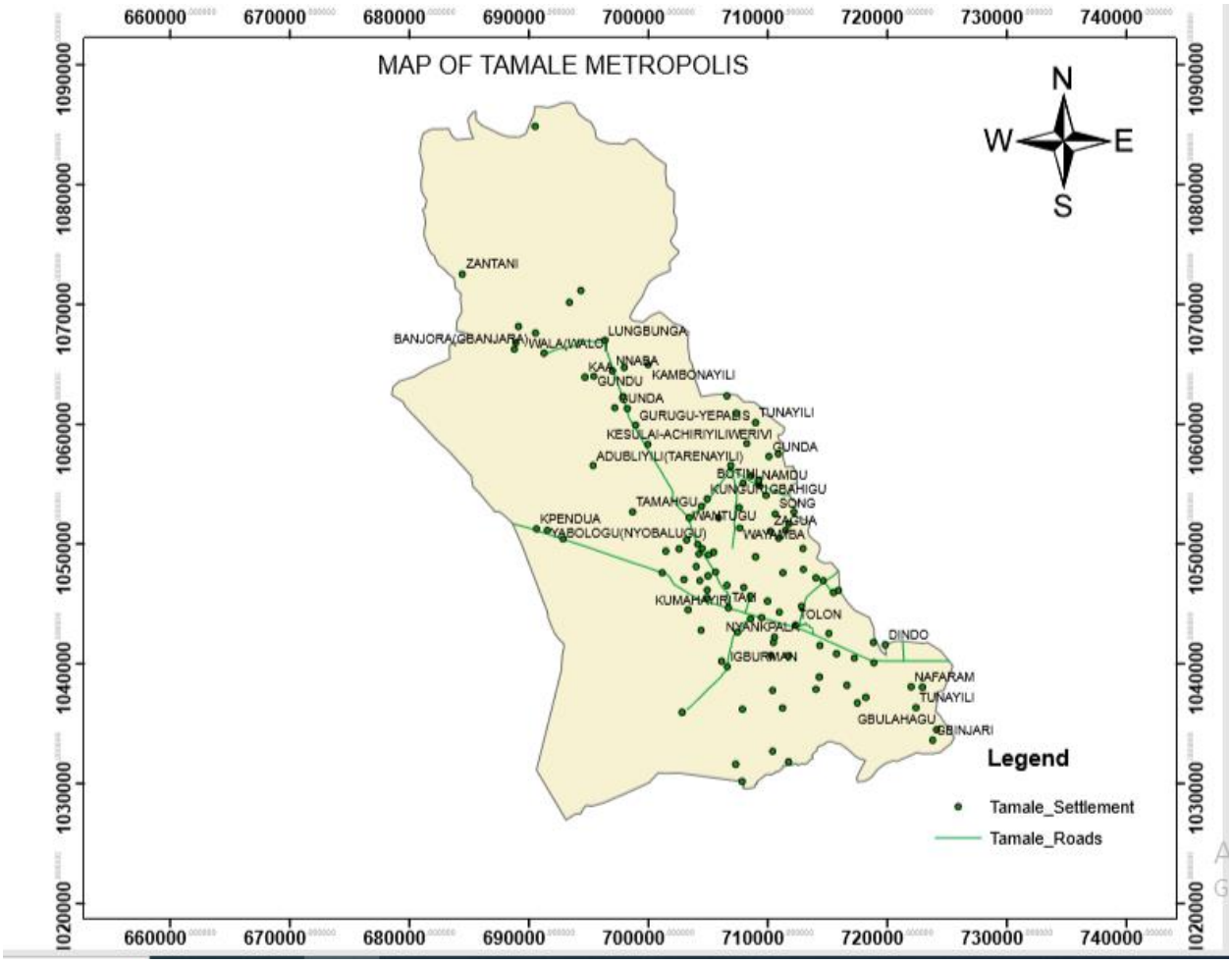

Figure 3.1: Map of Tamale Metropolis (Source: Field Survey, 2020)

3.3 Location, Size and Physical Features

The Tamale Metropolis is one of the 15 administrative Districts in the Northern Region. It is located in the central part of the Region and shares boundaries with the Sagnarigu District to the west and north, Mion District to the east, East Gonja to the south and Central Gonja to the south-west (GSS, 2010). The TaMA is located within latitudes 9°16′N and 9°34′N and longitudes 0°34′W and 0°57′W. It covers a total area of 922 km^2 (Fuseini *et al.*, 2014).

3.4 Study Design

The study design that was used for the study is a cross-sectional descriptive study. A cross-sectional method is carried out to obtain information that exists at that particular time (Creswell, 2009). In essence, it is a snapshot of the current state of a phenomenon of interest. This design was used to obtain information concerning the current situation of the issue being studied which is about reproductive health choices among young adolescent girls in the Tamale Metropolis. The design has the advantage of not typically requiring complex statistical analysis. Data analysis may simply consist of determining the frequencies and percentages for the major variables in the study. On the other hand, it also has some disadvantages such as the unwillingness of some respondents to come out with the true information required because they may find it to be too sensitive or otherwise, thus possibly weakening the final outcome of the study. In spite of these disadvantages, the design was considered the most appropriate for engaging in the current study. The study probed into the reproductive health choices of young adolescent girls in general and in particular adolescent girls in apprenticeship training in the Tamale Metropolis of the northern region of Ghana. The research acknowledging the inherent weaknesses tried to put in some control mechanisms such as assuring respondents of confidentiality with which the information given by them would be treated, controlling potential selection biases among others. Also quality assurance was done by conducting a pilot test to correct possible errors of data collection instruments and readjust for noticeable gaps. Questions that were found repetitive were eliminated after the pretest. This saw the total number of questions reduce from 57 to 33. A couple of others were reframed.

3.5 Study Type

The study type used was a mixed method. Mixed Research Method is relatively new and still under development (Creswell, 2003). A mixed method combines quantitative and qualitative methods in the same study in order to get a full understanding of the phenomenon under study. Thus a mixed research method usually results in profounder research due to its "methodological pluralism or eclecticism" (Johnson & Onwuegbuzie, 2004, p. 14). Creswell (2013) opines that mixed research methods are quite new and developing in the health and social sciences, and involves combining both statistical trends and stories to study human and social problems. The main assumption is that when an inquirer combines both quantitative and qualitative methods, it provides a better understanding of the problem than using either method alone. In Creswell (2003) this research method is likened to pragmatism and it is stressed that "mixed methods researchers look to many approaches to collecting and analysing data rather than subscribing to only one way using both quantitative and qualitative data in order to provide the best understanding of a research problem." (Creswell, 2003, p. 12). Mixed methods research, therefore, can be very useful in getting a deep understanding of any research. However, given that mixed research method requires more time and effort than either of qualitative or quantitative methods, it is imperative that this method be used only for that research in which a profound understanding of the phenomenon is of great importance to the researcher. The research gathered data largely from apprenticeship shops through responses to questionnaire, interviews and focused group discussions (FDGs).

3.6 Study Population

The study population for this study was young adolescent girls in the Tamale metropolis particularly those in apprenticeship training centers. The units included all apprenticeship shops in the Tamale central business district and Tamale central. This category of young adolescent girls were considered largely because most studies in this area focused mostly on in-school young girls and this data was set to draw data on reproductive attitudes and behaviours of out of school young adolescent girls currently in apprenticeship training. The estimated population stood at about 2,500 averaging 10 per shop considering 250 shops.

3.7 Inclusion Criteria and Exclusion Criteria

All young adolescent girls between 15-25 years of age at visiting shops were considered for the study. Besides, adolescent girls who were pregnant at the time of the study were purposively selected if even they missed the opportunity of systematic sampling. An adolescent by WHO standard is one between 15-19 years in age. Young adolescent girls above age 26 were not to be captured in the study even if they were in an apprenticeship training center picked through the systematic random sampling for the study.

3.8 Sample Size Determination

The research area was put into clusters. There were about twelve clusters (zones) with over 250 shops. The Tamale central zones, the central business district (Central market, Aboabu market and Tishigu zones) were purposively targeted for sampling. A minimum of one center each was considered from all these four zones and altogether 63 apprenticeship centers were

picked for the study as per records. An estimated sample size of 303 was drawn using Modified Epi-Info version 7 sampling method with 34% prevalence rate of contraceptive use among married women in Ghana. It was held at 95% confidence interval with a 5% margin of error and at a design effect of 1.0 and approximately 10% non-response rate.

3.7 Sampling Technique

Participants were put into clusters based on areas and shops. There were about twelve clusters (zones) with over 250 shops. The Tamale central zones, the central business district (Central market, Aboabu market and Tishigu zones) were purposively targeted for sampling. A minimum of one center each was considered from all these four zones and altogether 63 apprenticeship centers were picked for the study as per records. However, a systematic random probability sampling was used to select shops. As such every first (1st) of three (3) shops in an area was selected for the study. Girls in the various shops were again picked using systematic random sampling but in cases where there were pregnant adolescents at a particular shop, those girls were purposively selected to participate in the study precisely to cater for the qualitative aspect of the study. Purposive sampling is a non-probability sampling procedure where subjects are selected because of their special relationship to the objectives of the study. Like convenience sampling, accessibility and proximity to the researcher may well be part of the considerations (Salkind, 2005). In terms of systematic random sampling, all eligible participants were given random numbers and sorted in ascending order by the random numbers in each of the shops visited. All odd numbers were then selected to answer questionnaire in respect of quantitative processes and for interviews as regards qualitative data gathering. Dagbanli and English were the research languages to cater for both semi-literate and uneducated young adolescent girls.

3.8 Data Collection Tools

A semi-structured questionnaire was designed to gather information on reproductive health choices among young adolescent girls. The questionnaire was divided into five (5) sections that is sections A, B, C, D and E. Section "A" covered information on socio-demographic characteristics. Section "B" covered information on awareness and knowledge of reproductive health choices as well examine the sources of information of girls on matters relating to it, Section "C" is recall questions on attitudes of girls on matters of sex and reproductive related choices. Section "D" looks at behaviour of girls relative to reproductive health and Section "E" on availability and accessibility of reproductive health services especially with respect to established structures for health services delivery. Interview guide was also used for observational interviews during focused group discussions. In all three focused group discussions were conducted within the Tamale metropolis.

3.8.1 Dependent and Independent Variables-under sampling

Independent variables (IV) were socio-demographic characteristics, knowledge, attitudes, availability and accessibility of reproductive health services. Dependent variable (DV) was behaviours on reproductive health choices. The study was not only interested in examining relationship between availability and accessibility of reproductive services and sexual attitudes of adolescent girls but also taking pregnancy and abortion history of participants to precisely measure association between choices and outcomes.

3.9 Data Collection

Data assistance were assigned to specific mapped routs including Lamashegu, Tishigu, Central market and Vittin zones. The instruments were administered to each of the participants through a face to face interviewer by either an English or Dagbani language. Those who could read and write were given the questionnaire to provide responses. Responses from each respondent was entered offline on the cobocollect data app and sunk into kobocollect hosting link by data entry assistants at the end of each working day. As administrator to the platform, entries were inspected and appropriate feedback provided to serve as guidance going forward. The FDGs were conducted by the principal researcher, one during a meeting of shop owners and two others involving apprentices in Vittin and Ataesibi. They were first given covid-19 prevention education and later introduced into the subject matter for the respective gatherings.

3.10 Quality Assurance

To ensure quality, validity and reliability, data collectors recruited to assist in the collection of data were trained. All three data assistants had backgrounds in health with two of them being midwives under training; this was to ensure that they stayed on course and asked content-driven questions. Pre-testing was done at the “Catering Department of the Intermediate Programme of Tamale Technical University” in the Sagnarigu Municipality where 17 student girls were interviewed to test the workability of questions; it saw questions reduce from the initial 57 to 33 owing to how some of the questions appeared repetitive with the kind of responses they elicited from participants. Supervision was a key feature all

through. Sunken responses were always cross-checked to ensure that the right entries were made, in instances where entries were wrongly done, they were asked to retake.

3.11 Data Analysis

Analyses of data were conducted using Minitab and SPSS Version 21.0 statistical software package. Socio-demographic characteristics were cross-tabulated against various themes including knowledge, attitudes and behaviours. Data from the study were analysed using both frequencies, bivariate test instruments. As part of establishing relationships between the dependent and independent variables for this this study in non-parametric terms, Chi-Squared analysis were generally used and instances where cell numbers were less than five, Fisher exact test was used. In dealing with continuous variables in particular, independent samples t-test was used as a proven parametric procedure. These tests were sufficient to establish those that were significant and those that were not in terms of association. However, considering the fact that they could not establish the level of association, a binary logistic regression was performed to determine the extent to which predictor variables influenced the response variables. Socio-demographic factors, knowledge and attitudes were all held against behaviour as the ultimate outcome variable. Qualitative data was analysed using thematic content analysis.

3.12 Ethical Considerations

Ethical clearance was requested from the ethical review board of the University for Development Studies. Informed consent was also sought from respondents before administering questions in the instrument and before conducting interviews. Permission was

sought from the Association of Fashion Designers in the Tamale Metropolis before the data collection processes started. Major issues such as religious and human rights of respondents were highly respected. Participants were assured that information collected from them will be kept confidential and continue to be used only for the purpose for which it was collected. Study participants were informed that participation was voluntary. They signed or thumb-printed if they agreed to participate in the study.

3.13 Limitations

There were some selection biases especially at locations where pregnant young adolescent girls were purposively used even if they missed the chance of being picked from systematic random sampling. Notwithstanding this fact, they had to be used for their peculiar situation as against the main theme of the study. It could also be noticed that during the focused group discussions, respondents shied away from providing answers especially on sex. Despite this, the interviewer tried to make-up for that by telling jokes to make it appear normal to talk about sex and one's experiences on that. It is therefore worth noting that these challenges, did not significantly affect the validity and reliability of the study with the kind of quality assurance measures taken and interviewing skills employed. In essence, products of the study are good enough for a time snap report of an association between the IVs and DV.

CHAPTER FOUR

RESULTS

4.1 Introduction

The study assessed the relationships between knowledge, attitudes and behaviours of young adolescent girls in apprenticeship training as well as attempted to measure girls' subjective perception of availability and accessibility of reproductive health services in line with the individual level need fulfillment. In addition, it tried to identify some common factors associated with RH behaviours of young girls. This particular chapter thus entails the presentation of results and analysis of results thereof. It is presented in response to the research questions and for that matter the research objectives and in regard to literature reviewed around the key views of the research work. That is to say the socio-demographics, knowledge, attitudes, behaviours, availability and accessibility, and considerate factors in decision making relative to reproductive health. In particular, it presents descriptive narratives, particularly, Chi-square analysis, Fisher-Exact Test for non-parametric variables on one hand and independent samples t test for parametric data sets on the other hand. Higher order analysis of variables was done using binary logistic regression. As part of establishing relationships between the dependent and independent variables for this this study, Chi-Square analysis were generally used to determine association between socio-demographics and various aspects of knowledge, attitudes and behaviours on the other hand. In instances where cell numbers were less than five, Fisher exact test was used in cross tabulating these variables. After aggregation of data on overall knowledge, attitudes and behaviours, samples t test was used to establish further associations between variables. All significant variables after this process with p-values less than 0.05 were then subjected to a binary logistic

multiple regression analysis to determine the extent to which IVs had predictive effects on DVs.

4.2 Socio-Demographic Characteristics of Young adolescent girls

4.2.1 Age Distribution of Participants

It emerged from the study that 3.9% of respondents were in ages 14 or below, 54.5% were between ages 15 to 19 and 40% were between 20 and 24 (table 2). Even though the range of age for the study was 15-25years; the distribution mean age for the participants is 19.1 ±2.8 (figure 4.1).

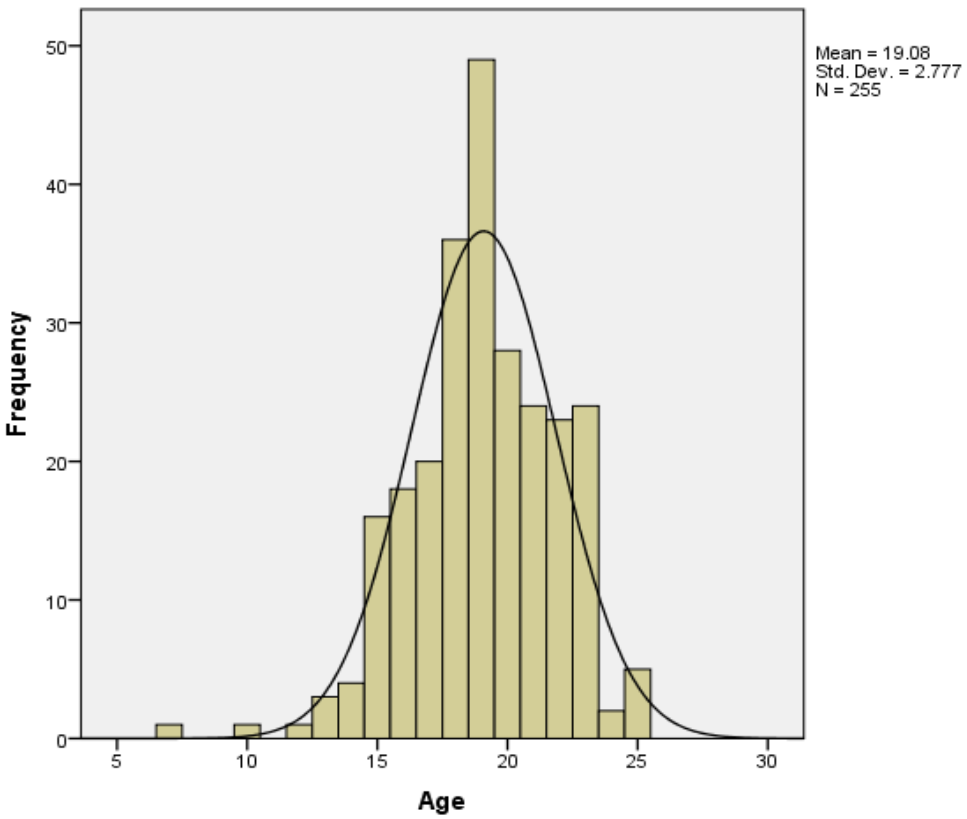

Figure 4.1: Age Distribution of Participants (Source: Field Survey, 2020)

4.2.2 Other Socio-Demographic Characteristics of Respondents

There were more Dagombas (84.7%) among the study participants. All other tribes amounted to 39 (15.3%). These other tribes included among others Dagaati, Fulani, Gonjas, Guruma, Konkomba, Kotokoli, Kusasi, Mamprusi, Mohie, and Tamplema. For the educational level of respondents, about 24.7% had no formal education at all, 21.6% had primary education, and 36.1% had junior high school education, 16.5% secondary education and 1.2% tertiary education. On religion, 96.1% of them were Muslims or belong to the Islamic faith (table 4.1).

On marriage in particular, it came that, as much as 56 (22%) were said to have been married. A 198 (77.7%) others were said not to be married (table 4.1).

Table 4. 1:Socio-Demographic Characteristics of Respondents (N□255)

Variable	Frequency	Percent (%)
Age Group in Years		
≤14	10	3.9
15-19	139	54.5
20-24	102	40
25+	4	1.6
Ethnicity		
Dagomba	216	84.7
Others	39	15.3
Level of Education		
None	63	24.7
Primary	55	21.6
JHS	92	36.1
SHS	42	16.5
Tertiary	3	1.2
Religion		
Christianity	10	3.9
Islam	245	96.1
Marital Status		
Divorced	1	0.4
Married	56	22
Never Married	198	77.6

(Source: Field Survey, 2020)

4.3 Awareness and Knowledge on Reproductive Health Choices (RHC)

This aspect addresses the question of the extent of awareness and knowledge participants have about the subject matter of the study.

4.3.1 Awareness on Sexually Transmitted Infections

On the question of whether girls had heard about sexually transmitted disease prior to the study, 214 (83.9%) answered in the affirmative and the 41 (16.1%) others said no (Table 3). On a follow-up question of what constitutes a Sexually Transmitted Infection (STI), as many

as 221 (86.7%) of respondents mentioned gonorrhea and HIV and AIDs, 13.3% others were largely un-informed on the subject matter.

4.3.2 Awareness on Condom

In a question of whether respondents had heard about or seen condom before, 228 (89.4%) asserted they had heard of it before as captured in table 4 thus far. Among the 228 who had heard about it, 51.3% of them heard from friends on the first instance, 31.6% others from media, 9.6% from partners; about 5.7% of them from school and 0.9%% others from parents as can be seen below (figure 4.2).

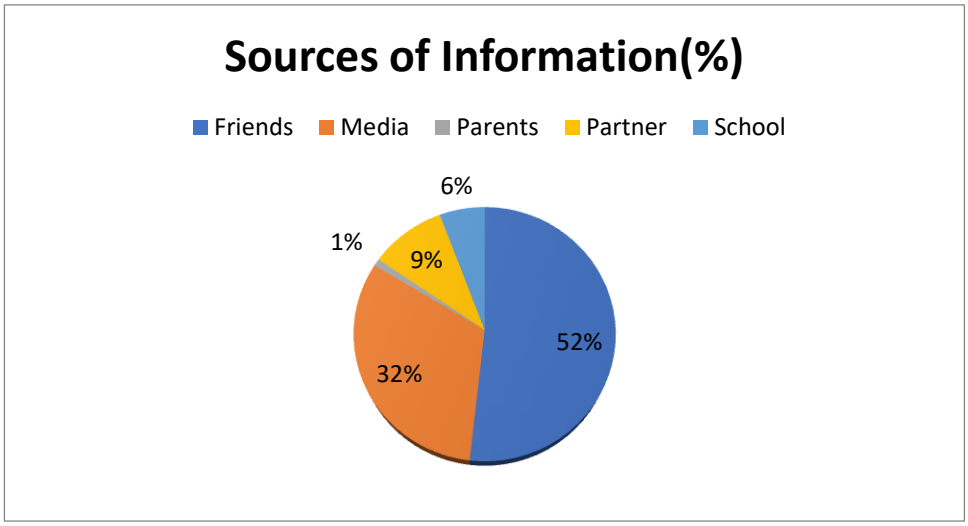

Figure 2.2: Sources of Awareness on Condom (Source: Field Survey, 2020)

4.3.3 Awareness on Contraceptive Options

The survey revealed respondents that 168 respondents altogether mentioned 14 different ways by which they think pregnancy could be prevented. These 14 different responses were so categorised into Abstinence, Natural and Modern (Artificial) Contraceptive Methods. This was to help in data handling as seen in figure 4.3.

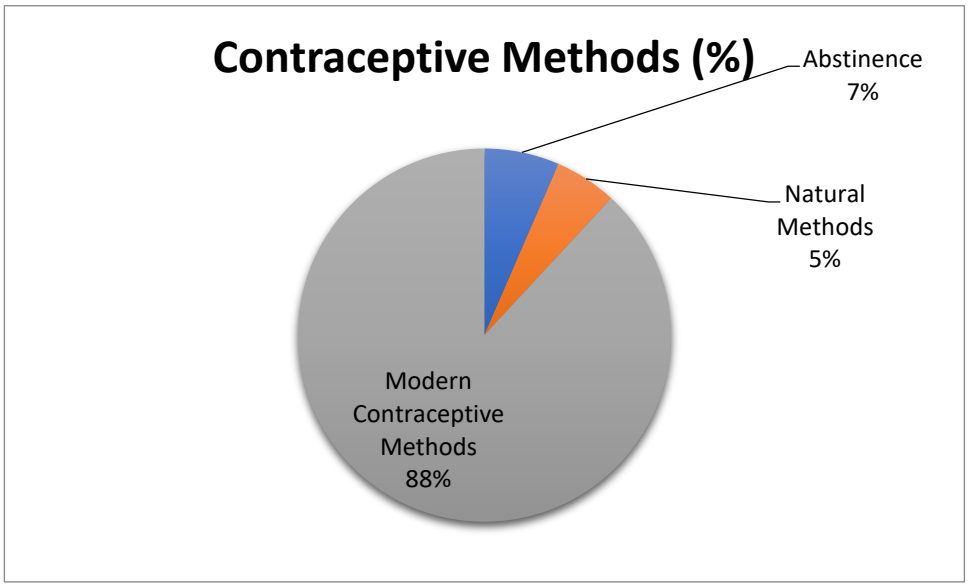

Figure 4.3: Specification of Contraceptive Awareness and Knowledge (Source: Field Survey, 2020)

4.3.4 Knowledge of Reproductive Health Choices

With respect to knowledge of what constitutes a reproductive health choice, about 78 (30.6%) of the respondents considered it as decisions girls make about their reproductive health. Some majority others 177 (69.4%) however, did not know exactly what constitutes reproductive health as can be seen in (Table 4.2).

On the matter of specific reproductive health choices presented for identification, 75 (29.4%) of respondents were able to accurately respond. About 180 (70.6%) others did not know or could not differentiate between the various options.

4.3.5 Knowledge on how to Use Contraception for Pregnancy Prevention

For contraception awareness and knowledge, the study found that 87 (34.1%) of respondents did not have any idea on how they could prevent pregnancy, 168 (65.9%) others accepted knowing how it could be done as a reference is herein made in table four ((Table 4.2) below.

4.3.6 Knowledge on Emergency Contraception

On the question of what to do after unprotected sex, 131 (51.4%) of the respondents were said not to know exactly what to do should that happen. About 124 (48.6%) of them said they will utilise emergency contraceptive pills (Table 4.2).

4.3.7 Knowledge on Abortion

With respect to knowledge of where to get abortion services, 144 (56.5%) of the respondents said they do not know where to get abortion services should the need arise. 111 (43.5%) others indicated they know where to acquire such services should the need arise as seen in item four of table 4.2 below.

Table 4.2: Awareness and Knowledge on ASRH (N□255)

Question	Yes	No
Have you heard of sexually transmitted infections?	214 (83.9%)	41(16.1%)
Have you heard of or seen condom before?	228(89.4%)	27(10.6%)
Do you know any procedure used to prevent pregnancy?	168(65.9%)	87(34.1%)
Do you know any procedure by which you can get rid of an unwanted pregnancy?	111(43.5%)	144(56.5%)
In your opinion what is a reproductive health choice?	78(30.6%)	177(69.4%)
Methods that can be used to prevent pregnancy after unprotected sex is (are)?	124(48.6%)	131(51.4%)

(Source: Field Survey, 2020)

4.3.8 Preferred Sources of Information on ASRH

On sources of preference of information relative to reproductive health, 55 (21.6%) preferred familial sources of education, for 20 (7.8%) others, their preferential sources of information on reproductive health were friends. About 82 (32.2%) others will like from health workers, 71 (27.8%) of the respondents prefer information officers on the subject matter to meet them at their shops, and 27 (10.6%) on social and mass media (figure 4.4) below.

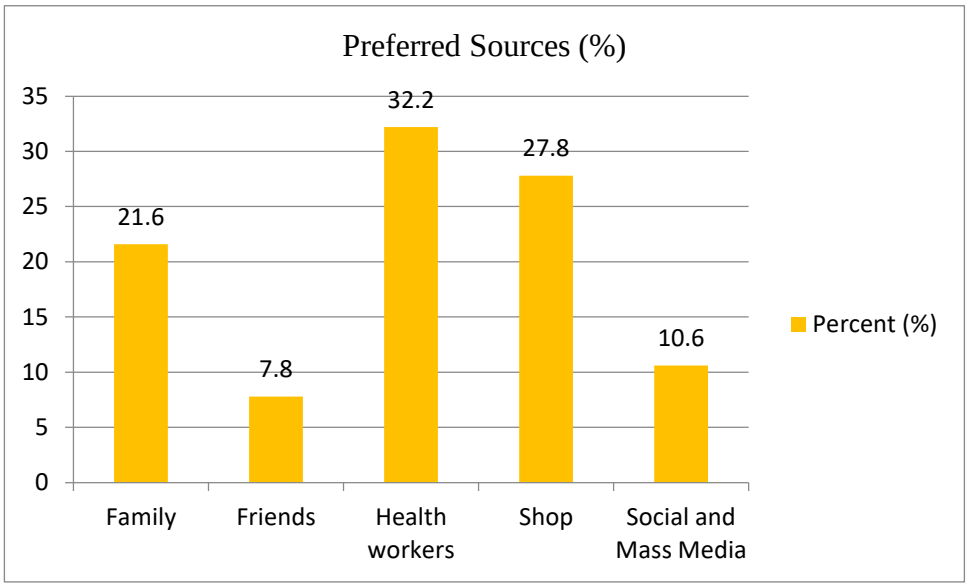

Figure 4.4: Preferred Sources of Information on ASRH (Source: Field Survey, 2020)

4.3.9 Overall Assessment of Knowledge on RH

As can be seen in figure 7, the level of knowledge was generally found to be fair as substantial number of respondents had fair knowledge and awareness of reproductive health choices in most of the variables of interest. This can be drawn from the fact that the mean level of knowledge (3.6) is some steps away from the median value of 4. Find reference herein made in figure 4.5.

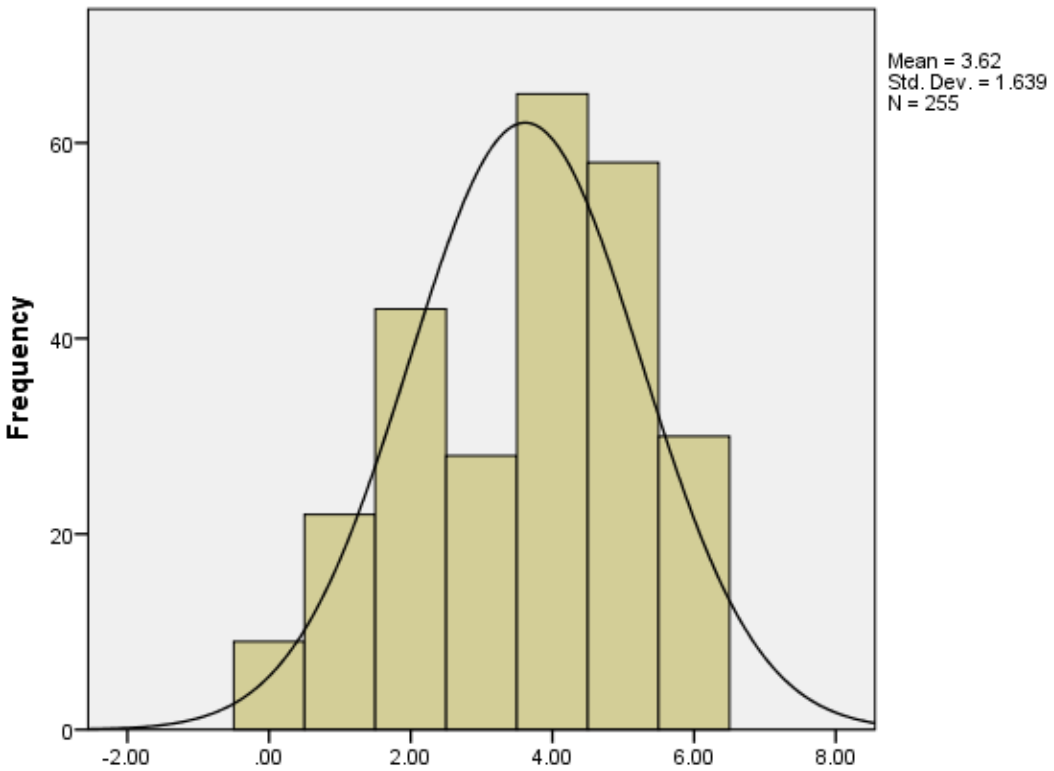

Figure 4.5: Level of Knowledge on RCH (Source: Field Survey, 2020)

4.3.10 Assessment of Knowledge Levels Based on Composite Scores

It is revealing to find that about 60% of young adolescent girls are found to have a medium to good level of knowledge and 40% others either poor in their level of knowledge on RH or completely uninformed as indicated in figure 4.6.

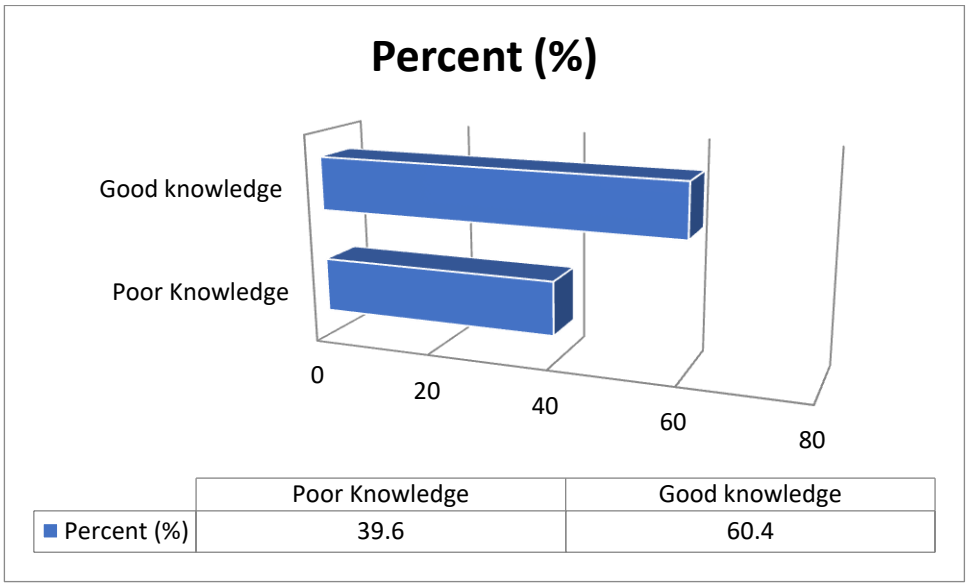

Figure 4.6: Overall Assessment of knowledge (Source: Field Survey, 2020)

4.4 Attitudes of Young Girls Relative to RH

These set of questions set out to assess the attitudes of young girls in apprenticeship training relative to adolescent sexual and reproductive health.

4.4.1 Perception on Modern Contraception (MC) and Infertility

Considering the perception of girls with respect to perceived side effects of the use of modern contraceptives, 108 (42.4%) of respondents had little or nothing to say about it. A significant number of respondents however, held wrong perceptions about its effect on

fertility. They believe that the use of modern contraceptives can lead to infertility and all other things being equal will not want to use it. This represents the majority view as 147 (57.6%) of the respondents held this view (Table 4.3).

4.4.2 Perceptions about Sex among Adolescent Girls

On the matter of attitudes and perceptions towards sex, About 73 (28.6%) of respondents see sex as a nice feeling, 56 (21.9%) see it as a weird activity and 9 (3.5%) of the respondents think of it as a shameful act. However, significant proportion of them thinks it is normal. That is about 117 (45.9%) of them think along this line as can be seen in figure 4.7 below.

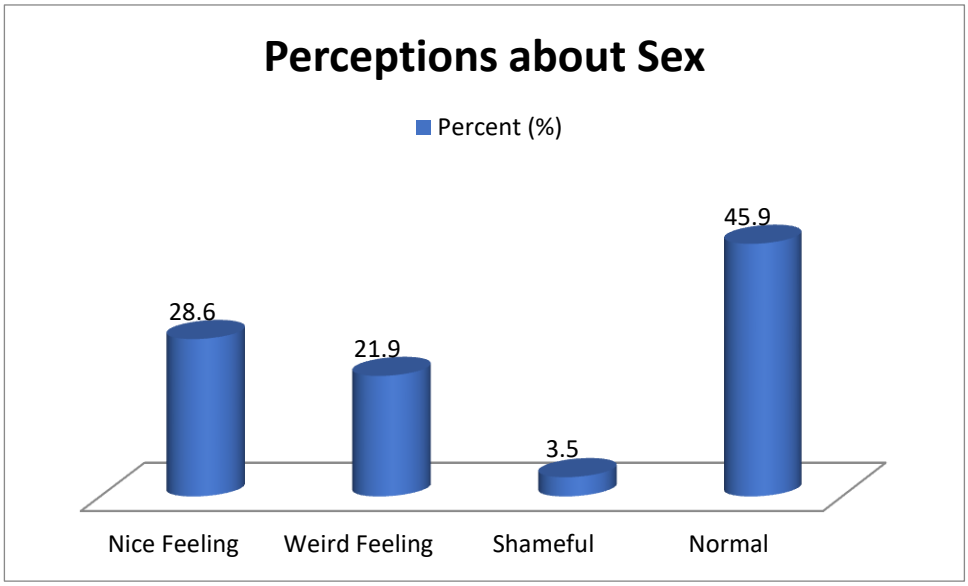

Figure 4.7: Perceptions about Sex (Source: Field Survey, 2020)

4.4.3 Allurers on Girls' Sexuality Decisions

As illustrated in figure 5, a question as to what will convince a girl to agree a sex session with a man, 2.4% of them think appearance is enough to convince them. The study showed

181 (71%) others will prioritise what they call love. Money will have an effect as 16 of, (6.3%) the girls are prepared to trade sex with money irrespective of the consequence. For 13 (5.1%) of them; any such demand from their men or friends will be met especially as it deemed normal and must be practiced in demand. About 15.3% of them had other reasons for which they will have sex with a man. These included among others, 'if they trust the man' and that he would not betray them going in to the future and others see it as happening only by accident (figure 4.8).

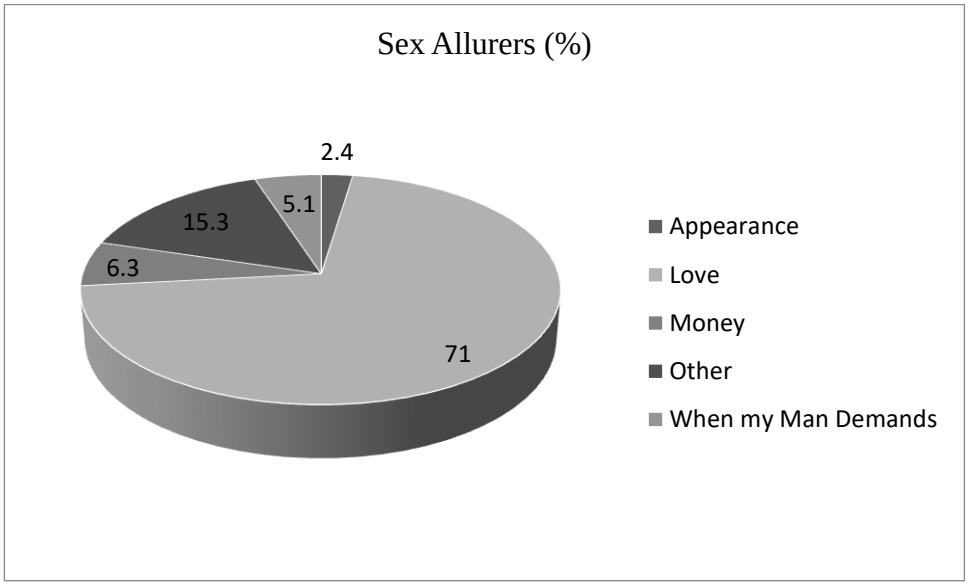

Figure 4.8: Allurers of Sex Decisions (Source: Field Survey, 2020)

4.4.4 Attitudes towards Condom Use

As regards perceptions towards the use of condom and identification of circumstances under which condom may be necessary, about 11.8% of respondents that said they do not know and do not care about when to use or not to use a condom. About 95 (37.3%) of them see it as a tool for protection against sexually transmitted infections, 121 (47.5%) of respondents see it

as a tool for protection against pregnancy and quite a 3.5% hold other views about condom and its use. In addition, the analysis here also sought to look at girls' approach to condom use and the behaviours formed around its use. On Attitudes towards the use of condom, therefore, about 179 (70.2%) of the respondents affirms the use of condom is not comfortable and will like unprotected sex without any barrier, 76 (29.8%) others think it is quite okay to use it (table 4.3).

4.4.5 Feelings towards Pregnancy among Young Girls

On a question of whether girls were ready to get pregnant, 211 (82.7%) said they were not ready and 44 (17.3%) are ready to get pregnant for varied reasons (table 4). In line with the expressions as found in the study, a number of reasons were cited as to why they were not ready to get pregnant, 13 (5.1%) of girls attributed it to financial reasons, 27 (10.6%) others were not just mentally ready. Also, 13 (5.1%) others want to be free whilst 47 (18.4%) others claimed they were young to get pregnant. About 111 (43.5%) of respondents stated their current trade being pursued as a reason they will not be ready to give birth until they graduate from apprenticeship. Find references herein attached (figure 4.9).

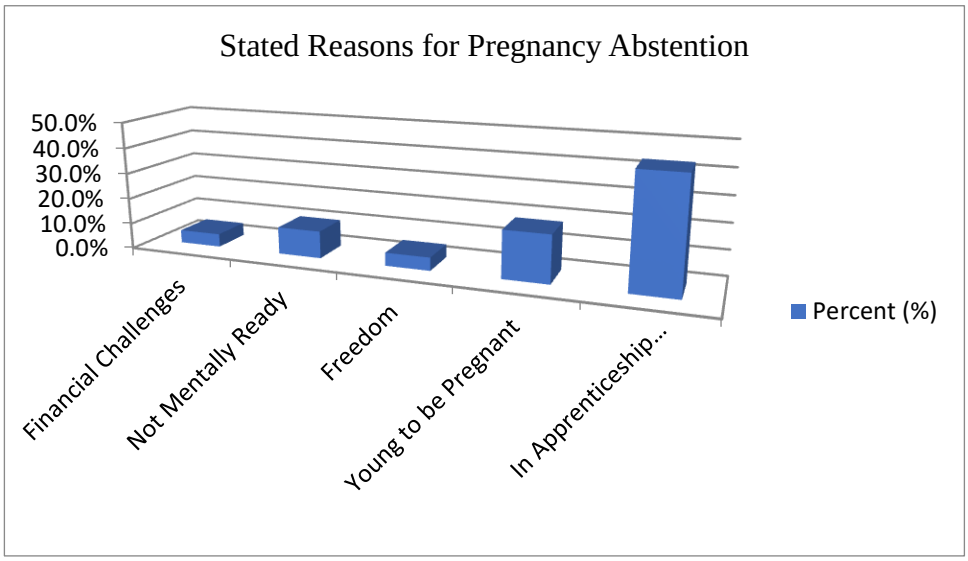

Figure 3: Reasons for Pregnancy Un-readiness (Source: Field Survey, 2020)

Table 4.3:Table on Overall Attitudes (N□255)

Question	Correct	Wrong
In your opinion can contraceptive use cause infertility?	108(42.4%)	147 (57.6%)
In your opinion is condom use confortable?	76(29.8%)	179(70.2%)
Are you ready to get pregnant right now?	44(17.3%)	211(82.7%)
Do you think is it okay for young girls to discuss relationships between boys and girls?	184(72.2%)	74(27.8%)
Do you think unwanted pregnancy is a common problem among girls?	236(92.5%)	19(7.5%)
Do you think most girls practice unsafe abortion?	187(73.3%)	68(26.7%)

(Source: Field Survey, 2020)

4.4.6 Attitudes on Information Sources

On sources of preference of information relative to reproductive health, 55 preferred familial sources of education, that is 21.6%, 20 others had their preferential sources of information on reproductive health being friends, this represents 7.8%, 82 (32.2%) will like from health

workers. About 71 (27.8%) of the respondents prefer information officers on the subject matter to meet them at their shops, and 27 (10.6%) on social and mass media.

4.4.7 Attitudes on SRH Communication

On attitudes towards relationship discussions, 184 (72.2%) agreed it is okay for young girls to engage in related discussions. About 71 (27.8%) others think it not okay (table 4.3).

On the question of who individual girls will first and foremost, discuss an issue of unwanted pregnancy with, 60 (23.5%) of the girls reported they will deal with friends first before any other consideration. About 15 (5.9%) others said they will deal with health officers. The study also revealed that 81 (31.8%) of respondents were comfortable discussing it with their mothers. Only one person mentioned religious leader which translate in to 0.4%, and 24 (9.4%) of them will go in for their siblings especially sisters. About 2% others prefer sharing information with their teachers or shop-masters.

4.4.8 Subjective Views on Prevalence of Teenage Pregnancy among Girls

About 92.5% of the girls think teenage unwanted pregnancy is a major problem confronting young girls and often common among them. However, 7.5% others think it is not as common as perceived (table 4.3).

4.4.9 Subjective Views on the Practice of Unsafe Abortion

On whether girls use the right and safe protocols to deal with unwanted pregnancies, 17 of them chose to pass no comment representing 6.7%, 51 thought right regimes were used by

girls to deal with unwanted pregnancies, and 187 believe most girls use unsafe ways to terminate pregnancies. This represent 20% and 73.3% respectively (table 4.3).

4.4.10 Overall Assessment of Attitudes

With a score of a total of 6, the mean value for scores on overall attitudes was 3.3 and a median of 3, attitudes are generally said to be poor (figure 12).

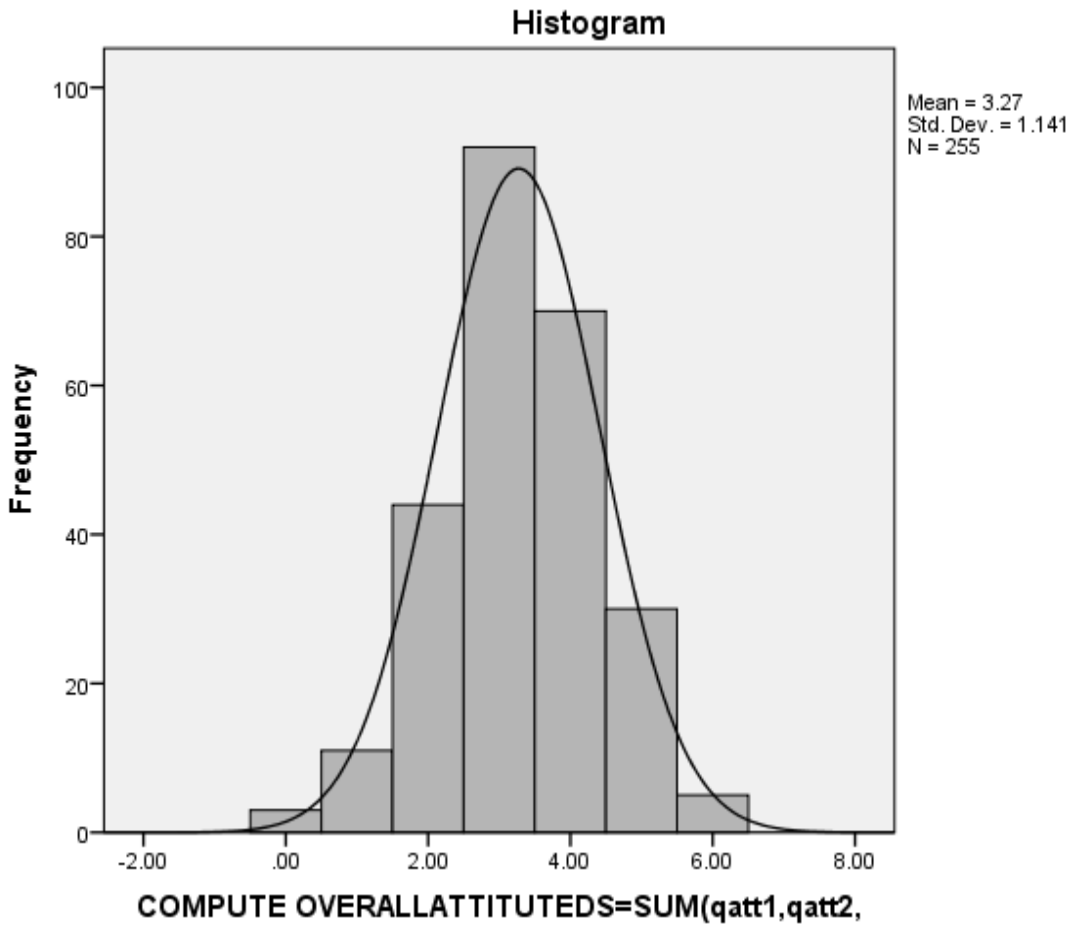

Figure 4: Overall Assessment of Attitudes(Source:Field Survey, 2020)

4.4.11 Assessment of Attitude levels Using Composite Scores of Respondents

It is found from the study that about 77.6% of young adolescent girls were found to be of the right scale of attitudes (figure 13). About 22.4% others were noted by the study as having poor attitudes.

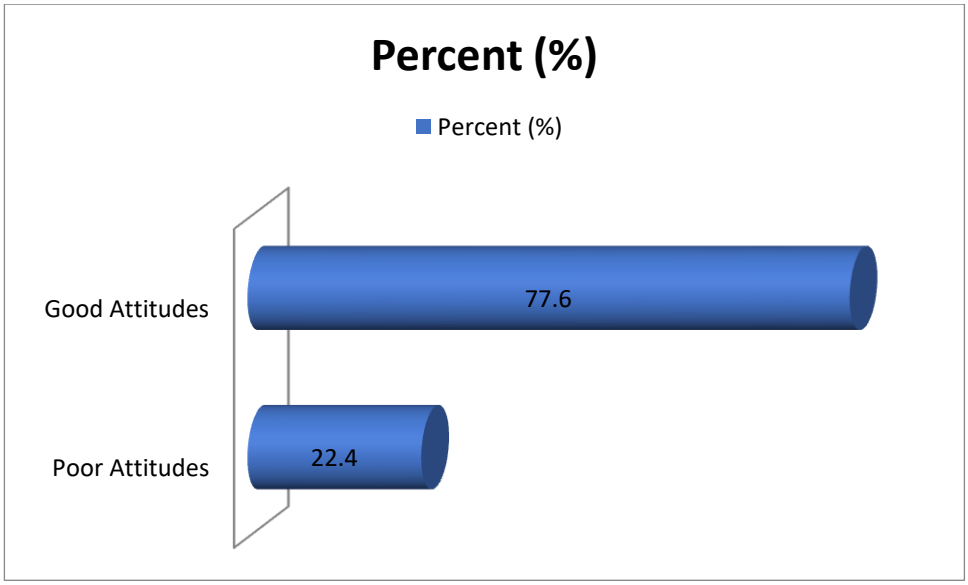

Figure 4.5: Composite Score Based Assessment of Attitudes (Source: Field Survey, 2020)

4.5 Behaviours of Girls Relative to SRH

This section looked at character manifestations of young adolescent girls with respect to reproductive health. The study hypothesized behaviour as a product of socio-demographic factors, knowledge and attitudes.

4.5.1 Intimate Relationships

The research sought to find out if girls were in relationships with the possibility of sexual exchange between and amongst them. About 209 (81.96%) of the respondents reported to be

involved in one form of relationships or another. Among these are those involved in multiple sexual relationships thus having up to four different boyfriends. About 46 (18.04%) were said not to be in any relationship as at the time of the study. Among them are those who broke out of relationships and were not engaged in any at the time of the interaction. A few others were minors and among them are those who are not in for relationship due one or both of the following factors. That is religion and parents' ability to satisfy personal needs of girls (table 4.4).

4.5.2 Practice of Sexuality

For the question of whether girls in one way or the other have engaged in sexual activity, 99 (38.8%) of respondents reported not haven had sexual intercourse thus far. About 156 (61.2%) others of the respondents are reported to have had sexual intercourse at least once over the course of their life (table 4.4). The study captures that, of the number that reported haven had sexual intercourse, only 55 (35.3%) were found to have used one form of contraceptive method or another. By implication, 101 (64.7%) others had sexual intercourse without any form of contraception. Among the 35.3%, those who used condom were 26 (47.3%), those who used emergency pills were 7 (12.7%). About 10 (18.2%) of them used injectables, much the same as emergency pills, 7 (12.7%) of them also used daily pills and 5 (9.1%) used other methods including the calendar method and coitus-interruptus.

4.5.3 Pregnancy Preventive Alternative Actions

For those who do not want to get pregnant but interested in having sexual intercourse at a given point in time, 25.9% said they will romance with their partners, 4.3% of them said they

will masturbate, 30.98% said they will use condom and 31% of respondents will resort to other means such as sleeping, washing private part with warm water. On masturbation one particular respondent indicated she often plays with her waist and or wash the private part with warm water.

4.5.4 Prospective Actions against Unwanted Pregnancy

On the question of what young adolescent girls will do to an unwanted pregnancy, 35.7% said they will abort it, 64.3% said they will keep it.

4.5.5 Previous Abortions

On the practice side of issues, 2.7% of the respondents had done at least one abortion as at the time they were spoken to. Almost this entire fraction did not use established protocols to carry out the activity but either got prescriptions from chemical shops or had private arrangement with health worker friends. About 97.3% others reported they had not carried out any abortion as at the time of the study. Find this as expressed in table 4.4 below.

4.5.6 Behaviours towards ASRH Discussions

On the regularity of discussions around the subject matter of sexual reproductive health, about 52.2% of the respondents were generally not interested in such discussions or did it on an occasional basis. It was a matter of concern to about 47.8% of them who formed habits around it and discussed it at every given opportunity (table 4.4).

4.5.7 Overall Assessment of Behaviour

After computation of aggregated marks for behaviour, about 37.3% of young adolescent girls were found to be having good to best reproductive health behaviours. 62.7% others were found to be engaged in moderate to bad behaviours (table 4.4) at a mean value of 2.1 and a median value of 2 (figure 4.12).

Table 4.4: Overall Behaviours on SRH (N□255)

Question	Correct	Wrong
Do you have a boyfriend?	209 (82%)	46 (8%)
Have you ever had sexual intercourse?	156 (61.2%)	99 (38.8%)
Did you use any form of contraceptive?	55 (35.3%)	101 (64.7%)
Have you ever aborted a pregnancy?	7 (2.7%)	248 (97.3%)
Do you discuss sex-related issues often?	122 (47.8%)	133 (52.2%)
Aggregate scores in percent	37.3%	62.7%

(Source: Field survey, 2020)

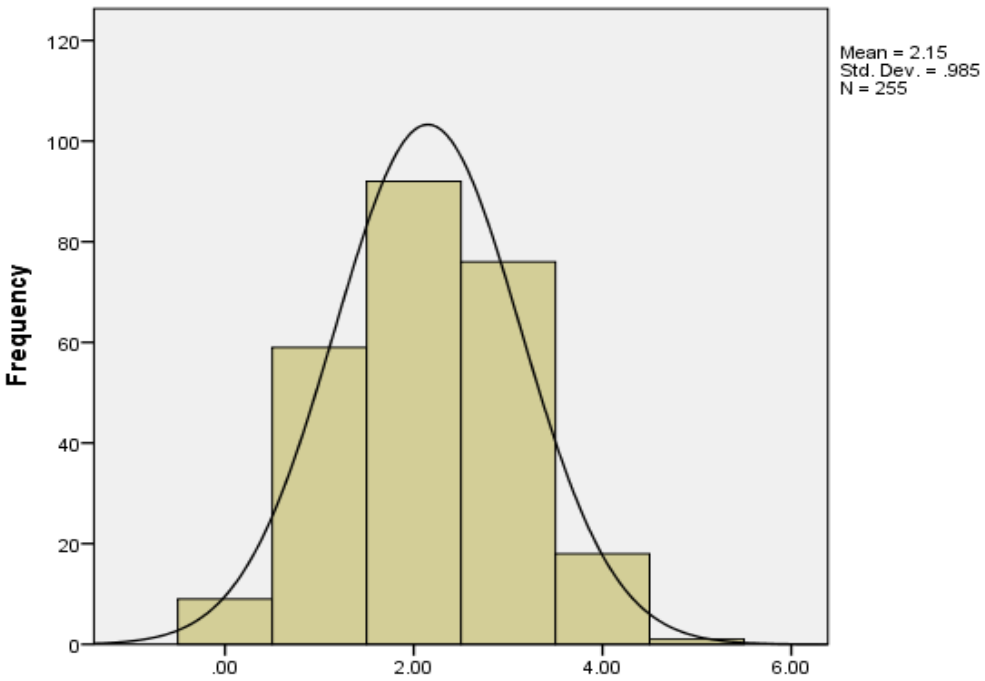

Figure 6: Overall Assessment of Behaviour (Source: Field Survey, 2020)

4.6 Availability and Accessibility of Services on RHC

This part of the study examines the key availability and accessibility issues associated with reproductive health services as well as factors associated to service utilisation. It by and large does a subjective inquiry into the availability and accessibility of RH services to young adolescent girls in their respective communities and social circumstance.

4.6.1 Availability of Reproductive Health Services

With respect to the availability of family planning and for that matter RH service, 127 of them said services are not available in their communities per their own estimation. About 128 others said services were largely available in their respective communities. This represents 49.8%, and 50.2%.

4.6.2 Availability of Abortion Services

On the matter of the availability of abortion services, about 110 of them said services are easy to come-bye. This represents 43.1% and 145 others said abortion services were largely difficult to access in their respective communities. This represents 56.9%.

4.6.3 Service or Facility Utilisation

On enquiry of those among the young adolescent girls who have visited health facilities for reproductive health services, about 82 said they had visited facilities for such services while 173 others said they had not visited any health facility for such purposes. This represents 32.2% and 67.8% respectively.

4.6.4 Accessibility of RH Services

On the matter of whether services were available and accessible to young adolescent girls, 108 (42.4%) of the respondent's belief it is difficult for young adolescent girls to get such services siting cost-related issues and 147 (57.6%) others believe services are largely available and accessible at any length.

4.6.5 Factors Influencing Service Accessibility

On the factors that affect young adolescent girls' choices of RH service, 28 (11%) of young girls indicated any day, their choice will be affected by the cost of services. 15 5.9% others said it will be affected by their culture. For 78 (30.6%) of them, their choices will always be affected by partner advice. However, a significant proportion of respondents attributed their choices to religion-related factors. In nominal terms, that is about 134 of them which translate into 52.5%.

4.7 Qualitative Results

This section presents selected responses to qualitative interviews done during focus group discussions (FDGs). Views of about four individual participants of the various FGDs conducted during the course of the study were captured. It is important to note that, this does not include every part of the discussions except issues relevant to the theme of the study.

4.7.1 Knowledge of RH

What are reproductive health choices? R1: "I don't really know, I think it is just personal hygiene." What are reproductive health choices?

R2: "*I think it about maintaining your mensuration well*". have you since made use of a female condom? "*No, I have never seen it before*" have you heard or care to know about Sexually Transmitted Infections? "*Yes I have, may be AIDs and gonorrhea*" "*I had been advised and taught by a friend how to masturbate but I have never tried*". What are reproductive health choices?

R3 "*I have no idea*". What are reproductive health choices? R4: she gave no apparent answer. What are reproductive health choices? R6: "*di ku nyela sabta kpangsibu*" to wit, "it is about cleanliness".

4.7.2 Attitudes on RH

Who will you want to share information with on your sexual life? R1: "*Well, I think my friends, we talk about a lot of things, our trade especially "pass out", business and our relationships, but when it comes to unwanted pregnancy, I will rather discuss it with my sister*".

R3: will you allow your boyfriend to use condom with you? "*For me if he uses condom on me it means he does not love me*" but how do you protect yourself? "*I do family planning, I take the pills*" what about sexually transmitted infections? "*I trust in him*".

4.7.3 Behaviours on RH

When did you have your first sexual encounter? R1: "*as for sex I was 16 years old when I had my first sexual intercourse with my boyfriend*".

In relation to a question on relationship status, she said (R2) "*frankly I have four boyfriends but I love only one of them*".

On the question of sex, she mentioned, R2: "I have had sex before, but I did not prepare my mind for it" did he use condom? "*Yeh he did*".

On the question of relationship status, she mentioned (R3) "*I was 14years old when I took my first boyfriend*".

R4: On the question of how she gratifies herself sexually, she said "*when I am sexually aroused, I bath cold water and I will be fine*".

On the issue of abortion, she mentioned, "*many young adolescent girls attempt it at home but only report complications when things don't go as expected*".

On the same question of sexual satisfaction to R5, she mentioned "*I often play with my nipples when on horny*" "*I can equally derive satisfaction from massaging*".

On relationship status, "*okay, I have five boyfriends but not all of them are serious, some always want to exploit me sexually and have even attempted raping me on different occasions*" when asked whether she reported the rape incidence, she said no.

R6: how old were you when you started your first relationship? "*I was 13 years old, but I realised the boy had no time for me so I had to quit*" really? "*Yeh, I eventually dropped out of school and went for 'Kayaye' because I had no money to cater for my education and my aunty did not care*" wow! "*I returned one and half years ago when I managed to secure a sewing machine*".

Have you had sexually intercourse before? "*when I returned from Accra, a man proposed to me but he has a wife, I was not ready but he was really helping, he has been trying but I just decided on one occasion to let it happen*" but were you on any contraception? "*No, I did not expect it, but he has been supportive, he says he will marry me*" so since the first incident has it happened again? "*It took long but it happened about twice in January this year*" are you now on a contraceptive? "*I fear it will make me infertile, I don't know but that is what people say and it seem like it is true, and when you are on it, it is like you are bad*".

4.8 Statistical Analysis of Variables

This part helps the researcher in establishing relationships between the dependent and independent variables of study, through the performance of Chi-Square analysis and Fisher exact testing as well as independent samples t-test.

4.8.1 Test of independence between demographic factors and knowledge, attitudes and behaviours

In this instance, independent samples t-test was done between IVs (age) and DVs, other socio-demographic data including age were equally cross tabulated against knowledge, attitudes and behaviours on reproductive health choices. Tables 8, 9 and 10, on the other hand, did a cross-tabulation of socio-demographics, knowledge, and attitudes as against behaviours respectively.

The research aggregated apprentices' scores on knowledge, attitudes and behaviours herein referenced as overall knowledge, attitudes and behaviours, sorted them in to dependent and independent variables alongside socio-demographic factors then performed paired-samples t-

test for significance and comparison of averages. Based on the t test analysis there was significant difference in the mean score of age (M□19.1, SD□2.8) and knowledge of RHC (M□3.6, SD□1.6); given t□89.2, and p-value<0.001 (table 12). The t test also produced significant difference for the mean scores of age and attitudes on RHC (M□3.3, SD□1.1); t□95.9, p-value<0.001, with t□101.6 where p-value is less than 0.001 for significance between age and good RH behaviours given means at (M□19.1, SD□2.8) for age and (M□2.1, SD□1) for behaviour. For level of education and marital status against knowledge, attitudes and behaviours, kindly reference (table 4.5).

Table 4.5: Test of independence between demographic factors and knowledge, attitudes and behaviours (N□255, df□254)

Variable	Mean	SD	Test Statistic
Age	19.1	2.8	t□89.2, p-value<0.001
Knowledge	3.6	1.6	
Age	19.1	2.8	t□95.9, p-value<0.001
Attitude	3.3	1.1	
Age	19.1	2.8	t□101.6, p-value<0.001
Behaviour	2.1	1	
Level of Education	1.5	1.1	t□-21.7, p-value<0.001
Knowledge	3.6	1.6	
Level of Education	1.5	1.1	t□-19.3, p-value<0.001
Attitudes	3.3	1.1	
Level of Education	1.5	1.1	t□-7.7, p-value<0.001
Behaviour	2.1	1	
Marital Status	0.7	0.8	t□-28.3, p-value<0.001
Knowledge	3.6	1.6	
Marital Status	0.7	0.8	t□-33.3, p-value<0.001
Attitudes	3.3	1.1	
Marital Status	0.7	0.8	t□-21.8, p-value<0.001
Behaviour	2.1	1	

(*Source: Field Survey, 2020*)

4.8.2 Chi-Squared (Bivariate) test of associations

This section of the results presents bivariate analysis of associations between certain demographic characteristics (age, educational level, marital status and religion) and outcome variables such as knowledge, behaviour, and attitude. Suitable statistical test such as chi square and Fisher's exact test were used to establish relationships between the predictor and predicted variables.

4.8.2.1 Association between socio-demographic factors and overall knowledge on RHC

The result depicts that there is a relationship between age and knowledge of young adolescent girls on RHC (F- Test□19.194 & p<0.001). It can also be observed from the Fisher' exact test results that the relationship between the educational status of young adolescent girls and knowledge on RHC is high (F-Test□22.846 & P<0.001). Again, knowledge of young adolescent girls on RHC were found to have high association with the ethnicity of the participant (χ2□9.257; P□0.002). However, it can be observed that marital status and religious affiliation were not significantly associated with knowledge of the respondents of RHC with each presenting a P-value more than 0.05 (table 4.6).

Table 4.6: Cross tabulation of Socio-demographic factors against Overall Knowledge

Variable	N	Composite Knowledge Scores: Poor Knowledge	Composite Knowledge Scores: Good Knowledge	Test Statistic
Age				
≤14	10	8 (80%)	2 (20%)	F-Exact Test□19.194
15-19	139	66 (47.5%)	73 (52.5%)	p<0.001
20-24	102	26 (25.5%)	76 (74.5%)	
25+	4	1 (25%)	3 (75%)	
Total	255	101 (39.6%)	154 (60.4%)	
Level of Education				
No Educ.	63	37 (58.7%)	26 (41.3%)	F-Exact Test□22.846
Primary/JHS	147	56 (38.1%)	91 (61.9%)	p<0.001
SHS	42	6 (22%)	36 (85.7%)	
Tertiary	3	2 (66.7%)	1 (33.3%)	
Total	255	101 (39.6%)	154 (60.4%)	
Marital Status				
Married	56	19 (33.9%)	37 (66.1%)	F-Exact Test□1.6
Never Married	198	82 (41.4%)	117 (59.0%)	P□0.469
Total	255	101 (39.6%)	154 (60.4%)	
Religion				
Christianity	10	5 (50%)	5 (50%)	F-Exact Test□0.470
Islam	245	96 (39.2%)	149 (60.8%)	P□0.355
Total	255	101 (39.6%)	154 (60.4%)	
Ethnicity				
Dagomba	216	77 (35.6%)	139 (64.4%)	$\chi 2$□9.257
Other	39	24 (61.5%)	15 (38.5%)	P□0.002
Total	255	101 (39.6%)	154 (60.4%)	

4.8.2.2 Association between socio-demographic factors and overall attitudes on RHC

It can be observed from (table 4.7) bellow that there is a strong association between age of participants and their RHC attitude (F-Exact Test□11.166 & P□0.008). The relationship between marital status and attitude towards RHC was high with a calculated F-Exact Test□8.500 and a P-value = 0.011. Meanwhile, the relationship between level of education, ethnicity and religion; and young adolescent girls' attitude on RHC was low showing a P-value greater than 0.05 (Table 4.7).

Table 4.7: Cross tabulation of Socio-demographic factors against Overall Attitudes

Variable	N	Composite Attitude Scores: Poor Attitude	Good Attitude	Test Statistic
Age				
≤14	10	5 (50%)	5 (50%)	F-Exact Test 11.166
15-19	139	38 (27.3%)	101 (72.7%)	P 0.008
20-24	102	14 (13.7%)	88 (86.3%)	
25+	4	0 (0.0%)	4 (100.00%)	
Total	255	57 (22.4%)	198 (77.6%)	
Level of Education				
No Educ.	63	14 (22.2%)	49 (77.8%)	F-Exact Test 4.015
Primary/JHS	147	38 (25.9%)	109 (74.1%)	P 0.235
SHS	42	5 (11.9%)	37 (88.1%)	
Tertiary	3	0 (0.0%)	3 (100.00%)	
Total	255	57 (22.4%)	198 (77.6%)	
Marital Status				
Married	56	6 (10.7%)	50 (89.3%)	F-Exact Test 8.500
Never Married	198	51 (25.6%)	148 (74.4%)	P 0.011
Total	255	57 (22.4%)	198 (77.6%)	
Region				
Christianity	10	3 (30%)	7 (70.0%)	F-Exact Test 0.000
Islam	245	54 (22%)	191 (78%)	P 0.394
Total	255	57 (22.4%)	198 (77.6%)	
Ethnicity				
Dagomba	216	48 (22.2%)	168 (78.8%)	χ^2 0.014
Other	39	9 (23.1%)	30 (76.9%)	P 0.525
Total	255	57 (22.4%)	198 (77.6%)	

4.8.2.3 Association between socio-demographic factors and overall behavior on RHC

Table 4.8 indicates the relationship between independent demographic variable and behavior of participants on RHC. It can be observed that the relationship between age and behavior of young adolescent girls towards RHC is high. The calculated Fisher's exact test is 17.365 with a P- Value <0.001. Similarly, the test shows a significant association between marital status and participants behavior towards RHC (F-Exact Test□36.720, P-Value <0.001). On the other hand, educational level, religion and ethnicity did not have any significant relationship with behavior on RHC with each presenting P-Values greater than 0.05 (Table 4.8).

Table 4.8: Cross tabulation of Socio-demographic factors against Overall Behaviour

Variable	N	Composite Behaviour Scores		Test Statistic
		Poor Behaviour	Good Behaviour	
Age				
≤14	10	8 (80%)	2 (20%)	F-Exact Test□17.365
15-19	139	41 (29.5%)	98 (70.5%)	P<0.001
20-24	102	18 (17.6%)	84 (82.4%)	
25+	4	1 (25%)	3 (75%)	
Total	255	68 (26.7%)	187 (73.3%)	
Level of Education				
No Educ.	63	12 (19.0%)	51 (81%)	F-Exact Test□3.509
Primary/JHS	147	45 (30.6%)	102 (69.4%)	P□0.286
SHS	42	10 (23.8%)	32 (76.2%)	
Tertiary	3	1 (33.33%)	2 (66.7%)	
Total	255	68 (26.7%)	187 (73.3%)	
Marital Status				
Married	56	0 (0.0%)	56 (100.0%)	F-Exact Test□36.720
Never Married	198	68 (34.3%)	130 (65.7%)	P<0.001
Total	255	68 (26.7%)	187 (73.3%)	
Religion				
Christianity	10	1 (10.0%)	9 (90.0%)	F-Exact Test□0.000
Islam	245	67 (27.3%)	178 (72.7%)	P□0.203
Total	255	68 (26.7%)	187 (73.3%)	
Ethnicity				
Dagomba	216	61 (28.2%)	155 (78.1%)	χ2□1.789
Other	39	7 (17.9%)	32 (82.1%)	P□0.125
Total	255	68 (26.7%)	187 (73.3%)	

(Source: Field Survey, 2020)

4.8.1.3 Association between knowledge and young adolescent girls' attitude on RHC

Based on the chi square test results, there was a significant relationship between young adolescent girls's knowledge and their attitude towards RH. The result has shown a value less than 0.05 (Table 4.9). Knowledge of RH is found to be significant for attitudes given ($\chi 2$ □8.388, N□255, P-value□0.003).

Table 4.9: Cross tabulation of Overall Knowledge against attitudes

		Composite score for Attitudes		
Variable	N	Poor Attitude	Good Attitude	Test Statistic
Poor Knowledge	101	32 (31.7%)	69 (68.3%)	$\chi 2$□8.388
Good Knowledge	154	25 (16.2%)	129 (83.8%)	P-value□0.003
Total	255	57 (22.4%)	198 (77.6%)	

(Source: Field Survey, 2020)

4.8.1.4 Association between Attitudes and young adolescent girls' behaviour towards RHC

It can be observed from the results that there is high relationship between participants' attitude and behavior on RHC. The calculated chi square has shown a significant value less than 0.05 (Table 4.10). Good attitudes are found to be significant for good behaviours given (P-value□0.018).

Table 4.10: Cross tabulation of Overall Attitudes against behaviour

		Composite for Behaviour		
Variable	N	Poor Behaviour	Good Behaviour	Test Statistic
Poor Attitude	57	22 (38.6%)	35 (61.4%)	χ2□5.343
Good Attitude	198	46 (23.2%)	152 (76.8%)	P-value□0.018
Total	255	68 (26.7%)	187 (73.3%)	

(Source: Field Survey, 2020)

4.8.2 Predictors of SRHC Behaviors among Young girls

The probability of certain response variables affecting the likelihood of having the outcome of good behaviour were described using binary logistic regression analysis. All statistically significant variables from the bivariate (Chi-squared and Fisher exact test) analyses were selected and ran using SPSS. The various socio-demographic factors such as age, level of education, ethnicity, knowledge, attitudes were all held as predictor variables as against the criterion variable behaviour. It is important to note that apart from knowledge, all other predictor variables were found to have weaker associations on the outcome variable, behaviour. Statistical conclusions are made on adjusted odds ratios of each independent variable selected if the p-values obtained are less than 0.05 and the confidence interval excluding 1.

In reference to the regression analysis output in the table below, all independent variables except knowledge had weaker predictive effect on behaviours. For model significance, the study find χ2 (9, N□255, p□0.001) □29.159 therefore proven solid grounds for test of associations. With age, the odds for good behaviour relative to category one (≤14) is 2.208 less likely to influence behaviour given (P-value□0.152 and C.I: 0.005-2.263). For category two (15-19), we have (P-value□0.86, OR□0.233 and C.I: 0.06 -10.499), (table 14). The odds

of educational level influencing behaviour on RHC increases by 0.333 given (P-value□0.809, and C.I: 0.094-20.797), (table 14). Relative to ethnicity, it is a 0.9 less likely that it will be predictive effect on good behaviour holding all other factors constant, given (P-value□0.083, OR□0.850, and C.I: 0.164 - 1.116).

Apprentices whose overall knowledge of RHC is good have a higher equally have no extra likelihood of posing good behaviours towards RH given, (P-value□0.032, OR□0.716, C.I: 0.254 - 0.94) except to say knowledge on a whole is significant for behaviour.

Table 4.11: Logistic Regression Table

Variable		Adjusted Odds Ratio	Standard Error	df	P-Value	Confidence Interval	
						Lower	Upper
Age				3	0.031		
	1	2.208	1.543	1	0.152	0.005	2.263
	2	0.233	1.318	1	0.86	0.06	10.499
	3	0.302	1.307	1	0.818	0.104	17.516
Education				3	0.345		
	1	0.977	1.401	1	0.485	0.171	41.424
	2	0.333	1.379	1	0.809	0.094	20.797
	3	0.139	1.398	1	0.921	0.074	17.798
Ethnicity		0.850	0.49	1	0.083	0.164	1.116
Overall knowledge		0.716	0.334	1	0.032	0.254	0.94
Overall attitude		0.436	0.352	1	0.216	0.324	1.29

(Source: Field Survey, 2020)

CHAPTER FIVE

DISCUSSION

5.1 Introduction

The study assessed the relationships between knowledge, attitudes and behaviours of young girls in apprenticeship training as well as attempt to gauge young adolescent girls' perception of availability and accessibility of reproductive health services in line with the individual level need fulfillment. This particular chapter thus discusses the findings of the study and in perspectives of the literature reviewed. It discusses findings from responses to research questions and for that matter the research objectives and in line with literature reviewed around the key views of the research work. This include among other things, the socio-demographic characteristics, knowledge, attitudes, behaviours, availability and accessibility, and considerate factors in decision making relative to reproductive health. In some instances test statistics are analyzed and reason for comparing one variable against another stated.

5.2 Socio-Demographic Characteristics of Young adolescent girls

Majority of the young adolescent girls that participated in the study were in ages between 15 and 19. The median age for sexuality practice was found to be 19.1 with a standard deviation of 2.8 as compared to the 19.6 by (Khan *et al., 2008*). In terms of ethnic mix, about fourteen (14) different ethnic groups participated in the study, representing precisely the cosmopolitan nature of the Tamale Metropolis.

Majority of respondents had primary, junior high school or secondary education. A hand full of others had tertiary education and their significant others having no formal education at all.

The study found a good number of them have dropped out of school at JHS and SHS levels and are now fully dedicated to apprenticeship training. However, about six out of every ten primary students were still in the classroom whilst in apprenticeship training. Even though the category of young adolescent girls in question here were largely expected not to be married, as much as 22% were indeed married. Notwithstanding that fact, the study found that majority of respondents were not yet married. This does not entirely agree with the views of some writers that educated women are also more likely to understand their physiology and social needs, and adopt appropriate reproductive health behaviour before marriage than the less educated (Khan et al., 2008; Ojakaa, 2008). The view about the fact that the more educated a girl is, the higher the chance that she will delay marriage is not only limited to formal education. It is the study's considered view that it has more to do with being involved in goal oriented tasks performance that makes marriage less of a priority in the goal pursuing process.

5.3 Awareness and Knowledge on Reproductive Health Choices

5.3.1 Awareness and Knowledge on Sexually Transmitted Infections

On the balance of things, there was generally a high level of awareness among young adolescent girls on the subject matter of sexually transmitted infections. As much as 84% of young adolescent girls had a fair idea about what it is. The next question being an open ended question which sought to demand examples of STIs from participants, majority of them mentioned HIV and AIDS as well as gonorrhea. As to whether they are aware of risk behaviours associated with STIs and consequences are another area of concern which study could not comprehensively deal with. The youth is particularly at continuous risk for STIs,

especially among which is HIV and AIDS, whose occurrence has been on the increase in Ghana since 2000, after a seeming decline in the late 1990s. HIV/AIDS prevalence rate increased from 2.3% in 2000 to 3.6% in 2003 in the 15-24 years old age group (GSS & GHS, 2015). The highest mean HIV prevalence was recorded in the 25-29 years old age group (4.5%), whilst the mean prevalence in the 15-19 years group was 2.0% and in the 15-24 years group was 2.5% Martin-Odoom, (2014) and Akwei-Addo, (2014).

Serious studies have been done in these areas with some startling findings with respect to the negative repercussions for lack of knowledge on the subject matter. Rani and Lule for instance find such consequences to include acquiring HIV/AIDS and other sexually transmitted infections (STIs), among others (Rani *et al*., 2004). Adolescents bear the risk of more vulnerability to STIs and HIV/AIDS because they are reported to indulge in multiple short-term relationships and practice unsafe sex. this finds expressions in the qualitative section of results as some participates affirmed haven been involved in multiple sexual partners with some having four or more boyfriends.

5.3.2 Awareness on Condom and Source of Information

Awareness on condom is generally high with 89.4% and on sources of information on condom as a barrier, majority of them sourced information from friends, followed by the media space, then followed by their partners, school and parents respectively. In previous studies, communication on sex and related matters were largely reported to be low among parents and their children at a 27% especially on sexual initiation among 12-14 year olds (Kawai *et al.,* 2008), in this study however, it is further low at a 1% in terms of parents as a

source of information on RH matters. Other studies equally identify parents as the lowest source of information on sexuality (Odimegwu, *et al.*, 2002).

5.3.3 Knowledge on Contraception and Pregnancy Prevention

Majority of the respondents numbering up to 65.9% were found to knowing how they could prevent pregnancy if they wanted to. The study finds that the higher an individual climbs in the academic lather, the better the chance that she will accept and use contraception. However, this figure is lower than the findings of 99.6% made by Askew *et al* in their 2003 study.

5.3.4 Awareness and Popular Contraceptive Options among Young Girls

On specific areas of knowledge on contraception and pregnancy prevention and what is particularly popular among young girls, the respondents altogether mentioned 14 different ways by which they think pregnancy could be prevented this was regrouped into natural, modern and abstinence. This category of respondents is referenced by the study to be 'contraceptive shoppers' who are not fixed on one particular method selects based on situation and circumstance. At 32.7%, condom was found to be one single most popular contraceptive method among young adolescent girls though same could not be said about its use. About 30.3% others mentioned 12 different options including but not limited to abstinence, calendar, coitus interruptus, emergency pills, implants, daily pills inter-alia. This finding is not materially different from in earlier studies. Condom was also found to be one single most known contraceptive by young girls as indicated by Afenyadu et al, (2003) yet less patronised method when it comes to practice. On a whole, majority of young adolescent girls make use of modern contraceptives as opposed to natural methods and abstinence. In

this context social stigma was one major disincentive to being on modern contraceptives for unmarried girls. One girl in particular, mentioned security as a factor in pregnancy prevention and contraception. That she likes sleeping naked and wit6h adequate security, there is no chance that she will be raped and for that matter save from the danger of an unplanned pregnancy. . A similar study reported among unmarried young adolescent girls (15–19), that current modern contraceptive use ranges from 21% to 64%; Percentages having unmet need range from 34% to 67% for the unmarried, Chandra-Mouli et al, (2014).

5.3.5 Knowledge on RHC

A significant number of 69.4% of the respondents did not know exactly what constitutes reproductive health. Quite a few of these young adolescent girls who reported not knowing still had some interesting views about what they think reproductive health choices were. A number of them saying it is about good personal hygiene and others stating it as being about knowledge of your menstrual cycle. One said as follows “mansani diku nyala sabtakpaŋsibu” to wit, for me it is just about maintaining personal hygiene.

In essence the key factor on knowledge with respect to reproductive health choices was more about educational achievements rather than age, level of education was thus strongly linked to knowledge on reproductive health choices. There is a general lack of adequate knowledge on the subject matter of reproductive health choices as was demonstrated with girls’ responses to questions on specific reproductive health choices presented for identification, few of them were very frontal with the fact that they did not know or could not differentiate between the various options. However, those who elected to answer answered wrongly. The options included abstinence, right to get STIs, safe abortion, and safe sex respectively which

are very serious elements when it comes to reproductive health matters as indicated by researchers (WHO, UNFP and *Askew et al*).

5.3.6 Knowledge on Emergency Contraception

Unprotected sex is found to be a common practice among first sex experience of young girls as young adolescent girls are often not prepared for until strongly pursued by their male counterparts in seclusion coupled with the fear of stigma if they adopted contraceptive procedures. At the same time, majority of the young adolescent girls do not know about emergency contraception and at least one of them said "I will squat immediately after sex so that the sperm will not go in and after that I will wash the semen". It is however, important to note that earlier studies captured pills as second most known technique among girls (Abdulai, 2015).

5.3.7 Knowledge on Abortion

With respect to knowledge of where to get abortion services, it is a key matter for consideration to the negative consequences associated with wrong abortion decisions. 56.4% majority of the respondents do not know where to get abortion services should the need arise. Serious studies have been done in these areas with some startling finding respect to the negative repercussions for lack of knowledge on the subject matter. Rani and Lule for instance find such consequences to include unintended pregnancies and maternal complications associated with infant child birth (Rani & Lule, 2004). Unplanned pregnancies will often be terminated through unsafe methods. Adolescents are therefore predisposed to complications of abortion because they delay in seeking help as a result of fear of social sanctions, ignorance, and high cost of medical services. The complications of abortion can be

divided into early complications and late complications. Complications from pregnancy and childbirth are the leading cause of death in young adolescent girls aged 15-19 years in Low and Middle Income Countries (LMIC) where almost all of the estimated 3 million unsafe abortions occur (Lopez, Hiller, Grimes, 2010). This therefore has implications in Ghana achieving MDG 5 at the close of 2015 (UNDP, 2005) and be transformed from MDG to SDG (Sustainable Development Goals). These young adolescent girls, who are the future leaders and human resource, end up as school dropout as a result of pregnancy and its complications. Those unfortunate often end up losing their lives as a result of the illegal ways of terminating the pregnancy, such as insertion of sticks, ingestion of herbs, concoctions, and placement of chemicals and herbal solutions into their vagina or uterus (Bernstein *et al.*, 2006).

As indicated in parts of the literature reviewed unintended pregnancy is found to be a major cause of dropping out of school, thereby limiting their education, economic opportunities and career choices for both males and female adolescents (Okereke, 2010). Those that give birth frequently as you know cannot adequately care for their offspring, resulting in a vicious cycle of poverty among such family cycles. Besides, children of adolescent parents may end up on the streets as juvenile delinquents which lead to severe economic burden on the nation. An earlier study has revealed that daughters of teenage mother are more likely to become teenage mothers in future whilst their sons have a significant probability of incarceration as adults (CPO, 1992).

5.3.8 Preferred Sources of Information on ASRH

Health workers were found to be preferred by young adolescent girls for receiving information on ASRH mostly by 32.2% of young adolescent girls. This was followed by

familial sources, outreach RHC information retailors, then social and mass media and friends. This runs slightly in contrast to both the findings of (J& Fatusi, 2008) and (Odimegwu & Addedini, 2013).

5.3.9 Overall Assessment of Knowledge on RH

Overall, knowledge of RHC was found to be generally good and information on the subject matter largely available to young adolescent girls. This is further strengthened by the fact all IVs had predictive effect on knowledge at a 95% confidence interval as can be referenced from table 4.11. With higher order analysis, increases in age, level of education are found to have predictive effect on good knowledge.

5.4 Attitudes of Young Girls Relative to RH

5.4.1 Modern Contraception (MC) and Infertility

The perception of young adolescent girls with respect to perceived side effects of the use of modern contraceptives was found to be damning with only 27.1% having the right mentality with respect to the appropriate use of contraceptives and its effects. A significant number of respondents held wrong notions about its effect on fertility. They believe that the use of modern contraceptive leads to infertility and all other things being equal and will not want to use it. Only a paltry 15.3% deferred their verdict on it hoping for proven sources of information on the subject or at least based on later experiences in their lives. An earlier study in the northern region of Ghana revealed that women especially those who had never given birth were reportedly advised to desist from contraceptive use as it could lead to

infertility (Tabong & Adongo, 2013). These advices as you may well be seen as being likely the causes of the perceptions on infertility as regards modern contraceptive use.

5.4.2 Perceptions about Sex among Young adolescent girls

A substantial number of young adolescent girls (45.9%) find sexual intercourse to be normal and hold no specific superstition about it. A few others see it as a nice feeling and a tool for entertainment as can be seen in figure 4.7. No girl was found to perceive sexual intercourse as a risky venture. This may well explain they reason a good number of them are very reluctant in getting their male counterparts to wear condom or wearing it themselves. The findings thus vary from earlier views held that young girls saw sexual matters as a forbidden venture for the young and a preserve of the old (Ogundipe, 2015).

5.4.3 Allurers on Girls' Sexuality Decisions

On things that can allure young adolescent girls into having sexual intercourse, young adolescent girls identified appearance and love (subjective) first and foremost. On a follow up of what constitutes love, some of the girls defined it as a man's ability to provide her basic needs; some defined it as care and concern. One particular girl mentioned that "if he calls me in the morning and in the night it means he loves me". Some other girls are prepared to trade sex money irrespective of the consequence. Others are often willing to offer sex as gift to their male friends especially when demanded. That is what the research identifies as "demand led sexual decisions". In addition, for some of them, if they trust a man, it may lead them to opening sexual boundaries with the man. Notwithstanding, earlier studies have the onset of puberty as one most important factor influencing risky sexual behaviour among young girls (NMADU, 2017).

5.4.4 Attitudes towards Condom Use

This study finds that about 15.2% young adolescent girls do not know or know little on when and how to use condom or at best do not appreciate its handiness on SRH. This studied opinion is in sharp contrast with earlier studies that sought to place the problem only on the utilisation of condom and not knowledge (Askew *et al*, 2015). About 37.3% of young adolescent girls see condom as a tool for protection against sexually transmitted infections, 47.5% others see it as a tool for protection against pregnancy. Even though it is true condom can be used both for the prevention of pregnancy and protection against STIs, the condom intervention is one of the world's most successful attempt at finding solution to the continuous spread of HIV and AIDs and for that matter STIs in general. Condom can be traced as far back as 17th century (1642). Materials used in its production included animal skins, intestinal bladder and later rubber around the 19th century. Its use however, gained popularity in between the late 19th and early 20th centuries especially in the western world. It increasingly became very important in the fight against AIDS upon its mergence in the 1980s (Youssef, 1993). So if the goal of an adolescent girl is pregnancy prevention, there are superior alternatives to condom, the choice of condom therefore as primus inter-paris of pregnancy prevention could only be as a result of the amount of information available to them on the subject matter.

Beyond researcher's interest in finding what young adolescent girls will use condom for if they had, a second line of probing, majority of young adolescent girls that is about 70.2% are found to believe that the use of condom is not comfortable and will like contact sex without any form of barrier around the male organ. About 29.8% others think it is quite okay to use it for the safety of it because their life also matter beyond enjoyment. We may refer to this crop

of young adolescent girls as those with ideal attitudinal traits. On whole, attitudes of young adolescent girls were generally found not to be impressive especially on condom use and unprotected sex amongst them is on the high.

5.4.5 Feelings towards Pregnancy among Young Girls

Majority (82.7%) of this class of girls understudied are not ready to get pregnant with their current trade being pursued stated as one most peculiar reasons they do not to want to start giving birth. In percentage terms 43.5% of young adolescent girls site the apprenticeship the principal reason they are not ready to get pregnant. What this means is that if girls are productively engaged irrespective of whether in school or learning a trade, there is a higher chance that they will delay marriage and for that matter child birth (figure 4.9). It is safe therefore to conclude that one of the ways to control exponential population growth in Tamale, Ghana or even Sub-Saharan Africa is to design alternative livelihood empowerment programmes for out of school adolescents to get them engaged just like their peers in main stream educational institutions. Young adolescent girls had different reasons for wanting to delay pregnancy ranging from age fears; financial status inter-alia. The single most important reason was their current trade with about 43.5% as indicated above.

5.4.6 Attitudes on Information Sources

A significant number of girls' preferential sources of information are found to be mostly discussing their SRH issues with health professionals than friends or even family. Discussions with friends and family arise in response to the non-availability of alternative sources (figure 4.2).

5.4.7 Attitudes on SRH Communication

The study finds that girls think it is okay for them to discuss issues regarding sex between boys and girls. Even though girls prefer professional information on the subject matter of SRH, when in crisis, 31.8% and 23.5% will likely discuss their crisis with family and friends respectively. This reveals that young adolescent girls were 0.74 times less likely to discuss their SRH emergency issues with friends than families and 4 times more likely to discuss with friend as against health professionals. The interesting to note is that when it comes to preference for engagement of opinions on SRH matters, it is the health official. However, when it comes to practice on the subject matter especially on crisis situation, young adolescent girls tend to confer more with friends and family than they do with health professionals.

5.4.8 Subjective Views on Prevalence of Teenage Pregnancy among Young adolescent girls

Subjective a good number of young adolescent girls are found to believe that unwanted pregnancy is a common problem among adolescent girls with many not readily willing to tell their personal stories except living under generalised impressions. It is the researchers considered view that teenage pregnancy is indeed very prevalent except generals do not want to be seen in that picture and often tend to present passive narratives on the subject matter. The challenge, however, is harmonization of data on the subject matter on a national scale.

5.4.9 Subjective Views on the Practice of Unsafe Abortion

Only a few girls are thought to use the right regimes in dealing with unwanted pregnancies. and a bigger number of young adolescent girls believed to mostly use unsafe ways to

terminate pregnancies. That is 26.7% and 73.3% respectively as seen in table 4.3. This put in perspective the call for the provision and management of a legal framework as regard abortion related services especially among the youth (UNDP, 1994).

5.4.10 Overall Attitudes

Generally, attitudes were found to be fair. Knowledge was found to be a precursor of good attitudes with 13.6% likelihood of improving attitudes with additional increase in the level of knowledge. However, socio-demographic factors were generally found not be significant for attitudes. Age, marital status is observed to be significant for attitudes (table 4.7). Besides, knowledge is found to have predictive effect for good attitudes (table 4.9).

5.5 Behaviours of Girls Relative to SRH

This looks at character manifestations of young girls concerning reproductive health. It is a product of knowledge and attitudes.

5.5.1 Intimate Relationships

Intimate sexual relationships are common practices among adolescent young adolescent girls in apprenticeship training with about 82% of young adolescent girls currently being in such relationships. Among the young adolescent girls are those involved in multiple sexual relationships, some have up to four (4) different boyfriends. About 18% are said not to be in any amorous relationship as at the time of the study, among them are those who broke out of relationships and were not engaged in any at the time of the interaction. A few others were minors and among them are those who are not in for relationship due one or both of the

following factors. That is religion and parents ability to satisfy personal needs of young adolescent girls. These are appropriately illustrated in table 4.4. The indication here is that young adolescent girls who come from financially sound homes are less likely to be preyed upon by men. Behaviours of young adolescent girls were generally found not to be impressive especially on the issue in discussion here. This partly agrees with earlier findings that adolescent sexual activities are on the ascendency (Weillings, 2006).

5.5.2 Practice of Sexuality

Sex could pass as a norm among this population of young girls. About 38.8% claimed not to have had any episode of sexual intercourse before the research interviews. About 61.2% had actually had conceded haven had sexual intercourse with their partners, male friends, and preys. However, the researcher's observation of the entire period leads him to draw conclusion that about 75%+ have had sex at least once in their life thus far at an average age of 19.01 contrary to the finding of the department of health and human services which put average age of sex among girls at 17.4 years. Owing to interactions with some who did not out-rightly accepted engaging in sexual activity due to shyness but can be inferred from interactions with them. This equally finds favour in the 2006 study of Weillings as earlier cited. As captured in table 4.4, of the number that reported haven had sex, only 21.6% said they had used contraceptive methods. By implication, 70% plus others had sexual intercourse without any form of contraception. Amongst the 21.6% who used contraceptives, those who used condom were 48.2%. Those who used emergency pills were about 13% of the young adolescent girls and about 18.5% others used injectables. This is way above the 33% captured in the 2009 report of the GSS and GDHS. Much the same as emergency pills, 13%

of them also used daily pills and 9.1% used other methods including the calendar method and coitus-interruptus. Find reference in table 4.4. It is generally found that there exist connection between being in a relationship and haven had sexual intercourse. It is almost certain that but for issues of sexual abuse, all those who reported haven had sexual intercourse were all in one form of relationship or another.

5.5.3 Pregnancy Preventive Alternative Actions

Young adolescent girls adopt different ways and means in ensuring that they do not get pregnant against their will, it is clearly that most of these girls are more concerned about preventing pregnancy than even protecting themselves against sexually transmitted infections. Sexually active girls who do not want to get pregnant at a given point in time, may well settle for romance with their partners, others will masturbate, a moderate number will also have sexual intercourse with the use of condom and significant others are purported to resorting to other means such as sleeping or washing private part with warm water when she feels horny. Reference is made for table 4.4. Such unstudied alternative procedures for pregnancy prevention may form basis for the over 32% of SRH diseases being contributed to by the activities of young adolescents (WHO, 2008). Measures such playing with waist and washing the private part with warm water are some of the masturbative procedures young adolescent girls are found to undergo.

5.5.4 Prospective Actions against Unwanted Pregnancy

Abortion is found to be a challenge for good number adolescent girls. As much as 35.7% are willing to abort their pregnancies should it happen whilst 64.3% are motivated enough to keep it. Nonetheless, if you strike out the number of those married from this population, the

percentage relativity for adolescent girls who will likely abort their pregnancies increases. This finding probably among others forms the basis for the call by UNDP for governments to design appropriate legal frameworks to deal with unwanted pregnancies among young adolescent girls (UNDP, 1994). Government's establishment of the Ghana Costed Implementation Plan in 2016 is somewhat a self-admission of failure as regards ASRH after nearly three decades of the Cairo conference on RH as drawn from (GMoH, 2016).

5.5.5 Practice of Unsafe Abortion and Previous Abortions

About 73.3% of young adolescent girls are thought to use wrong means of eliminating pregnancies. About 2.7% are found to have previously aborted pregnancies. As insignificant this may appear in term of percentage, it is intriguing to note that almost all of them did not use established protocols to carry out the activity but either got prescriptions from chemical shops or had private arrangement with health worker friends. The finding here posse serious questions about Ghana's progress so far as regards the 1994 recommendations of UNDP on ASRH.

5.5.6 Discussions around SRH among Young adolescent girls

Discussion and talking about the subject matter was found to be a subculture among young adolescent girls. About 52.16% of respondents were to generally be involved in consistent discussions of the subject matter. This invariably runs somewhat contrary to earlier studies that identified the absence of communication as one of the issues underpinning utilisation RH-services (Ghafari *et al*., 2014; Newton-Levinson *et al*., 2016).

5.5.7 Prevalence of Teenage Pregnancy among Girls

There is an overwhelming believe that teenage pregnancy is a big problem among young adolescent girls except that very few are willing to open up on the issue. Almost about 92.55% of the young adolescent girls think teenage unwanted pregnancy is a major problem confronting young girls and often common among them. Some others think it is not common as perceived; however, these are in the minority. This is not so different from the issues and challenges confronting young adolescent girls in a study by Awusabo-Asare and others (Awusabo-Asare et al., 2004).

5.5.8 Overall Behaviours

On the whole, behaviours were found to be poor relative to RH at the individual level. However, on aggregate scores, marital status, age and attitudes are found to be significant for behaviours (table 4.9 and 4.10). At higher order analysis age and knowledge are found to have predictive effect on behaviour on RH. This finding is largely not reflective of other findings by Mbeba et al., (2012).

5.6 Availability and Accessibility of Services on Reproductive Health Choices

The twin issues of availability and accessibility are very key in the delivery of family planning and reproductive health services. Find discussion therefore the variables of availability and accessibility as associated with reproductive health and family planning services as well as key issues associated with service utilisation. Previous studies identified factors influencing service utilisation as a complex social, financial and psychosocial impetus (WHO, 2011).

5.6.1 Availability of Reproductive Health Services

In attempt to enquire awareness relative to service availability of family planning and reproductive services in communities of young adolescent girls, the study found that, 49.8% of young girls said services are not available in their communities per their estimation. 50.2% others said services were largely available in their respective communities. The study noticed that perception on availability was largely tied to demand and utilisation, for those who had used at least a service or the other, they were better placed to indicate whether services were generally available or otherwise. For those who had not patronized services before at the time of this study, there was a big gap in determining whether services were available in their communities should they demand it or otherwise. It was much more easy for those who had previously patronised services to say services are available than those who have not utilised services thus yet. This indicates that the subject of availability is need driven to the extent that those who patronise services have a fair thought about availability of RH services. The united nation's population fund identifies availability and accessibility as key drivers for the utilisation of RH-services (UNFPA, 2019).

5.6.3 Accessibility of Abortion Services

52.6% respondents said abortion services were largely difficult to access abortion services in particular in their respective communities. This explains why they will more likely opt for unapproved alternatives to carrying out abortions. Unlike availability, the subject of accessibility is a little more complex as there exists a myriad of accessibility challenges ranging from social, economic and to distance. It finds expression in the views of (Mngadi et al., 2003).

5.6.4.1 Service or Facility Utilisation

Utilisation of ASRHSs especially for young adolescent girls is often affected by cultural, social, economic and gender-based barriers (Kamau, 2006). Utilisation of family planning clinics were found to be low as much as 67.8% said they had not visited any health facility for the purposes of ARHS. In addition, only 32.2% others were found to have visited facilities for such services. This probably might have had bearing on the factors as enumerated above. Others researchers have also found that adolescents' utilisation of ASRHSs may be restricted because of fear of, stigmas, and shame (Blanc, Tsui, Croft & Trevitt, 2009). This is generally corroborated by the study as the key reason that young adolescent girls gave for not being on methods was the fear of being tagged promiscuous.

5.6.4.2 Service Satisfaction

It is refreshing to note that those who previously patronised services have very good impression of the quality of service in our health facilities in the country. 92.7% of responses to the question said there was an appreciable sound level of quality of services at family planning clinics and as such were generally adolescent friendly. This is refreshing because in a study by Jonas et al., (2018), health professionals conduct are thought to largely positively influence adolescents utilisation of RH services.

5.6.4.3 Facility Level Confidentiality

In terms of confidentiality, 86.9% of responses believe there is enough confidentiality at family planning clinics in the country. About 13.1% others said there was no confidentiality. It is easy to argue that the most important barrier to RHS care is the attitude of health workers and that many adolescents are discouraged from using services because of

preconceived motives of health workers and their lack of maintaining confidentiality (Morris & Rushwan, 2015). It is imperative therefore to state that if the situation in the Tamale metro is that better, we can safely conclude that worker attitudes are general good as witnessed in the family planning unit of the Tamale West Hospital during a six weeks monitoring programme in the field practicum component of the Master of Public Health in 2019.

5.6.5 Accessibility of RH Services

It is important to make the point forcefully that poor health systems and weak infrastructure for sexual health, communications and transport make access to services in rural areas particularly difficult (Kabiru, Izugbara & Beguy, 2013). In this particular study, 42.4% of young adolescent girls believe it is difficult for adolescent girls to get such services and 57.6% others believe services are largely available and accessible at any length. Previous studies have identified find other factors such as inadequate number of trained personnel, attitudes of health care service providers, cost, hours spent and distance of health facilities to affect access to ARHSs (Woog *et al*, 2015). It is equally noted that interventions which aim to address the negative attitudes of health workers are likely to improve adolescents‟ RHS utilisation (Jonas, Crutzen, van den Borne & Reddy, 2017). Therefore to improve access to ARHSs, the focus must not only be on providing infrastructure, but also deal with issues of communication, social strands and health worker attitudes.

5.6.6 Factors Influencing Service Utilisation

Many factors may influence young adolescent girls' choices of RH service or why they will use or not use family planning services, and when they decide to use, some other factors may

determine their choice of one product against the other. These factors among others include but not limited to religion, socio-cultural, partner and cost associated factors inter-alia. In this regard therefore, 11% of young adolescent girls indicated any day, their choice will be affected by cost of services. This finds favour in a study done by the Programme for Appropriate Technology in Health (PATH, 1999) which showed that, generally, health service utilisation including RHS is tied to economic aspects of the individual involved. In addition, unmarried young people are generally often dependent financially on parents and may be afraid of being reprimanded or disapproved or punished off if they request money for SRHS (Tylee et al., 2007). However, 4.7% others said it will be affected by their culture, 1.2% others will be affected by other factors either than cost and culture nor partner and religion. For about 30.6% of them, their choices will always be affected by partner advice; however, a significant proportion of respondents, which is 52.6%, attributed their choices to religion related factors.

5.6.7 Facility Level Factors that Influence SRH Service Patronage

Privacy and confidentiality have been found to be two most important issues girls consider in electing a facility for ASRH services. As much of 59.6% of respondents intimated that for if there is privacy and confidentiality, there is everything else; reason facilities with “adolescent corners” will most likely receive more clients for family planning services than those other facilities without such tailor made services. Others prioritized cost and affordability of services in making decision as to where to go for services; this represents just about 18.4% of respondents. This becomes the second most important factor young adolescent girls will consider as against the study of *Erulkar el, (2005)* in a large-scale population-based survey in

Kenya and Zimbabwe found affordability to be the third most important aspect of "youth-friendliness" as reported by young people themselves(Erulkar et al., 2005).. Absence of delays at a facility could also qualify as basis for which some young adolescent girls will choose one facility over another and Television and Radio adverts attracted a negligible constituency of 3.1%.

CHAPTER SIX

CONCLUSIONS AND RECOMMENDATIONS

6.1 Introductions

The study was highly unearthing notwithstanding the difficulties it had with respect to respondent compliance on very sensitive issue of ASRH. Inferring from results of the data gathered from the target respondents in this study, one will note that the following reproductive health issues were identified:

6.2 Summary of Key Findings

- ✓ Majority of young adolescent girls were found to have a minimum of primary education and a fair understanding of RH issues
- ✓ There was however little or connection between knowledge of RH and attitudes or behaviours
- ✓ A strong connection was established between socio-demographic characteristics and attitudes and behaviours
- ✓ Overall attitudes and behaviours towards RH were generally poor
- ✓ Unwanted pregnancy is believed to be common among young adolescent girls
- ✓ The study also revealed that a good number of young adolescent girls will prefer a self-administered abortion procedures despite the risk that comes with it for fear of stigma
- ✓ Health facilities are generally said to be accessible to the peculiar needs of the girl child in respect to RH services
- ✓ Overall reproductive health services to adolescent young adolescent girls is said to be mostly satisfactory and confidential

- ✓ Lastly, majority of their discussions among peers is on sex and sexuality

6.3 Conclusions

In addition, the study upon analysis and counter analysis in line with objectives for the study came to the following conclusions:

- ✓ That the level of awareness on adolescent reproductive health is high
- ✓ That the level of knowledge on reproductive health of young adolescent girls in apprenticeship training within the Tamale Metropolis is however generally fair
- ✓ That most sexually active young adolescent girls in these shops who practice sex do not practice proper contraception
- ✓ That young adolescent girls are believed to be using unsafe means to terminate unwanted pregnancies
- ✓ That teenage pregnancy is thought to be a canker among young adolescent girls in the Tamale metropolis
- ✓ That reproductive health services are widely available and accessible to young adolescent girls
- ✓ That most young adolescent girls would prefer discussion on such topics such as ASRH from health workers and familial sources
- ✓ That age, education and marital status of young adolescent girls is what affect their reproductive health choices most be it on the level of knowledge, attitudes or even behaviour
- ✓ That one of the ways to control exponential population growth in Tamale, Ghana or even Sub-Saharan Africa is to design alternative livelihood empowerment programmes for out

of school adolescents to get them engaged just like their peers in main stream educational institutions

The study acknowledging well that the health of the young adolescent girls and for that matter adolescents is as important as the adult woman or even more, and the fact that every young girl is a potential mother and a family keeper, it states that the health of a family is closely tied to that of the woman, for young girls to be healthy mothers to raise healthy homes tomorrow, they must make healthy reproductive health decisions today.

6.4 Recommendations

It is therefore under the same score recommends the following:

- ✓ UNFPA and governmental agencies on RH such as GHS sustain at efforts educating the youth on RH if not improve
- ✓ That governments make available and accessible to the young girl the social environment to make healthy RH decisions
- ✓ Government and other NGOs in health concentrate on the reproductive health needs of out of school young adolescent girls as much as those in school
- ✓ Governments and relevant stakeholders should in particular organise special fora for apprentices on RH on quarterly basis
- ✓ Government of Ghana enacts an adolescent reproductive health law that regulates reproductive health conduct of young adolescent girls as separate from the general reproductive health policies of government. It must include making premarital sex

criminal and a sanctions regime that will be reformative at the same time deterrent. This will provide impetus for proper targeting of policies that aim at addressing the teenage pregnancy crisis the nation is currently experiencing

- ✓ Health facilities make their environment more adolescent friendly by giving true meaning to the adolescent reproductive health corner
- ✓ That health personnel in GHS and MoH agencies be tolerant to adolescent service seekers
- ✓ Stalk holders in reproductive health increase their campaigns on the subject matter targeting social transition
- ✓ That the attention given to condom and condom use should be replicated in respect to other reproductive health choices.
- ✓ That government take steps to make abortion both legally and socially accessible to young girls

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APPENDICES

APPENDIX I

QUESTIONNAIRE

KNOWLEDGE, ATTITUDES AND BEHAVIOURS ON REPRODUCTIVE HEALTH AMONG YOUNG WOMEN IN APPRENTICESHIP TRAINING IN THE TAMALE METROPOLIS

Serial No.: [ ]

SECTION A: SOCIO DEMOGRAPHIC CHARACTERISTICS

1. Age of respondent 1. 9- 14 years [ ] 2. 15 to 19 years [ ] 3. 20-24 years [ ] 4. 25+ [ ]
2. Educational level of respondent 1. Primary/JHS [ ] 2. SHS [ ] 3. Tertiary [ ] 4. No Education [ ]
3. Religion 1. Islam [ ] 2. Christianity [ ]
4. Marital status of respondent 1. Married [ ] 2. Never Married

SECTION B: KNOWLEDGE ON REPRODUCTIVE HEALTH CHOICES

5. Have you heard of sexually transmitted disease before? 1. Yes [ ] 2. No [ ]
6. Have you heard about or seen condom before? 1. Yes [ ] 2. No [ ]
7. Do you know any natural or modern means of preventing pregnancy? 1. Yes [ ] 2. No [ ]
8. If yes, state examples of contraceptive methods? ….....
9. Do you know any method by which you can prevent pregnancy after unprotected sex? 1. Yes [ ] 2. No [ ]
10. Do you know of any means by which you can get rid of an unwanted pregnancy? 1. Yes [ ] 2. No [ ]
11. In your opinion what are reproductive health choices? …….
12. From which source will you want to be informed on reproductive health? 1. Friends [ ] 2. Media [ ] 3. Parents [ ] 4. Health Workers [ ] 5. Shop [ ]

SECTION C: ATTITUDES ON REPRODUCTIVE HEALTH CHOICES

13. In your opinion can modern contraceptive use cause infertility? 1. Yes [ ] 2. No [ ]
14. What do you think about sex? 1. It is a nice feeling [ ] 2. It is a weird feeling [ ] 3. Normal [ ] 4. Shameful [ ]
15. If you want to have sex what will influence your decision? 1. Money [ ] 2. Appearance [ ] 3. Love [ ] 4. When he demands [ ] 5. Others, please specify……..…….……
16. When do you think most girls at your age would use condom? 1. Do not know [ ] 2. For protection against STIs [ ] 3. Avoid pregnancy [ ]
17. In your opinion is condom use confortable? 1. Yes [ ] 2. No [ ]
18. Are you ready to get pregnant right now? 1. Yes [ ] 2. No [ ]
19. From whom or where, would you prefer to have received more information on this topic? 1. School [ ] 2. Family [ ] 3. Friends [ ] 4. Health workers [ ] 5. Radio [ ] 6. Other, please specify……
20. Do think it is okay for young women to discuss relationship between boys and girls?
21. Do you think unwanted pregnancy is a common problem among young women? 1. Yes [ ] 2. No [ ]
22. Do you think most young women practice unsafe abortion? 1. Yes [ ] 2. No [ ]

SECTION D: BEHAVIOURS ON REPRODUCTIVE HEALTH CHOICES

23. Do you have a boy lover? 1. Yes [ ] 2. No [ ]
24. Have you ever had sexual intercourse? 1. Yes [ ] 2. No [ ]
25. Did you use any form of contraceptive? 1. Yes [ ] 2. No [ ]
26. What will you do to an unwanted pregnancy? 1. Keep it [ ] 2. Abort it [ ]
27. Have you ever aborted a pregnancy? 1. Yes [ ] 2. No [ ]
28. Do you discuss sex-related issues often? 1. Yes [ ] 2. No [ ]

SECTION E: AVAILABILITY AND ACCESSIBILITY OF SERVICES ON REPRODUCTIVE HEALTH CHOICES

29. In your opinion do you agree that reproductive health facilities are available? 1. Yes [ ] 2. No [ ]
30. Are abortion services generally available in your community? 1. Yes [ ] 2. No [ ]

31. Have you visited health care provider on account of reproductive health problems? 1. Yes [ ] 2. No [ ]
32. Do you think it is easy or difficult for unmarried girls to obtain contraceptive methods? 1. 1. Yes [ ] 2. No [ ]
33. What factor do you consider most in selecting a reproductive health service? 1. Religion [ ] 2. Culture [ ] 3. Partner [ ] 4. Cost [ ] 5. Others, please specify……..……

Thank you for your participation

APPENDIX II

INTERVIEW GUIDE

KNOWLEDGE, ATTITUDES AND BEHAVIOURS ON REPRODUCTIVE HEALTH AMONG YOUNG WOMEN IN APPRENTICESHIP TRAINING IN THE TAMALE METROPOLIS

1. What are reproductive health choices?
2. How many guys are you dating
3. Why do you date?
4. Who will you share information with on your sexual life
5. At what age did you have you first sexual encounter?
6. How did it occur?
7. Are you on contraception?

INFORMED CONSENT

Dear participant,

I am Alhassan Iddrisu Abdullai, a student of the University for Development Studies (UDS), School of Medicine and Health Sciences, Department of Community and Family Medicine, Tamale, conducting a research on "Knowledge, Attitudes and Behaviours on Reproductive Health among young women in Apprenticeship Training in the Tamale Metropolis".

Your participation is voluntary and you are free to withdraw at any point in time. The information provided will remain anonymous, treated with confidentiality and used only for academic purposes. The researcher is very grateful for your participation in this study.

Sign/ Thumbprint: ……

APPENDIX III

UNIVERSITY FOR DEVELOPMENT STUDIES
School of Medicine and Health Sciences
(Department of Community Health and Family Medicine)

Tel : 03720 - 93295
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Local : 5:7811/106.15
Internet: www.uds.edu.gh

Post Office Box TL 1883,
Tamale, Ghana, West Africa.

25/02/2020

Office of the Head

The Chairperson
Institutional Review Committee
University for Development Studies
Tamale,
Northern Region

LETTER OF INTRODUCTION

I write to introduce to you Mr. Alhassan Iddrisu Abdulai, a second-year Master of Public Health student in the Department of Community Health and Family Medicine, School of Medicine and Health Sciences. As part of the requirement, Mr. Alhassan is expected to write and submit a well-written thesis to the Department as part of the requirements for graduation. As part of the process, Mr. Alhassan is applying to your committee for ethical clearance on the topic: ***Reproductive Health Knowledge, Attitudes and Behaviours of adolescent girls in an apprenticeship training in the Tamale Metropolis.***

I would be very grateful if you could assist him by way of ethical clearance to enable him execute his project to a successful end.

Thank you very much.

OFFICE OF THE HE
Dep. Of Comm. Health & Family Medicine
UDS-SMH

Yidana Adadow *(PhD)*
(HoD, CH&FM)

APPENDIX IV

GHANA HEALTH SERVICE

DISTRICT INFORMATION HEALTH MANAGEMENT SYSTEM

Period	Organisation unit / Data	Family planning registrant 10-14 years-fp	Family planning registrant 15-19 years-fp	Antenatal mother at registration - 10-14	Antenatal mother at registration - 15 - 19	Delivery by mother in age group 10-14 years	Delivery by mother in age group 15-19 years	Abortion mother at age 10-14	Abortion mother at age 15-19
2019	Tamale West Hospital	1	102		560	1	458		42
	Tamale Teaching Hospital		28		83		425		55
	Sagnarigu Health Centre	65	105		26		2		
	Vitting Clinic		67		44		4		
	Tamale Central Hospital		66		208		404		14
2018	Tamale West Hospital	4	103	1	504	1	385		50
	Tamale Teaching Hospital	2	47	1	53		434		36
	Sagnarigu Health Centre	94	247	1	21		2		
	Vitting Clinic		43		57		2		
	Tamale Central Hospital	5	56		202	2	374	1	22

APPENDIX V

LOGISTIC REGRESSION MODEL COEFFICIENTS AND SUMMARY

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	29.159	9	.001
	Block	29.159	9	.001
	Model	29.159	9	.001

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	266.598[a]	.108	.157

a. Estimation terminated at iteration number 4 because parameter estimates changed by less than .001.

Classification Table[a]

Observed			Predicted		
			Comp_for_Behaviour		Percentage Correct
			Poor Behaviour	Good Behaviour	
Step 1	Comp_for_Behaviour	Poor Behaviour	17	51	25.0
		Good Behaviour	6	181	96.8
Overall Percentage					77.6

a. The cut value is .500

APPENDIX VI

DATA ENUMERATION MAP TRACKING SHEET

NO.	SHOP	LOCATION	NUMBER OF RESPONDENTS	REMARKS
1				
2				
3				
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APPENDIX VII

KNOWLEDGE, ATTITUDES AND BEHAVIOURS ON REPRODUCTIVE HEALTH AMONG YOUNG WOMEN IN APPRENTICESHIP TRAINING IN THE TAMALE METROPOLIS

ORIGINALITY REPORT

16%	14%	3%	9%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	iosrjournals.org Internet Source	6%
2	etd.uwc.ac.za Internet Source	5%
3	Submitted to Atlantic International University Student Paper	1%
4	Submitted to Institute of Development Management Student Paper	1%
5	Submitted to University of Ghana Student Paper	1%
6	Submitted to University for Development Studies Student Paper	<1%
7	mafiadoc.com Internet Source	<1%
8	www.statsghana.gov.gh Internet Source	<1%

Abdul-Rahman ...
23 - 11 - 2...