UNIVERSITY FOR DEVELOPMENT STUDIES

AN INVESTIGATION OF FACTORS CONTRIBUTING TO LOW UPTAKE OF FAMILY PLANNING SERVICES IN WEST GONJA DISTRICT OF GHANA

BILLEY YAW KRAH

A THESIS SUBMITTED TO THE DEPARTMENT OF ALLIED HEALTH SCIENCES, UNIVERSITY FOR DEVELOPMENT STUDIES IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF PHILOSOPHY DEGREE IN COMMUNITY HEALTH AND DEVELOPMENT

2012

UNIVERSITY FOR DEVELOPMENT STUDIES

AN INVESTIGATION OF FACTORS CONTRIBUTING TO LOW UPTAKE OF FAMILY PLANNING SERVICES IN WEST GONJA DISTRICT OF GHANA

BY

BILLEY YAW KRAH

(UDS/CHD/0011/10)

A THESIS SUBMITTED TO THE DEPARTMENT OF ALLIED HEALTH SCIENCES, UNIVERSITY FOR DEVELOPMENT STUDIES IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF PHILOSOPHY DEGREE IN COMMUNITY HEALTH AND DEVELOPMENT

JUNE, 2012

DECLARATION

I certify that this thesis does not incorporate without acknowledgement any material previously submitted for any degree in any university; and that to the best of my knowledge it does not contain any material which is formerly published or written by any other persons except where due to reference is written in this thesis.

…… ……

BILLEY YAW KRAH **DATE**

(STUDENT/AUTHOR)

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

…… ……..

DR.MAHAMA SAAKA **DATE**

(SUPERVISOR)

DEDICATION

I dedicate this work to Mr. Akwasi Boakye-Yiadom; my mentor and to the memory of my late father Mr. Sampson Yaw Billy who died during the period of my study.

ACKNOWLEDGEMENTS

I wish to express my profound gratitude to my supervisor; Dr. Mahama Saaka who welcomed me to his office at anytime and gave me academic guidance throughout this research work. He took time out of his busy schedules to guide me in this study.

I particularly want to thank Mr. Akwasi Boakye-Yiadom, a lecturer of the Department of Allied Health Sciences who gave me financial support to carry out this research.

Dr. Robert Kuganaab Lem who is the Head of Department of Allied Health Sciences is worthy to be thanked for his supervision in the entire course work.

I am again grateful to Dr. Chrysantus Kubio (District Director of Health Services, West Gonja District) for his support during my data collection.

Finally, I am grateful to my three course mates; Oppong Michael, Abdulai Abdul Rauf and Abdul Ganiwu for the healthy relationship that existed between us during our course work.

ABSTRACT

There is no information or scanty information on the factors associated with utilization of modern family planning methods in the West Gonja District. This study therefore examined the determinants of uptake of family planning services and the barriers in accessing family planning services among urban poor women. A community-based cross-sectional analytical study was conducted. Both quantitative and qualitative methods were used in the data collection. The sample included 15 family planning service providers, 300 men in the age group of (17 -50) years and 600 women in the reproductive age group of (15 – 49) years. Structured questionnaires were used to interview 600 women while another 300 group of women were engaged in focus group discussions. The study was carried out in 30 communities that were selected using multi-stage cluster sampling method. In each of the study communities, 20 women were interviewed using a structured questionnaire whilst 10 women who were not interviewed with a structured questionnaire were engaged in focus group discussion. There were also 10 men in the focus group discussions in all the thirty communities. Information regarding socio-demographic factors, economic factors, women autonomy, and knowledge of family planning methods, barriers, availability and accessibility of family planning methods were gathered. The contraception prevalence rate (CPR) was 20.3 %. Multiple logistic regression analysis showed that the uptake of modern family planning methods was associated with the ability of women to discuss their health issues with service providers (OR = 1.10, 95 % CI: 1.9- 2.4, P < 0.001), household wealth index (OR =2.70, CI: 1.7- 4.4 , P <0.001), number of daughters a woman have (OR= 0.471, 95 % CI: 0.31- 0.72, P <0.001) and maternal autonomy (OR= 1.413, 95 % CI: 1.09 -1.83, P< 0.009). Education level of husbands had a more positive effect on the uptake of family planning services, compared to the education level of their wives. Women's education, economic and empowerment or autonomy were significant determinants of the uptake of family planning services in the study population.

Also, the ability of the woman to discuss her health needs especially her reproductive health issues with a health service provider had a positive influence on the uptake of family planning services. Family planning service providers should freely avail themselves to women and encourage them to feel confident to discuss their health needs with them. Family planning behaviour change communication (BCC) that target both women and men should be strengthened in the district.

TABLE OF CONTENT

CONTENTS **PAGE**

LIST OF TABLES

TABLE **PAGE**

LIST OF FIGURES

FIGURE **PAGE**

LIST OF ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
ATR	African Traditional Religion
BCC	Behaviour Change Communication
CBHV	Community based health volunteer
CHPS	Community Based Health Planning Services
CI	Confidence Interval
CIWA	Composite Index for Women Autonomy
CPR	Contraception Prevalence Rate
CYP	Couple Year of Protection
DHD	District Health Direct
DHS	Demographic and Health Survey
DPHN	District Public Health Nurse
FGDs	Focus Group Discussions
FP	Family Planning
GDHS	Ghana Demographic and Health Survey
GHS	Ghana Heath Service
GSS	Ghana Statistical Service

HIV	Human Immunodeficiency Virus
ICPD	International Conference on Population and Development
IEC	Information Education and Communication
IPPF	International Planned Parenthood Federation
IUD	Intrauterine Devices
JHS	Junior High School
MDGs	Millennium Development Goals
MOH	Ministry of Health
NGO	Non- Governmental Organization
NPC	National Population Council
OR	Odds Ratio
PPAG	Planned Parenthood Association of Ghana
RAPID	Resources Awareness of Population Impacts on Development
RCH	Reproductive and Child Health
RH	Reproductive Health
SES	Socio-economic Status
SPSS	Statistical Package for Social Sciences
STIs	Sexually Transmitted Infections
TFR	Total Fertility Rate
UN DESA	United Nations Department of Economic and Social Affairs
UNFPA	United Nations Population Fund
UNICEF	United Nations Children Fund
USAID	United States Agency for International Development
WHO	World Health Organization

WIFA	Women in Fertile Age

CHAPTER ONE

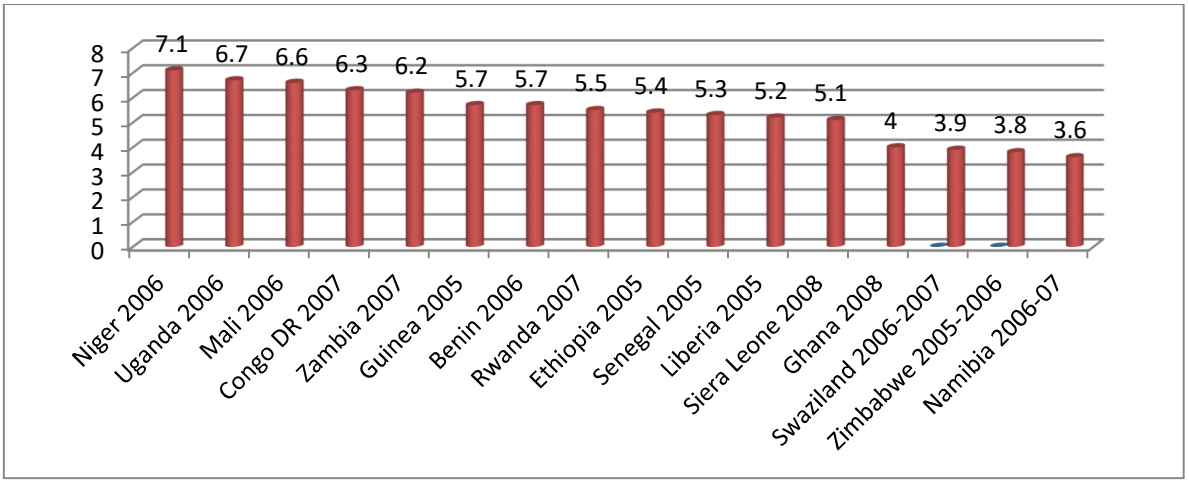
INTRODUCTION

1.1 Background

Family planning (FP) is promoted worldwide to enable individuals and couples to space and limit childbirth. The Alma Alta Declaration on Primary Health Care identified FP as one of the key strategies to achieve a better quality of life for all people (WHO and UNICEF, 1978). When carried out effectively, family planning is one way of reducing the maternal mortality ratio, high rates of infant and child morbidity and mortality and ultimately promoting optimum well being of the whole family.

Though the concept of family planning is not a new idea in most African cultures, low uptake of modern family planning services is one of the biggest challenges maternal health programmes face. This is as a result of pressures being put on the limited resources that are available for carrying out these programmes. The health of women deteriorates when there is no adequate spacing of child births.

Governments of African countries have devised ways to check fertility rates so that development can be achieved in every sector. According to the Ghana Health Service and Ghana Statistical Service in the 2008 Demographic and Health Survey of Ghana, total fertility rate is still high in Ghana which is attributed to the low uptake of family planning services. A comparison of fertility rates of some Sub-Saharan African countries indicates high fertility rates therefore the need for couples to use contraceptives. The figure below shows the fertility rates of some sub-Saharan African countries.



Source: GDHS (2008)

Fig 1.1: Total fertility rates of some sub-Saharan African countries

According to the Ghana Health Service & Ghana Statistical Service (2009), awareness about contraception and family planning services is high but utilization of available family planning services is low. Family planning services generally focus on decreasing high total fertility rate mainly by increasing the contraception prevalence rate (CPR). The CPR for Ghana is 17% (GHS & GSS, 2009). This gives an indication that uptake of modern family planning services is low. There is also regional variation of CPR within Ghana with the Greater Accra and Brong Ahafo regions having the highest CPR of 22% whilst the Northern region has the lowest of 6%. As a result of the regional variations of the CPR, there is a wide variation in fertility rates in Ghana with the Northern region having the highest fertility rate of 6.8 and the Greater Accra region having the lowest rate of 2.5. (GHS & GDHS, 2009)

According to the Ghana Statistical Service (2001) in the population and housing census that was conducted in the year 2000, the West Gonja district had a population growth rate of 3.8 which was higher than the national population growth rate of 2.5

In resource-poor settings, like that of the West Gonja District, the allocation of limited resources must be prioritized to ensure the maximum possible benefits to the population. It is therefore critical to espouse the factors that contribute to women's health-seeking behavior for family planning services. If these factors are well understood, policy interventions aimed at behavior change could be enacted to improve the uptake of these services.

1.2 Problem Statement

The West Gonja District which is located in the Northern Region is one of the worst performing districts in terms of the uptake of family planning services. The uptake of family planning services is reported to be as low as 1.5% (District Health Directorate Annual Report, 2010). The factors leading to this low uptake of family planning services are unclear and therefore the need to research into it.

There is little information regarding the factors that are responsible for this situation. Low uptake of family planning services leads to high fertility rates which produce large families and short birth intervals which are closely associated with poverty and poor maternal and child health. Frequent births usually lead to resource constraints, overcrowded housing, and poor hygiene and sanitation for the children which may turn to perpetuate a vicious cycle of poverty. This study therefore sought to identify factors and their relative contribution to low uptake of modern family planning services.

1.3 General and Specific Objectives of the Study

The general objective of the study was to investigate factors that contribute to the low uptake of family planning services in the West Gonja District.

The specific objectives were:

i. To assess the current uptake of modern family planning services in the district.

ii. To examine the relationship between women's economic, educational and empowerment status and uptake of modern methods of family planning.

iii. To find out the effect of distance to health facility on the uptake of family planning services in West Gonja District

iv. To identify the preferred modern contraceptive method in the West Gonja District.

v. To identify barriers to the uptake of family planning services in the West Gonja district.

vi. To identify the main service providers of family planning services in the West Gonja District.

vii. To determine the couple year of protection (CYP) for the three years preceding the study.

1.4 Research Questions

i. What is the CPR of the West Gonja District?

ii. What are the factors that determine the uptake of family planning services in the west Gonja District?

iii. What is the influence of women's educational, economic and empowerment status on the uptake of family planning services?

iv. What is the preferred family planning method among couples in the West Gonja District?

v. What are the barriers against the uptake of family planning services in the West Gonja district?

vi. What is the CYP of the West Gonja District for 2009, 2010 and 2011?

1.5 Significance of the Study

Information generated by the study may be useful for designing interventions and formulating policies aimed at improving the uptake of family planning services in the district.

There is an array of family planning services but people have their choices. Therefore, the results of the study may inform health authorities the preferred methods of clients, so that more resources will be committed in promoting those family planning services.

1.6 Study Area

The West Gonja District of the Northern region of Ghana was the study area. This is because it is in the Northern region of Ghana thus the region with the highest fertility rate (6.8 children per woman) as compared to the lowest 2.5 children per woman of Greater Accra region and also comparing it with the national fertility rate of 4.0 (GHS & GSS,2009).

Again, the West Gonja district had the lowest Contraception Prevalence Rate (CPR) among all the districts in the Northern region as reported in the 2010 annual report of the regional health directorate. The district is also the largest district among the 20 districts of the Northern region with about 200 communities according to the Ghana Health Service or the District Health Directorate. It has no single tarred road linking the district capital (Damongo) and most of the communities in the northern part of the district are flood prone areas. These communities are referred to as "hard to reach areas" by all agencies and departments operating in the district. These communities are therefore cut off from the District capital (Damongo) during the rainy season therefore, denying the people of services such as health services and other life-enhancing services.

According to the District Planning and Coordinating Unit (DPCU) (2010) the district has an estimated population of 88,320 (a projection from the 2000 Population Census with 3.8 % growth rate) with approximately 200 communities, which are sparsely populated and far apart. This peculiar pattern of distribution of the population in the district has adverse implication for service delivery, as staff going on out-reaches travel long distances. A larger proportion of the population is in "overseas or hard to reach" areas and these populations can only be accessed

during the dry season. The population per square kilometre is 8.5 with a sex ratio of 103 males to 100 females. The age structure is typical of developing countries with over 50% between 15 - 60 years of age.

According to the DPCU (2010), the fertility rate of West Gonja district which is about (8 children per woman) is high in the district compared with the national average of (4 children per woman) in normal reproductive life. The average household size is about 8 people per household, which is again larger than the national average of 5 per household. The annual average household income is estimated at about GH¢ 550.00 which gives an average per capita income of about GH¢70.00/year. This implies that over 80% of the population fall below the poverty line as set by the United Nations Organization to be GH¢ 900.00/year.

The main economic activity in the area is farming with the cultivation of food crops such as yams, maize, beans, groundnuts, and green leafy vegetables being the main crops cultivated. The women and children throughout the District also engage in picking of shear nuts extensively, and the oil extracted for domestic and commercial purposes. There is also the processing of cassava into gari for commercial purposes.

In this study, thirty (30) communities in the district were selected to be the study communities. All the six sub-districts of the Ghana Health Service (GHS) in the District were duly represented although the number of communities from the various sub districts differed.

1.7 Conceptual Framework of the Study

Fig 1.1 shows the conceptual framework of the study. The framework is based on the determinants of the use of modern contraceptives. This was constructed by the author.

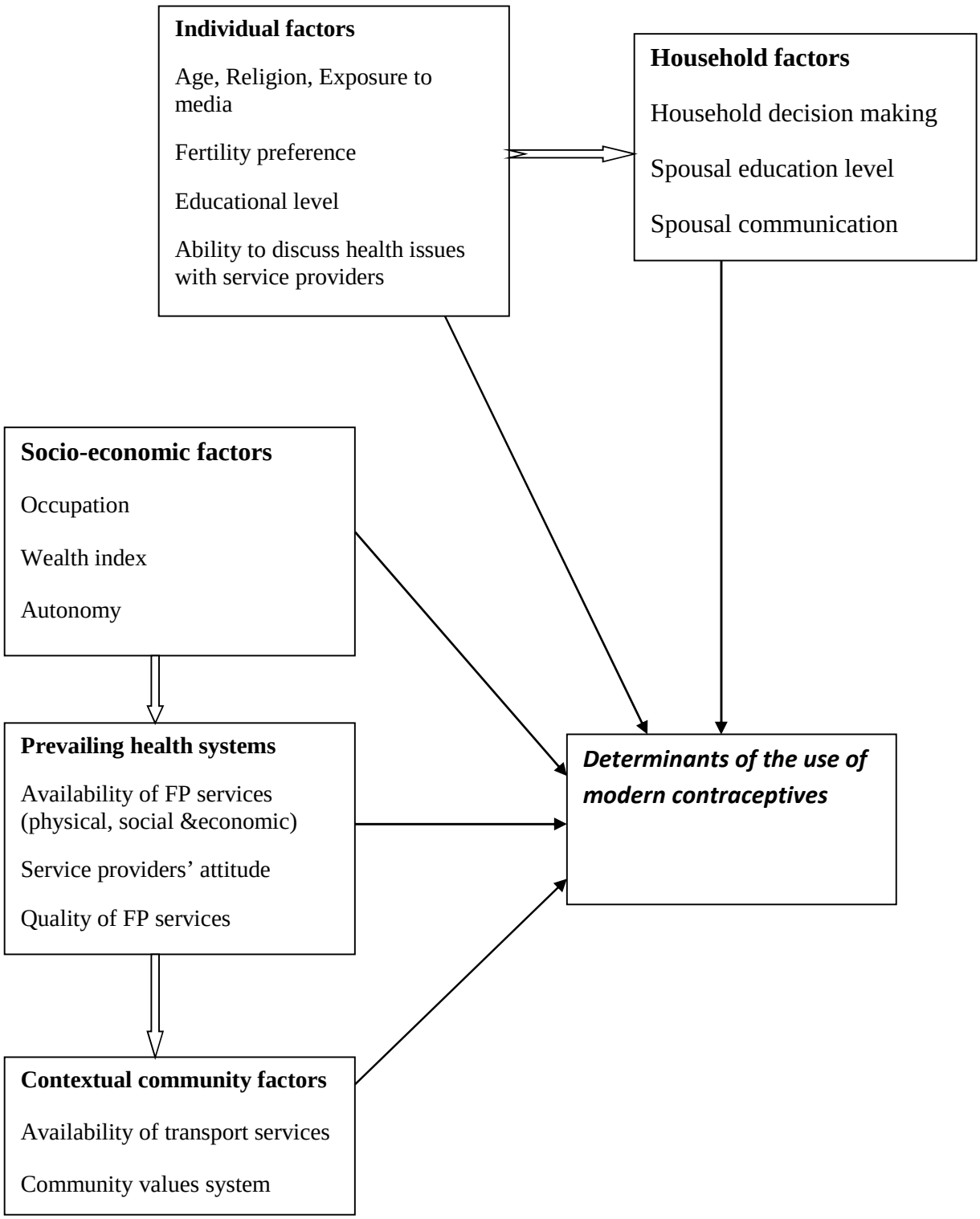


Fig 1.1: Determinants of contraceptives use

The framework shows the factors that are generally known to influence or determine the use of contraceptives. The factors are classified into individual level, household, socio-economic, prevailing health systems, and contextual community level factors:

i. Individual factors of the woman: these factors include the influence of age, level of formal education, religious denomination, and women's ability to discuss their health needs with service providers to help them acquire knowledge to make informed decisions.

ii. Household factors: The prevailing household factors that were considered include the level of education of the husbands, household decision making process, spousal communication or ability to discuss the health needs of the household.

iii. Socio economic factors: The socio economic factors of the woman and the entire household include the occupation of the woman, the wealth index, and the level of empowerment or autonomy of women.

iv. Prevailing health systems: Influence of the prevailing health systems, availability of family planning services and attitude of service providers.

v. Contextual community factors: The contextual community factors include the values system of the communities, availability of motorable roads and transport services and the distance to the source of family planning services.

1.8 Operational Definition of Terms

Women in fertile age: …… Women who are at the beginning or the peak of their reproductive life and are classified here within the age group of 15 to 49 years.

Health facility*:* ……Any registered and well recognized hospital or clinic

Reproductive Health*:* ……Complete physical, mental and social well being in all aspects relating to the reproductive system and its functioning.

Family planning: ……Any method that is used by couples or sexual partners to avoid, delay, space or limit future pregnancies. It means allowing choice, not chance, to determine the number and spacing of children.

Chemical seller*:* …A registered or licensed store that sells drugs and contraceptives

Availability of a health facility: ……when a client does not have to travel more than eleven Kilometers to for a health.

1.8 Organization of the Thesis

This thesis has been presented or organized into six chapters thus IMRaD (Introduction, Methodology, Results and Discussions) and conclusion and recommendations.

Chapter one includes the introduction to the study, background to the study, the problem statement, the study objectives, the significance of the study, conceptual framework and the operational definition of terms of the study.

The second chapter reviewed relevant literature in relation to the study. The methodology, which is made up of the study design, study type, study variables (independent and dependent variables), data collection instruments, sampling procedure and sample size, study population, sources of data, data collection methods, determination of educational level, determination of household wealth index, determination of maternal autonomy, quality control measures, some ethical considerations as well as plan for dissemination of results are captured in the third chapter.

Results and findings of the study are presented in chapter four whilst the discussion of the results and findings of the study is done in chapter five. The conclusion and recommendations of the study are also presented in chapter six.

CHAPTER TWO

LITERATURE REVIEW

2.0 Overview

This chapter presents a critical review of the literature on determinants of modern contraceptives uptake. Relevant studies in both developing and developed countries are reviewed with particular emphasis on the findings and methodological issue in developing countries.

Before examining the factors influencing family planning services utilization, this chapter describes: the importance of family planning and the development of family planning services in Ghana. A framework that will be used in explaining the determinants of family planning services uptake is then presented. The framework covers all possible factors influencing family planning services uptake and specifies the mechanism through which they operate. Socio-economic variables, such as education, occupation, women's status and women's exposure to media are considered.

2.1 Family Planning and its Importance

Family planning remains one of the most cost-effective public health measures available in developing countries. Family planning and contraception has been defined by many authors and organizations in various ways. The Ghana Health Service (2007) defined family planning services as methods and practices that are used to space births, limit family size and prevent unwanted pregnancies. According to the report, pregnancy by choice and not by chance is a basic requirement for women's health.

Mturi (1996) defined contraception as any deliberate practice or technique undertaken to reduce the risk of conception. Similarly, contraception is defined by Hennink (1997) as the deliberate employment of a technique or a device to prevent conception or pregnancy.

The use of family planning is associated with lower rates of maternal and infant mortality and can therefore influence economic growth. Beyond the health and survival implications of high levels of closely spaced and unintended births, high fertility rates accelerate population growth, undermining development efforts across all sectors not just the health sector (USAID, 2005)

Even though pregnancy or childbirth is seen as a blessing and welcomed by most women, yet the risks of illness and death associated with these events are very high in some parts of the world. According to Rhonda et al (2009) in developing countries, a woman's lifetime risk of dying due to pregnancy and childbirth is 1 in 75, or almost 100 times higher than the 1 in 7,300 risk in developed countries. They further stated that the risk was higher in sub-Saharan Africa, where; a woman's lifetime chance of dying from pregnancy or childbirth-related causes is 1 in 22. The World Health organization (WHO, 2004) reported that more than 500,000 women die every year due to pregnancy-related problems and that the use of methods for family planning reduces maternal mortality prevents unwanted and highly risky pregnancies and also prevents the need for safe and unsafe abortions.

Accordingly, it provides protection from sexually transmitted diseases. The report further stated that approximately 120 million couples in the world do not use contraception and 300 million are not satisfied with the method applied.

Again, the African Population and Health Research Center (2011) reported that, globally, 600,000 women die annually of pregnancy-related causes, and 75,000 die as a result of unsafe abortions (Grimes, 2000). He further stated that, failure or lack of contraceptive services is the cause of about 200,000 of these maternal deaths. The Center further reported that mothers who have unintended births tend to suffer non-psychotic or postpartum depression, feelings of

powerlessness, increased time pressures, and a reduction in overall physical health. They also have poorer quality relationships with all their children, tending to physically abuse them more and spend less leisure time with them.

To reduce the menace of maternal deaths attributed to unplanned pregnancies, Collumbien et al (2008) in their study stated that if women had only the number of pregnancies they wanted or planned and had these pregnancies at the intervals they wanted, then maternal mortality would drop by about one-third. In emphasizing the importance or contribution of family planning services as recipe to lower or reduce maternal mortality, Agustin & Jose (2000) stated that women with birth-to-pregnancy intervals of less than five months experience a risk of maternal death that was 2.5 times higher than women with birth-to-pregnancy intervals of 18 to 23 months. To achieve the desired birth –to –pregnancy intervals couples have to employ the use of contraceptives and family planning services.

Governments of various countries are struggling to reduce fertility rates due to the pressure it poses on every sector of development. Bongarts et al (1994) in their study entitled the proximate determinants of fertility in sub Saharan Africa stated that contraception is the most proximate determinant of fertility. It therefore stands to reason that governments and policy makers who want to check fertility rates should promote the use of contraceptives and working on the underpinning factors that influence contraceptives use. They again stated in their study that the proximate determinants of fertility are the biological and behavioural factors through which social, economic, and environmental variables affect fertility. These factors listed also affect the uptake of family planning services and contraceptives use. Demographers find the study of contraception as a crucial issue in demography since there is a strong association or relationship between contraception and fertility.

Alluding to this fact, Olivera et al (2006) stated that family planning in its broader meaning; is part of the entire demographical and population policy of each country and the planet as a whole. In almost every surroundings, the objectives of family planning commonly highlighted include unwanted pregnancy prevention, extensive population growth reduction, and health improvement of women, children and population as a whole.

In 2001, Ntozi & Ahimbisibwe conducted a study in Uganda and postulated that the use of contraceptives has a significant impact on reducing a woman's fertility level.

There are variations in the levels of contraceptives use in the world. There are different levels of use between continents and countries. Within countries, there are also regional and zonal differences in the use of contraceptives. According to Mturi & Hinde (2001), the differences in levels of contraceptive use accounts for or explain about 92 per cent of the variation in fertility and argued that where contraceptive use is widespread, fertility is expected to decline and birth spacing is equally widespread. Thus, contraceptives use is important not only for its effect on fertility but also because it has health implications for both mother and child.

Family planning and contraception has an array of benefits to the individual and the society. In estimating the importance or benefits of family planning and contraception, Moreland & Talbird (2006) made an analysis of the importance of contraceptives use and vis-a- vis its contribution to the achievement of the Millennium Development Goals (MDGs) which developing countries are striving to achieve. Their study in Kenya stated that the contribution of family planning to the MDGs showed that satisfying unmet family planning needs in Kenya could avert 14,040 maternal deaths and 434,306 child deaths by the MDG target date of 2015. In USAID/HPI (2007), it was noted that the cost savings in providing services to meet MDGs outweigh the additional costs of family planning by a factor of almost 4 to 1.

Cleland et al (2006) stated that promotion of family planning in countries with high birth rates has the potential of reducing poverty and hunger, while at the same time averting 32 percent of

all maternal deaths and nearly 10 percent of child mortality. This would contribute substantially to women's empowerment, achievement of universal primary schooling or education and long term environmental sustainability. Other substantial economic benefits could include demographic *bonus* or dividends. Demographic *bonus* exists when there is a shrinking share of the population consisting of dependent children at the same time as a greater share consisting of working-age adults. According to David et al (2002), when this occurs, it boosts productivity and allows added savings or investment. They again observed that family planning helps to reduce the number of high-risk pregnancies that result in high levels of maternal and child illness and death.

Wawire (2006) noted that high population growth is associated with high illiteracy rates and low education level that make it difficult to implement government programmes, given their budgetary implications. According to World Bank (2003), the use of family planning services is an important issue for a developing country like Ghana. The World Bank (2003) noted that this was due to the benefits gained in terms of development through reductions in fertility levels. Furthermore, the uptake of family planning widened choices available to people, particularly women, by allowing individuals and society more opportunities for social and economic development. Singh et al (2004) revealed that a high fertility rate (which in many cases is attributed to low contraceptive prevalence rate) impedes economic growth. Singh et al (2004) observed that countries with high "population pressure" or with rapidly growing populations may not be able to meet the large education, labour, health, and infrastructure-related demands of the population.

Leisinger et al (2002) noted that population growth affects the environment and raises concerns about food security, safe drinking water and availability of arable land. Eastwood and Lipton (2001) observed that reducing fertility can help alleviate poverty and stimulate economic growth.

2.2 Family Planning Services and Contraceptives Uptake in Ghana

The history of family planning in Ghana could be traced back to the early years after independence with the formation of the Planned Parenthood Association of Ghana (PPAG) in 1967 which was mandated to provide appropriate and quality sexual and reproductive health services to Ghanaians. The government of Ghana in 1969 developed a population strategy or policy that was aimed at lowering the fertility rate, reducing infant and maternal mortality rates, and ensuring a more balanced development of all the regions of the country through the use of voluntary, modern contraceptive methods. The population policy of Ghana was then formed to address the population issues of the country. The population policy of Ghana was the third of its kind in the whole of Africa. The National Family Planning Program was then established the following year thus in 1970 (Caldwell and Sai, 2007).

Ghana has witnessed two major phases of population activities: early public and private activities that focused on family planning programs in the 1960s to 1970s, followed by stagnation until the mid-1980s when renewed efforts brought about an expanded population program.

Chandani et al (2000) in their work entitled, *Ghana: Implications of Health Sector Reform for Family Planning Logistics,* stated that although communication and media programs on family planning were successful, however evaluations that were carried out on family planning programs showed that in the late 1970s “far more Ghanaians had heard of family planning than were practicing it,” and shortages of supplies were a major problem. In the 1970s, the problem to contraception was not about knowledge of the methods but shortage of supply of contraceptives.

Akitobi et al (2009) and PPAG & IPPF (2005) asserted that Ghana's family planning programs began to experience significant results or improve in the 1980s when the U.S. Agency for International Development (USAID), which later evolved into the Ghana Social Marketing Foundation (GSMF), and the Ministry of Health (MOH) staff developed the Resources for the Awareness of Population Impacts on Development (RAPID) model. In the 2000s, the UNFPA, PATH and Pathfinder emerged in the country to sponsor programs on reproductive health and family planning. All the family planning programs aimed at reducing fertility rates and improving the health of women and children. According to Akitobi et al (2009), the Total Fertility Rate (TFR) of Ghana reduced from 6.4 to 4.4 children per woman.

According to the GHS & GSS (2003) in the Ghana Demographic and Health Survey (GDHS), Ghana's fertility rate of 4.4, as shown in Table 2.1 remained unchanged since the last DHS that was taken in 1998, and it was among the lowest fertility rates in sub-Saharan Africa. Even so, the unmet need for family planning among married women ages 15-49 was still high at 34 percent.

Table 2.1: Ghana's fertility rate from 1988 to 2008

Year	Total fertility rate per woman
1988	6.4
1993	5.2
1998	4.4
2003	4.4
2008	4.0

Source: Ghana Demographic and Health Survey 2008

The 2008 DHS in Ghana revealed that women in Ghana have an average of 4.0 children. The average number of children per woman ranges from 3.1 in urban areas to 4.9 in rural areas. Fertility has gradually decreased over the past 20 years from 6.4 children per woman in to 4.0

(GHS & GSS, 1988; GHS & GSS, 2009). The Survey showed an increase in contraceptives use among currently married women in Ghana, from 13.0 per cent in 1988 to 23.5 per cent in 2008. Similarly, an increase from 43.5 per cent to 50.4 percent in the proportion of sexually active unmarried women using a contraceptive method was noted between 2003 and 2008. This increase in contraceptive use is encouraging; however, studies conducted suggest that Ghana's contraceptive prevalence rate (CPR) is still too low to have solely led to the observed reduction in fertility levels from 1988 to 2008 (Asare et al, 2002; Agyemang et al, 2005). They raised the fact that induced abortion, (taken together with contraceptive use) could explain this decrease in fertility.

The GHS & GSS (2009) in the 2008 GDHS stated that, among married Ghanaian women, the percentage of current contraceptive non-use is 76.5 percent while 50.4 percent of married women had never used any method. It has been established by Bongaarts & Westoff (2000) that the prevalence and effectiveness of contraception is important in predicting unintended pregnancy and the abortion rate. Thus, use of effective contraceptive methods is essential in preventing unintended pregnancies that are later voluntarily terminated.

The (Ghana Statistical Service (GSS), Ghana Health Service (GHS), 2007) reported that in 2002 and 2007, about 70 per cent of the women who came for abortion failed to use a contraceptive method prior to the terminated pregnancy. Twenty-eight per cent of women used a method but reported experiencing contraceptive failure.

The PPAG & IPPF in 2005 reported that, unsafe abortion still remained a problem in Ghana and that many service providers of abortion and women were not familiar with the law, and safe abortion services were not widely available. It was further reported that data from the Korle-bu Teaching Hospital in Accra, approximated 30 percent of all maternal deaths were as a result of unsafe abortion complications. They therefore, suggested that programs that incorporate both education and the provision of services were needed to reduce the number of

women that die each year from abortion-related problems. This was to be achieved through the implementation of family planning programs. Table 2.2 shows the regional fertility and contraceptive prevalence rates in the regions.

Table 2.2: Regional fertility and contraceptive prevalence rates

Region	Fertility rate	% of women using modern FP
Greater Accra	2.5	22
Ashanti	3.6	16
Central	5.4	17
Eastern	3.6	17
Brong Ahafo	4.1	22
Volta	3.8	21
Upper East	4.1	14
Northern	6.8	6
Upper West	5.0	21
Western	4.2	13

Source: GDHS 2008

Although there has been a tremendous decline in the fertility rate of Ghana as a whole, there are regional variations in terms of contraceptives usage and fertility rates. These differences in fertility rate and contraceptives use may be precipitated by individual background characteristics as reported by Babalola & Fatusi (2009). They further mentioned the factors which include; educational status of women and their partners, socio-economic level, type of residence area, access to media, knowledge about family planning methods, support to family planning methods by women and/or their partners and senior members of their family, age, migration status, wealth equity, parity, experience of abortion and child death, religious beliefs, and ethnic affiliations.

Amin et al (2002) in their study said that there could be substantial geographic variations in contraceptives use although the factors shaping these variations were little or not properly understood. In another dimension Stephenson (2002) stated that contextual factors such as community-level cultural beliefs, the presence and quality of reproductive health services, the

physical characteristics of the area, macroeconomic factors, and the presence of transport routes have been suggested as causes of geographic variations in contraceptive use .

2.3 Factors Influencing Contraceptives Use in Sub Saharan Africa

Factors influencing the uptake of contraceptives are both exogenous and endogenous. Studies of the determinants of contraceptive use, however, have focused on individual and household-level factors (National Research Council, 1993). For example, associations between modern contraceptive use and parity, (Clements and Madise, 2004) education, (Oliver, 1995) and household socio-economic status, (Mallucio & Thomas, 1995; Guilkey & Jayne, 1997). In buttressing Stephenson 's findings, Amin et al (2002) pointed out that many developing countries have substantial geographic variations in contraceptive use although the factors shaping these variations were little or not properly understood. Previous studies by Tuoane (2003) suggested that variations in contraceptive use typically remain after accounting for individual and household factors.

Stephenson et al (2007) in their study on contextual influences on modern contraceptives use in sub Saharan Africa stated that it is unlikely that characteristics of the health services in a community alone account for all geographic variation in contraceptive use.

For example, contraceptive use may be indirectly influenced by economic development, through a relationship with access to health services (Diez-Roux, 1998) or through its relationship with female autonomy and positive attitudes toward health service use (Alan, 1998)

Some studies have examined the effects of other characteristics of the community, including the influence of levels of community economic development (Adongo et al, 1995; Diez-Roux,1998; Saha,1998) levels of school participation (Chacko, 2001) economic roles of children, (Entwisle & Mason,2002) and community fertility norms (Nsemuklia,1999) on contraceptive use.

2.4 Influence of the Education Level of Women and their Spouses on Contraceptives Use

Education has long been associated with declining fertility and increasing contraceptive use since the publication of the results of the first World Fertility Survey in the mid-1970 (Charlie, 2011).

Findings from across the developing world show that the better educated a women is, the more likely she is to use contraceptives (Ainsworth et al, 1996; Rutenburg et al, 1991).

Education has been linked to the uptake of family planning services in different ways by different studies or authors. According to Rehan (2011), the education level of a woman affects her reproductive behaviors and desires in a number of ways. First, it typically delays the age of cohabitation. Secondly, literate women can learn about and use of contraceptives more effectively than uneducated women, thus reducing the number of unanticipated or unexpected pregnancies. Thirdly, highly educated women are likely to be more effective in producing healthy children because they have knowledge on healthy child upbringing.

In another dimension, Bertrand et al (1993) and Caldwell (1982) sees education as a vehicle by which people learn more Western views about the family, which leads to a more child centered parenting approach, and to different definitions of acceptable child care. This may lead to a demand for fewer children, and consequently, the use of contraceptives to prevent or to space childbirth.

Another important linkage of female education and fertility according to Ghulam & Naushin (2003) and Bbaale (2009) is the improved survivorship chances of their children.

Some demographers have propounded theories linking the influence of female education to the use of contraceptives. Diffusion theories emphasize the role of elite educated women in exposing other women to new ideas about fertility control. According to the theories, elite

educated women develop a heightened awareness of the opportunity costs of childbearing, learn about western contraception and become empowered to adopt them (Johnson-Hanks 2003). These elite women then act as sources of information, social support and social pressure that diffuse their new lifestyles and ideas to other women (Montgomery and Casterline 1996; McNay et al 2003).

Other theories argue that the education of women in a community changes the institutional setting in ways that reduce the incentive to have many children. Some claim that the education of some women in a community initiates social and ideational changes that undermine traditional patriarchal power and reduce men's interest in having large numbers of children as it becomes difficult for them to devolve the costs of childbearing onto their wives (McNay et al, 2003). Other versions of institutional theory suggest that women's education makes female labor markets more competitive or increases women's interest in educating their children. These social changes give rise to the idea that social mobility is incompatible with large family sizes (Kravdal, 2002).

However it happens, these theories imply that individual women become interested in regulating their fertility and using contraception as other women in their community become educated.

Another prominent theory proposed to understand the effect of education on contraceptives use is the one proposed by Gary (1979) which is entitled the "New Household Economics." This theory views education as a public good. According to the theory, members of a household unit seek to maximize income. In this formulation, it is assumed that women and men respond to economic incentive structures. Accordingly, the theory predicts that once education is provided as a public good and becomes widespread for women and men, an increase in education leads to an increase in contraceptives use to reduce fertility, all things being equal. According to Tuman et al (2007) the putative mechanism for this effect is the opportunity costs associated

with caring for children as education increases. As women acquire skills that are useful in the market place with higher levels of educational attainment, they tend to command a higher wage, increasing the value of their time.

One link of education to the use of contraceptives was proposed by Cristian & Columbia University (2005) which goes directly through the financial costs of contraceptives. They said that an educated woman has presumably more resources to afford costly birth control methods. Secondly, certain contraceptive methods might be associated with psychic costs that could be lower for educated women. As an example, the use of condoms or traditional methods, such as the calendar method or the withdrawal method, might require the co-operation of the husband. An educated woman has potentially more bargaining power within the family and thus could be more successful at using these methods if other alternatives are not available. Alternatively, an educated person may have lower psychic cost of reducing sexual activity if access to birth control methods is limited. Again, they stated that educated women may be more efficient at using particular contraceptive methods, especially in settings where information about the proper use of a contraceptive technology is not readily available or where the only methods of birth control available have high failure rates and need to be used with extreme care, such as in the case of traditional methods.

Another potential explanation of the mechanisms behind the education-contraception link was proposed by Charlie (2011) which is knowledge of, and access to, family planning services by educated women and men.

2.5 Women Economic Status and Contraceptive use

The direction and pathways of causality between contraceptives use and economic status remain debatable. According to Bryant (2007) socio-economic change of women is believed

to modify the incentives to have children, diffuse new ideas about childbearing through society, and provide them with better access to contraceptive methods.

Benefo (2006) in a study in Ghana found that a woman's socio-economic status as well as her life cycle stage affects her reproductive behavior. This relationship according to him is quite complicated and varies depending on the aspect of reproductive behavior examined.

Neoclassical theory suggests that as investment in human capital increases and as more women participate in the labour market, the fertility behaviour of households is bound to change, in favour of fewer children (Singh, 1994).

Oyedokun (2007) in recounting the contribution of economic status to contraceptives use said that many developing economies are characterized by rapid population growth that is partly attributed to low contraceptive prevalence rate, high fertility rate, high birth rates accompanied by steady declines in death rates, and high but declining mortality rate.

2.6 Relationship between Women Empowerment and Use of Modern Contraceptives

According to Narayan et al (2002), there is considerable variation in the definition and conceptualization of women's empowerment. There are different existing definitions for the term empowerment and people define it depending on what they want to measure. Nevertheless there are some commonalities in the widely known definitions for empowerment. Narayan et al (2002) stated that the World Bank defines empowerment as the "expansion of freedom of choice and action to shape one's life." Pradhan (2000) argued that this World Bank definition encompasses two features of women's empowerment: process of change (through which a woman gains power in making decisions) and agency.

Kabeer (2000) defines women's empowerment as a "process by which those who have been denied the ability to make strategic life choices acquire such ability. Jejeebhoy and Sathar (2001) commenting on Kabeer's definition said it involves resources and achievements, in

addition to process of change and agency, all of which are interrelated. They compared the World Bank's definition with that of Kabeer's and came out with a commonality which is the recognition that household and interfamilial relations are central aspects of women's empowerment.

Alsop et al (2006) reiterated that empirical research often incorporates analyses of empowerment that use data aggregated from individual and household levels or direct measures at the community and societal levels. According to them the measurement of women's empowerment is difficult: first, because it is a process; secondly, it is multi-dimensional; and thirdly, the concept operates at various levels. They again stated that until recently, women's empowerment was often measured by these three proxies, thus education, employment and knowledge. In their assessment, they said that these proxies or characteristics were important but conceptually distant, and they do not always reflect empowerment.

According to Lee-Rife and Edmeades (2011), Malhotra et al (2002) and Upadhyay & Hindin (2005) the body of research on women's empowerment has conceptualized and defined this construct in many ways and used different terms, often interchangeably, including "autonomy,""status and "agency."

Other studies by Mason and Smith (2000) have examined other dimensions of women's empowerment, including decision making regarding household economy and family size, whether women need permission to go out, coercion or control of women by their spouse or family, women's political and legal awareness, and their participation in public protests and political campaigning.

Malhotra et al (2002) also showed different measures for the conceptualization of women empowerment. According to their study the proxies used to measure women's autonomy include their participation in decision making in various household issues. This index represents women's degree of control over their environment. They mentioned both major and

minor decisions, while others include only major decisions, excluding day-to-day household decisions and those that are traditionally within the woman's domain. Women's empowerment encompasses many dimensions, including economic, socio-cultural, familial, interpersonal, legal, political, and psychological, which contributes to the wide variation in conceptualization of women's empowerment.

Additionally, to measure empowerment at an individual level, Kishor and Subaiya (2008) stated that researchers must translate the amorphous constructs into a set of specific questions that population-based surveys can ask of individual respondents.

Cultural differences are also seen as a challenge in the measurement of empowerment. Ushma & Deborah (2010) stated that it is desirable to use standardized questions that enable cross-cultural comparisons of empowerment. Yet a measure that captures empowerment in one context may have limited relevance in another, as is the case with measures that assess mobility in a community where women's free movement is the norm. It is still unknown whether the same dimensions of empowerment that were developed elsewhere are relevant in sub-Saharan Africa, where the gender environment is completely different than in other regions. In Africa, empowerment is likely to look different than elsewhere because of such differences as more working women who have control over their earnings, more polygamy, more nuclear families (as opposed to extended families), and larger ideal family size, and because women's status is often tied to their fertility.

2.7 Health Systems and Available Family Planning Methods

According to Rhonda et al (2009) there is no “ideal method” of family planning, but there is a safe and effective method for every woman. They stated that family planning methods vary according to their convenience, cost, effectiveness, side effects, risks, and benefits for the individual. Family planning users are best able to evaluate the relative importance of these

factors based on their preferences; their desired family size; stage of life; goals of delaying, spacing, or limiting future pregnancies; health status; relationship status; and living conditions. Mona et al (2010) in considering the choices that people make in their contraceptives use they said that making a choice of a family planning method does not just depend on the users' preferences but also on health system characteristics prevailing in that environment. Strong family planning programs rely on effective family planning service delivery strategies, such as those that offer method choices tailored to the needs of users, provide family planning counseling and medical expertise for administering methods, and follow up on users' response to the method.

The National Statistical Office of Malawi & ORC Macro (2005); and Central Statistical Agency & ORC Macro (2006) asserted that countries in the African sub region with frail health systems are faced with the challenge of improving contraceptive method choice within existing constraints. Magadi & Curtis (2003) in their study said that broadening the choice of contraceptive methods increases the overall contraceptive prevalence. According to them, the provision of a wide range of contraceptive methods increases the opportunity for individual couples to obtain a method that suits their needs.

It has been suggested by Caldwell and Caldwell (2002) that successful family planning program strategies in Africa must promote methods that are temporary, can be used covertly by women, and do not have to be stored at home. Catherine and Everd (2008) also said that given the low literacy level especially among women, their commonly weak domestic position in making decisions over childbearing and weak economic power, the injectable hormone is a very opportune method for them. Other artificial methods like oral pills, spermicides and condoms require overt actions that require the acceptance and cooperation of the partners.

2.8 Male Involvement in Family Planning

According to United Nations (2001), male involvement in population planning is defined as the ways in which men relate to reproductive health, problem, reproductive rights and reproductive behavior. Both men and women involvement on fertility and reproductive health was the key message in 1994 International Conference on Population and Development and 1995 Fourth World Conference on Women.

Jamal (2002) listed two aspects of male's involvement in family planning, first is that men accept and support their partner's need, choices and rights in fertility regulations and second men have their own perceptions regarding contraceptive knowledge, approval, use and sexual behavior. However, the husband's reasons for opposing or accepting family planning vary by their socio-economic characteristics, religious and societal norms.

According to the IPPF (2009), engaging men in family planning programs holds promise as a means to improve access and use of family planning and that addressing gender in family planning programs — for instance by engaging men — can improve program outcomes and increase gender equality.

Mustapha et al (2006) said that in a patriarchal society, with men having absolute power over certain family issues, it has been found that the wife has no say on family size. In a patriarchal society like Zaire children belong to the husband and an extension to his extended family or clan .The husband pays dowry in marriage to the bride's family as a compensation for the loss of her services and expenses of upbringing .In return the woman is expected to contribute to the husband's family in terms of labour and child bearing. For this reason a woman cannot cease child bearing voluntarily because it will be seen as a failure of the wife to fulfill her obligation.

Ria (2009) in citing Mohamad et al (1988) in their in Indonesia, found that a husband's approval of contraception is the most significant factor in affecting contraceptive use, followed by the number of living children and the woman's education. According to the study, a husband's view on family planning has a substantial effect on contraceptive use and modern method usage. In their study they stated that , wives with the perception that their husbands approve of contraceptive use, are more likely to use contraceptives, and a modern method, than wives with the perception that their husbands disapproves contraception.

A study in Ghana by DeRose et al. (2002) has suggested that husbands' declining fertility desires are largely responsible for national-level reductions in fertility. Atenane (2002) in reporting on "male attitudes and behaviors concerning family planning and male initiatives in Africa" indicated that men often have positive attitudes toward family planning, but women believe that their husband disapproves of family planning.

The Cairo declaration demands men's participation in family planning and reproductive health in terms of gender equality and fulfilling various reproductive responsibilities. It is argued that "men are partners in reproduction and sexuality and therefore it is logical that they equally share satisfying sexual lives and the burdens of preventing diseases and health complications" (Green, *et al.*, 1995).

Khan & Bella (1997) proposed that; the broadening of the concept of 'male-involvement' to 'male-responsibility' demands changes in the strategies of educational campaigns and motivational efforts also where men and women need to be educated and informed about gender equality, their reproductive rights and responsibilities and not only about the adoption of contraception.

According to Alemayehu (2012), male involvement in family planning not only helps accepting a contraceptive, but also in its effective use and continuation. Men's knowledge, attitude and practice towards family planning also influence the behavior of their wives.

There are various factors that influence male participation in family planning. These include cultural norms and values, religious beliefs, socio-economic factors, psychological factors. These factors can act as barriers to male involvement **(**Kabwigu, 2001).

2.9 Couple Years of Protection (CYP)

Evaluation of family planning programmes is directed to determine achievements and assessing strategies on a number of levels, including the administrative, demographic, financial and political levels. Furthermore, the results of these assessments must be represented in a convenient form for annual or other appropriate periods. The accomplishments of family planning programmes may be measured in many ways. For example, programme achievements may be represented by statistics on such topics as acceptors by age, parity and method; continuation rates, pregnancy rates, conversions between methods and so on. But in such cases, the larger the number of different indices displayed, the more difficult becomes the task of drawing comparisons between years or between programmes (Martin and David, 2000).

It was to overcome this problem of interpreting achievements from service statistics and clinical records that the concept of combining the incidence of long-term contraceptive methods with the prevalence of short-term methods into a single index known as couple-years of protection (CYP) was introduced. This index summarizes the total achievement of a one year programme of work into a single figure, satisfying at least some of the needs which demand such an assessment (Lee & William, 1969).

According to Stover et al (2004) CYP is calculated by multiplying the number of each contraceptive method given to clients by a corresponding conversion factor. This yields an estimate of the duration of contraceptive protection provided. One full CYP is the equivalent of one year of protection from unintended pregnancy for one couple. CYP is a commonly used measurement of family planning performance.

According to the USAID (2011) & Population Services International (PSI) (2010), CYP refers to "the estimated protection provided by contraceptive methods during a one-year period based upon the volume of all contraceptives sold or distributed free of charge to clients during that period. They further stated that 'CYP' reflects distribution and is a way to estimate coverage and not actual use or impact. The CYP calculation provides an immediate indication of the volume of programme activity. CYP can also allow programs to compare the contraceptive coverage provided by different family planning methods.CYP is used to measure programme performance.

According to Singh et al (2009), a report entitled the "2009 *Adding It Up report* "estimated the ratio of unintended pregnancies averted per modern contraceptive user in developing countries. The analysis estimated that in 2008, the average pregnancy rate of the 215 million women in developing countries who wanted to avoid pregnancy but were using either no method or a traditional method was 288 per 1,000, but would have been 39 per 1,000 if they had been using modern contraceptives. Use of modern methods would therefore have averted 249 unintended pregnancies per 1,000 women, or 0.25 per modern contraceptive user.

Susanna et al (2010) explained the rationale behind CYP and said the basic idea is that each unit of each contraceptive method provides a certain amount, or duration, of protection, but that this duration varies by method. Furthermore, a quantity of contraceptives dispensed to family planning users will (theoretically) provide a specific quantity of Couple-Years of (contraceptive) Protection. The concept of the CYP is to help in forecasting, that if family planning programmes wish to serve a certain number of clients, and have a reasonably accurate idea of what methods they'll use, to calculate the quantities of each contraceptive method that will be required.

Some simple examples were used by Susanna et al (2010) to illustrate the CYP concept, and its application to a family planning programme. These are stated below:

Consider first a cycle of contraceptive pills. This provides a couple with 28 days, or 4 weeks, of contraceptive protection if used properly. To provide a year of protection would require 13 cycles, since 4 weeks is one-thirteenth of a 52-week year. This is true whether one woman uses all 13 cycles, or 13 women use one cycle each, or two women use respectively 6 and 7 cycles—all would count as one CYP. For a programme to estimate how many CYPs it has provided by dispensing pill cycles, it can simply divide the number of cycles by 13. For example, if Clinic A dispenses 390 cycles of pills in a year, this equals 30 "couple-years of protection", regardless of how many women actually received these pills. In practice, one typically finds that there is some loss or other non-use of pills, and allowing for this wastage raises the appropriate factor to 14 or 15 cycles per actual year of protection. Using the "standard" adjusted estimate of 15 cycles per CYP would reduce the CYPs from the 390 cycles to 26 CYPs (390 ÷15 = 26 CYPs).

Similar reasoning applies to injectables. If we are using Depo-Provera, for example, which provides 3 months of protection; this means that it takes 4 injection doses to provide one CYP. In our clinic example, if 100 injections have been given in a year, this number divided by 4 yields the total of 25 CYPs provided by this method.

For condoms and vaginal foaming tablets, the factor is based primarily on the average number of uses of the method by a woman (or couple) in a year, but this needs to be adjusted for substantial levels of incorrect use and wastage. Different programmes will have different factors, but we will use the "default" value of 120 per year, which includes the correction for wastage and improper use. In our example above, if the clinic dispenses 3,000 condoms in the year, it is credited with 3,000/120 = 25 CYPs for condoms. For these "supply-based" methods, each unit of supply, or unit that is "dispensed to user", provides only a fraction of

one CYP. For example, one cycle of pills is 1/15th of a CYP, and one injection of Depo Provera is 1/4th of a CYP

2.10 Conclusion on Literature Review

The literature review has shown that extensive studies have been done to determine the factors that influence the uptake of family planning services and modern contraceptives in different settings.

The literature review has shown that several important factors operating at individual, household and community levels affect the uptake of family planning services. Women education, husband's education, women exposure to media, women's autonomy, women's working status, husband's occupation, age, parity and socio-economic status are the independent variables, which are assumed to have positive or negative association with the utilization of family planning services. With this host of potential determinants, it is not obvious which are more dominant in the West Gonja District and hence the need to conduct this study.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter presents the methodologies that were employed during the study. The data collection techniques and tools, the study population, data analysis, quality control measures and the limitations of the study are presented in this chapter.

3.1 Study Design

The study design was an analytical cross sectional study.

3.2 Study Population

The study population comprised women in fertile Age (WIFA) of 15-49 years and who have given birth at least once. Men within the age group of 17 to 50 years were recruited for Focus Group Discussion (FGD). Information on barriers to contraception, supply of contraceptives, preferred family planning methods, and the quantities of contraceptives issued within the past three years was sourced from the district public health Nurse (DPHN) who is in charge of reproductive health, the nurses and midwives who were in charge of reproductive health in the facilities of the study communities and licensed chemical sellers. The competence and qualification of service providers was also considered in the study by looking at the number of in-service trainings that have been given to service providers and whom/which department or agency carried out or organized the training. In all four (4) licensed chemicals shop operators were interviewed in four communities as they were the only chemical shops in the study communities. Again, four (4) midwives in-charge of Reproductive and Child Health (RCH) units of four (4) health centers were interviewed, five (5) Community Health Nurses (CHN) who were in-charge of Community-based Health Planning Services (CHPS) compounds were interviewed and one(1) Midwife in-charge of reproductive and child health services (RCH)

in one (1) Polyclinic was interviewed. The district Public Health Nurse (DPHN) who is in-charge of distribution of contraceptives to all the health facilities in the district and also receives monthly reports on family planning services from all the health facilities was interviewed to assess the trend of family planning acceptance rate and quantities of contraceptives distributed.

3.3 Sample Size Determination and Sampling Procedures

A sample size of 323 was estimated based on the assumption that population prevalence of family planning acceptance rate in the study district was 30 %, with a precision of 5 % at a confidence level of 95 %. For cluster sampling, a design effect of 1.5 was considered and this resulted in a sample size of 484. An additional 15 % allowance was made for damaged questionnaire, refusals to participate in the study. So a final sample size of 600 was used. This then translated to 20 respondents per cluster. The 20 x 30 multistage cluster sampling procedure was used as the sampling procedure since the study was a community based study. By this method the populations of all the communities in the district were summed cumulatively and the sampling interval calculated. A number was then chosen with the same digits as the sampling interval calculated. This number was then compared with a community that had a population higher than this chosen number among the communities as listed in the order into which they were presented cumulatively. This chosen community became the starting point or the first cluster to be chosen. Subsequent clusters or communities were chosen by adding the sampling interval to the starting cluster and the order continued until all the 30 clusters were selected.

In each of the study communities, 20 women in the WIFA group of 15 to 49 years were interviewed. Two focus group discussion sessions in all the thirty (30) study communities were organized or held for the women in the same age group of 15 to 49 years. The other focus group

discussion was held for men within the age group of 17 to 50 years. There were ten (10) members each in all the focus groups held in the communities. In all, six hundred (600) women in the WIFA group were interviewed with a structured questionnaire while another 300 women took part in the focus group discussions. Three hundred (300) men took part in the focus group discussions but none of the men was interviewed with a structured questionnaire.

3.3.1 Selecting the Starting Household Using the EPI Method

The first household was selected from the centre of each cluster or community. In each community, the Community based health volunteer (CBHV) together with the interviewer chose a starting location by going to a central location in the cluster. At the centre of the cluster, a travel direction was selected at random by spinning a pen. The team then moved in a straight line in a chosen direction and counting all of the households until the end of the community was reached. The team then randomly chose a number between 1 and the number of houses counted as the starting point for the survey. The number randomly chosen therefore corresponded with the starting house.

3.3.2 Selection of Subsequent Households

The random-walk procedure was followed until such time that the required number of interviews was reached. Every third household from the previously selected household formed the basis of selecting respondents for interview. This approach of selecting households has been reported to reduce similarity in responses by the interviewees (that is, reduced homogeneity) (Bennett et al., 1994).

3.3.3 Procedure for Selecting Individual Survey Subjects

Women of reproductive age who had a child under 24 months old in the sampled households were eligible for interview. Only one eligible mother was randomly selected for interview in any particular sampled household where there were more than one woman eligible for the study

or interview. In any chosen household where two women fit that description, the mother of the youngest child was interviewed.

3.4 Data Collection

Both quantitative and qualitative methodologies were used in the data collection. The qualitative design consisted of focus group discussions and in-depth interviews with identified individuals such as the District Public Health Nurse (DPHN), midwives, nurses and licensed chemical operators to find out more about knowledge, attitude and barriers to family planning services.

Face-to-face interviews' using structured questionnaires was used to collect primary data from the respondents including health service providers. The questionnaires consisted mainly of closed-ended questions. Information on the independent variables and dependent variables were collected.

Focus Groups Discussion

Focus group discussions were organized in the communities to gather information on societal perception of family planning services, benefits of family planning, and barriers to family planning.

Secondary Data

Information on the quantities of contraceptives issued to clients for the past three (3) years was taken from the District Health Directorate (DHD). Health personnel in-charge of health facilities in the communities of study were also contacted for the clients' registers to get the average number of clients and their preferred methods. Publications from other researchers and organizations were also reviewed. Since the focus of this work was on the low uptake of family planning services; areas such as staff level in the health facilities offering family planning services, equipment for family planning services, supplies or stock of family

planning, attendance register for family planning services and the professional competence of the staff were considered. The human resource manager or personnel of the DHD was consulted for these pieces of information.

3.4.1 Variables and Measurements

The independent and dependent variables are listed below:

Independent variables

- Availability of family planning services and contraceptives
- Effect of distance on the uptake of family planning services
- Socio-cultural barriers to uptake of family planning methods and contraceptives
- Attitude of family planning service providers
- Maternal knowledge and awareness of contraception and family planning services
- Spousal attitude or approval of contraception and family planning
- Individual and household characteristics.

Dependent variable

Family planning acceptor rate was the principal outcome variable of the study. Secondary outcome variables of the study were the couple year of protection (CYP) for the various family planning methods available in the districts for the past three years thus 2009 to 2011**,** and uptake of family planning services.

3.4.2 Assessment of Maternal Autonomy

Autonomy has been defined as the control women have over their own lives, the extent to which they have an equal voice with their husbands in matters affecting themselves and their families, control over material and other resources, access to knowledge and information, the authority to make independent decisions, freedom from constraints on physical mobility and the ability to forge equitable power relationships within families (Jejeeboy and Sathar, 2001).

Maternal autonomy or the mother's status in the household indicates her decision-making power with respect to movement, finance, healthcare use, and other household activities. The dimension of women's autonomy that was investigated in this study related more to decision-making power, control over finances and ability to communicate with spouse or health worker on her health. Maternal autonomy was determined by taking into consideration the ability of the woman to take some decisions including the following:

i. Woman takes part in decision making on household matters
ii. Woman decides how to spend her own money
iii. Woman makes the decision to buy her clothes
iv. Woman is involved in making decision to buy large household items/furniture
v. Woman makes the decision to work outside of the home
vi. Woman's power to deny sex to the husband
vii. Woman's freedom to travel
viii. Knowledge of where to find family planning services
ix. Ability to discuss family planning issues with spouse
x. Ability to communicate with service provider on health matters

In this study, women are considered to participate in decision making if they make decisions alone or jointly with their husband or someone else. A composite measure was created using the sums of equally weighted binary input variables. Women were scored 1 for answers to each factor that included her (alone or jointly) in decision making, otherwise they were scored 0. The index of decision making power contained ten factors, thus the respondents were scored from 0 to 10. A composite index of women autonomy (CIWA) was then constructed similar to that of Singh et al (2005). Two categories of CIWA viz. low and high were created on the basis of average value of index in the study sample. Thus a binary variable from CIWA was created to indicate women with high versus low autonomy. The high and low categories were created

by dividing the sample indexes into approximately half. The women receiving less than the average score were classified as low autonomy category. Women who scored at least the mean index value were classified as having relatively high autonomy.

3.4.3 Determination of Household Wealth Index

A household wealth index based on household assets and housing quality was used as a proxy indicator for socio-economic status (SES) of households. An absolute measure of household wealth (wealth index) used in this study is based on an earlier concept developed by Garenne & Hohmann (2003), whereby the sum of dummy variables created from information collected on housing quality (floor, walls, and roof material), availability of electricity, water and type of toilet facility, and ownership of household durable goods and livestock (e.g. bicycle, television, radio, motorcycle, sewing machine, telephone, cars, refrigerator, mattress, bed). These facilities or durable goods are often regarded as modern goods that have been shown to reflect household wealth. A household of zero index score for example means that household had not a single modern good. The scores were thus added up to give the proxy household wealth index. The index varied from 0-18. Households that had a wealth index score of 13 and below were classified as having a low wealth index score and those that had a wealth index score of 14 and above were classified as having a high wealth index score.

The main aim of creating the index was to categorize households into SES groupings in order that we could factor in socio-economic status in multiple regression analysis and to compare the difference in the uptake of family planning services between the groups of lowest and highest SES.

3.4.4 Determination of Educational Level

The educational level was based on the highest level attained according to the Ghanaian System where primary education consist of six years of formal education, the Junior High School (JHS)

is nine years, Senior High School (SHS) is 13 years. An individual with tertiary level education spends at least 17 years acquiring formal education. This variable has three categories: no education, primary or junior secondary, senior secondary education or higher.

3.5 Data Processing and Analysis

Data from the structured questionnaires for service providers and the WIFA group were cleaned and analyzed using the Statistical Package for Social Sciences (SPSS) version 17.0.

The data were analyzed using univariate and bivariate statistics where appropriate. Bivariate analysis was done to find association between the uptake of modern contraceptives and family planning methods with quantitative variables such as education level of mothers, distance to source of family planning service, age of mothers, education level of husbands, frequency of watching TV, frequency of listening to radio, savings type of mothers, and spousal (husbands) approval of modern contraception.

Chi square values of these bivariate analysis were considered to be statistically significant with $P < 0.05$ and a confidence level of 95 %. Independent variables found to be statistically significant at the 0.1 level based upon the results of the bivariate tests, were entered as potential variables included in the logistic regression models.

Statistical difference was considered significant if the P-value was less than 0.05 and 95 % Confidence Intervals (CI) was calculated for all main outcome measures that met the normality and homogeneity criteria.

Multiple logistic regression analysis was done to find out the determinants of the uptake of family planning services. Factors that were included in the first step of the multiple logistic regression analysis included the maternal education level, wealth index, maternal autonomy and mothers' ability to discuss family planning issues with their spouses.

In the second stage of the multiple logistic regression analysis, factors that were included in the analysis were maternal autonomy, ability of mothers to discuss family planning issues with

family planning service providers, maternal wealth, education level, and mothers' ability to discuss family planning issues with their spouses.

Multiple logistic regression analysis was used because the main outcome variable was binary and it also allows for testing for confounding and independent contribution of potential factors that influence the uptake of family planning services. This type of regression also gave the P-values together with the confidence intervals of the individual factors that were identified. This was helpful in determining factors that were statistically significant.

The focus group discussions were recorded with a voice recorder after which the recorded tapes were transcribed. A thematic analysis was then carried out for this qualitative data.

3.6 Quality Control Measures

- **Training**: There was a two-day training session held for the three nurses who assisted in the data collection to ensure that valid and reliable data were collected. The training gave the data collectors much insight into the questionnaires and what it sought to achieve.
- **Pre-testing of questionnaires**: There was a pilot survey to pre-test the questionnaires in order to refine and restructure the questions where necessary. The pre-testing was done in three communities in Central Gonja district which shares boarder with the West Gonja district. The pre-testing helped to compare the responses with the objectives of the study.
- **Double entries of data**: Double entry of data was done after which the two data sets were compared at the analysis stage. This helped in identifying some omissions during the data entry.

3.7 Ethical Considerations

- Permission was sought from the District Director of Health Services of the West Gonja District before embarking on the study. The questionnaires were also approved by the District Director before they were administered.
- An informed consent of the respondents was also sought and in the consent form, the objectives and significance of the study were clearly stated and explained to the prospective respondents. Respondents were given the free will to decide whether to partake in the study or not.
- Anonymity and confidentiality of the actual source(s) of information obtained from the study was ensured by not indicating the names of facilities and individuals who took part in the study. Names were not provided on the data collection tools and therefore no clues were provided for someone to trace the source of information.
- The recorded tapes of the focus group discussions were destroyed after transcription so that the voice recordings of those who took part in it are not recognized.
- Due to the sensitive nature of issues of sexuality in the society, men and women were not brought together in the focus groups but were handled separately to protect the cultural disposition of the community that women should not mix up with men in discussions.

3.8 Limitations of the Study

These were the limitations or challenges to this study:

- The measurement of distance that clients have to travel before accessing a family planning service was not easily quantifiable. Therefore values that are used by the District Assembly were used in determining the distance.
- Social barriers vary and difficult to measure since these are based on the individual's perception and judgment.

3.9 Publication/Dissemination Plan

Preliminary results of the study were disseminated to the West Gonja District Health Directorate and other NGOs working in the area of health in the district.

The final results and findings will also be disseminated to other stakeholders in the Northern region this would be done through the media, seminars and workshops. There are also plans to publish the findings of this study in scientific journals.

CHAPTER FOUR

RESULTS

4.0 Introduction

The results and findings of the study are presented in this chapter. The quantitative results are presented in tables and diagrams while the qualitative results were thematically presented with some direct quotations from the respondents.

4.1 Sample Characteristics

The minimum age of the respondents was 15 years while the maximum age was 43 years. The mean age was 26.9±5.1 years. The respondents were women in their fertile age (WIFA) who have given birth either once or more.

Out of 600 women interviewed, 59.8 % (359) of the respondents did not have any formal education and formed a larger proportion of the population while 0.7 % (4) of them were educated to the tertiary level.

With regards to the level of formal education attained by their husbands 54.7 % (328) of their husbands did not have any formal education whilst 2.5 % (15) of them were educated to the tertiary level.

The respondents belonged to different religion and religious denominations. The results revealed that, 60.8 % (365) of the respondents were Muslims, 0.2 % (1) was African traditional believer whilst the rest of them were Christians but in different denominations. These are shown in table 4.1

Table 4.1 Socio- demographic characteristics of respondents

Variable	Frequency N/600(%)	Variable	Frequency N/600(%)
Age		**Mothers Education Level**	
15-24	81(13.5)	JHS	293(32.2)
25-34	154(25.7)	SHS	44(7.3)
35-44	201(33.5)	Tertiary	4(0.7)

45-49	164(27.3)	No formal Education	359(59.8)
Religion		**Ethnicity**	
Islam	365(60.8)	Gonja	346(57.7)
Catholic	118(19.7)	Dagomba	81(13.5)
ATR	1(0.2)	Hanga	56(9.3)
Pentecostal/Charismatic	56(9.3)	Ewes	38(6.3)
Orthodox	60 (10.0)	Others	79(13.2)
Level of Education(Husband			
JHS	139(23.2)		
SHS	82(13.7)		
Tertiary	15(2.5)		
No formal Education	328(54.7)		

4.1.2 Housing and Household Characteristics

Residential status of the respondents differed as to the ownership of the houses and the number of households in their various houses. Among the respondents, 59.3 % (359) lived in their own houses, 9.7 % (58) were living in rented apartments, 30.2 % (181) were living in family houses, whilst 0.3 % (2) were living in government bungalows.

With regards to the number of households in the various residences of respondents 33.7 % (202) of them were living with single households or occupied the houses alone with their households whilst 0.2 % (1) were living in houses with 10 households which was the maximum. The mean number of households per house was 2.1±1.1 households. Again, 15.7 % (94) of the households had electricity supply whilst 506 (84.3%) did not have electricity. Table 4.2 below shows the household distribution of respondents.

Table 4.2: Ownership of houses of respondents

No, of households	Frequency	Percentage
1	202	33.7
2	235	39.2

3	85	14.2
4	60	10.0
5	12	2.0
6	3	0.5
7	1	0.2
8	1	0.2
10	1	0.2
Total	600	100.0

4.1.3 Households Room Occupancy

The households occupied different number of rooms ranging from single to six rooms. Majority (41.8 %) of the households occupied two rooms while 16.7% of the respondents occupied single rooms with their households. Table 4.3 shows the room occupancy rate of respondents.

Table 4.3: Number of rooms occupied by households of respondents

Number of rooms	Frequency	%
1	100	16.7
2	251	41.8
3	157	26.2
4	75	12.5
5	15	2.5
6	2	0.3
Total	600	100.0

4.2 Bivariate Analysis of Socio-demographic Characteristics of the Mother and Uptake of Family Planning Services

More educated women were using modern contraceptives; compared to illiterate women. This was shown in bivariate analysis (Table 4.4). Educational level of women correlated positively with the uptake of contraceptives and family planning services. As the level of education increases, the uptake of contraceptives and family planning services also increase. This association produced a Chi-square (χ^2) = 189.373, P < 0.001]. Also, as the level of spousal

education increases, the approval of the uptake of contraceptives increases. Husbands who are highly educated tend to approve the use of contraceptives by their wives (Table 4.4).This association produced a Chi-square (χ^2) = 90.434 P<0.001

Of all the religious dominations, the Pentecostal/Charismatic group was the highest users of modern contraceptives whilst the lowest users came from Islam.

In bivariate analysis, there was a significant inverse association between the distance travelled and the uptake of family planning services though the association was not sustained in multivariable logistic regression analysis. Women who stayed closer to a health centre patronize modern family planning services more than their colleagues who had to travel over 25Km to access the services (chi = 14.6, P = 0.002)

The uptake of family planning services was high among women who were economically empowered and have their own financial savings and it is low among women who do not have savings at all and those whose partners only have savings. There is a stronger relationship between women economic status and uptake of family planning services (χ^2 = 96.15, P < 0.001). Also, the wealth index of women who were using one form of modern contraceptive was significantly higher than women who did not use any (3.0±1.05 versus 2.5±1.01) F (1,599) = 25.6, P < 0.001.

Access to media also had a significant influence on the uptake of family planning services as women who watched TV frequently were more likely to use FP as shown in (Table 4.4). This association produced a Chi = 67.0 P < 0.001. However, this association was not significant in multiple regression analysis (P < 0.09, Chi = 4.3). Also, frequent listening to radio was

positively and significantly associated with uptake of FP services (Chi = 1.7, P < 0.001). The association was not significant in the regression model.

There is a stronger relationship between spousal approval of the uptake of contraceptives and their current uptake by their wives or partners as shown by a Chi square value of 107.415 and P < 0.001 (table 4.4).

Uptake of contraceptives was higher 70.3% (26) among women in the civil service or government agencies and lowest 0.6 % (2) among women were farmers or in the agricultural sector. Among the respondents who were traders 50.9 % (89) were using modern contraceptives. The chi square value of 243.815 and P< 0.001 (Table 4.4) below shows a stronger association or relationship between the occupation of a woman and uptake of contraceptives or family planning services.

The uptake of contraceptives and family planning services was low among teenagers and women who were above thirty years but uptake was relatively high among women in their twenties. A chi square value of 19.810 and P < 0.001 shows that there is a stronger association between age and the uptake of contraceptives among women (Table 4.4).

Table 4.4: Bivariate analysis of socio-demographic characteristics, economic status and access to media and the uptake of family planning services.

	Currently using contraceptive		Test Statistic
Variable	**No**	**Yes**	
Age			
15-24	68(84.0)	13(16.0)	
25-34	113(73.4)	41(26.6)	
35-44	149(74.1)	52(25.9)	P<0.001
45-49	148(90.2)	16(9.8)	X^2=19.81
Religion			

Catholic	92(78.0)	26(22)	
Orthodox	44(73.3)	16(26.7)	
Pentecostal/Charismatic	32(57.1)	24(42.9)	
Islam	309(84.7)	56(15.3)	P<0.001
ATR	1(100.0)	0(0.0)	X^2=28.4
Education Level			
None	340(94.7)	19(5.3)	
Low	126(65.3)	67(34.7)	P<0.001
High	12(25.0)	36(75.0)	X^2=189.37
Distance to Health Facility			
0.5-5Km	189(73.0	70(27.0	
6-11Km	114(81.4)	26(18.6)	
12-17Km	68(85.0)	12(15.0)	P<0.001
18-25Km	107(88.4)	14(11.6)	X^2=96.15
Occupation			
Civil Service	11(29.7)	26(70.3)	
Trading	86(49.1)	89(50.9)	
Farming	353(99.4)	2(0.6)	P<0.001
Unemployed	28(84.8)	5(15.2)	X^2=243.82
Spousal Approval			
Yes	29(36.3)	51(63.8)	P<0.001
No	449(86.3)	71(13.7)	X^2= 107.41
Savings			
Yes, partner's savings	25(89.3)	3(10.7)	
Yes, mine and partner's savings	18(60.0)	12(40.0)	
Yes, self savings	49(47.1)	55(52.9)	P<0.001
No, we don't have savings	386(88.1)	52(11.9)	X^2=25.61
Watching TV			
Daily	30(42.9)	40(57.1)	
Once/week	5(71.4)	2(28.6)	P<0.001
Not at all	443(84.7)	80(15.3)	X^2=12.24
Listening to radio			
Daily	94(49.7)	95(50.3)	
Once/week	46(71.9)	18(28.1)	P<0.001
Not at all	338(97.4)	9(2.6)	X^2=1.7

4.3 Educational Level and Choice of Contraceptive Method

The majority of the respondents 79.7 % (478/600) were not using any form of modern contraceptive. However, the most popular method was injectable Depo Provera (Table 4.5)

Table 4.5: FP methods used according to respondents' education level

			Preferred family planning method				
			Never use	Depo provera	Pills	Jadelle	Total
Educational level of mother	None	Count	331	18	7	3	359
		%	92.2	5.0	1.9	0.8	100.0
	Low	Count	107	72	8	6	193
		%	55.4	37.3	4.1	3.1	100.0
	High	Count	8	34	5	1	48
		%	16.7	70.8	10.4	2.1	100.0
Total		Count	446	124	20	10	600
		%	74.3	20.7	3.3	1.7	100.0

4.4 Preferred Method of Family Planning

The preferred family planning method among the respondents was Depo- provera with 71.3 % (87) among current users of family planning methods. Five methods namely spermicides, female condoms, IUCD, tubal ligation and vasectomy had zero uptake among partners. There was also 1.6 % (2) of the respondents who reported that they were not using any of the regular modern contraception methods but rather they use emergency contraceptives when the need arises. None of the women also reported the use of the male condoms by their partners Fig. 4.4 shows the percentage of uptake among respondents.

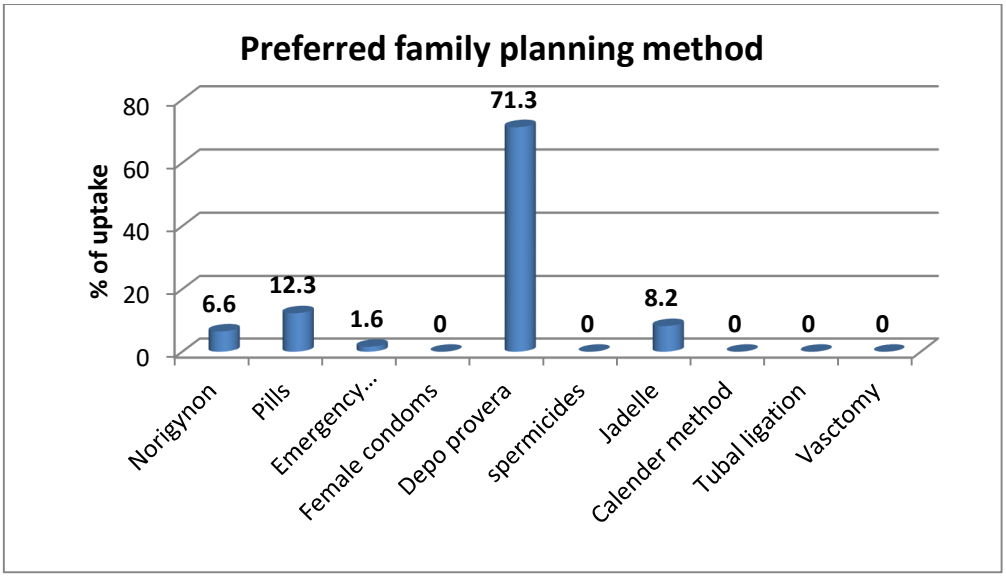


Fig 4.1: Preferred method of family planning among respondents

4.5 Spousal Approval of Contraceptives Usage

Spousal approval of contraception was assessed among the respondents. 13.7% (82) of the respondents said that their husbands approve of the uptake of contraceptives whilst 86.3% (518) said that their husbands were against the uptake of contraceptives below.

A total of 122 (20.3 %) women were using contraceptives as against 478(79.7 %) of the respondents who were not using. A total of 45 (7.5 %) of the respondents who were using contraceptives sought the consent of their spouses whilst 77 (12.8 %) of them did not seek approval from their husbands. This is shown in table 4.6

Table 4.6: Husbands educational level *Approval of contraceptives usage

			Approves contraceptives uptake		
			Yes	No	Total
Husband's educational level	None	Count	16	312	328
		%	4.9	95.1	100.0
	JHS	Count	18	121	139
		%	12.9	87.1	100.0
	SHS	Count	28	54	82
		%	34.1	65.9	100.0
	Voc/Tech	Count	8	28	36
		%	22.2	77.8	100.0
	Tertiary	Count	10	5	15
		%	66.7	33.3	100.0
Total		Count	80	520	600
		%	13.3	86.7	100.0

4.6 Knowledge and Use of Modern Family Planning Methods

Of the 600 women interviewed, 15.2 % (91/600) heard of family planning prior to the study. Most respondents had information about modern family planning methods than about natural family planning methods. More than half of the respondents 58.2 % (349) knew of modern family planning methods, 36 % (216) had no knowledge of modern methods and only 5.8 % (35) knew of natural family planning methods. The results show that there is a strong association between family planning knowledge and utilization. The more knowledge a woman has, the greater the chance of utilizing a modern family planning method (Likelihood ratio = 154.3, P< 0.001)

The knowledge level of the specific contraceptives and family planning methods is shown in Fig 4.2

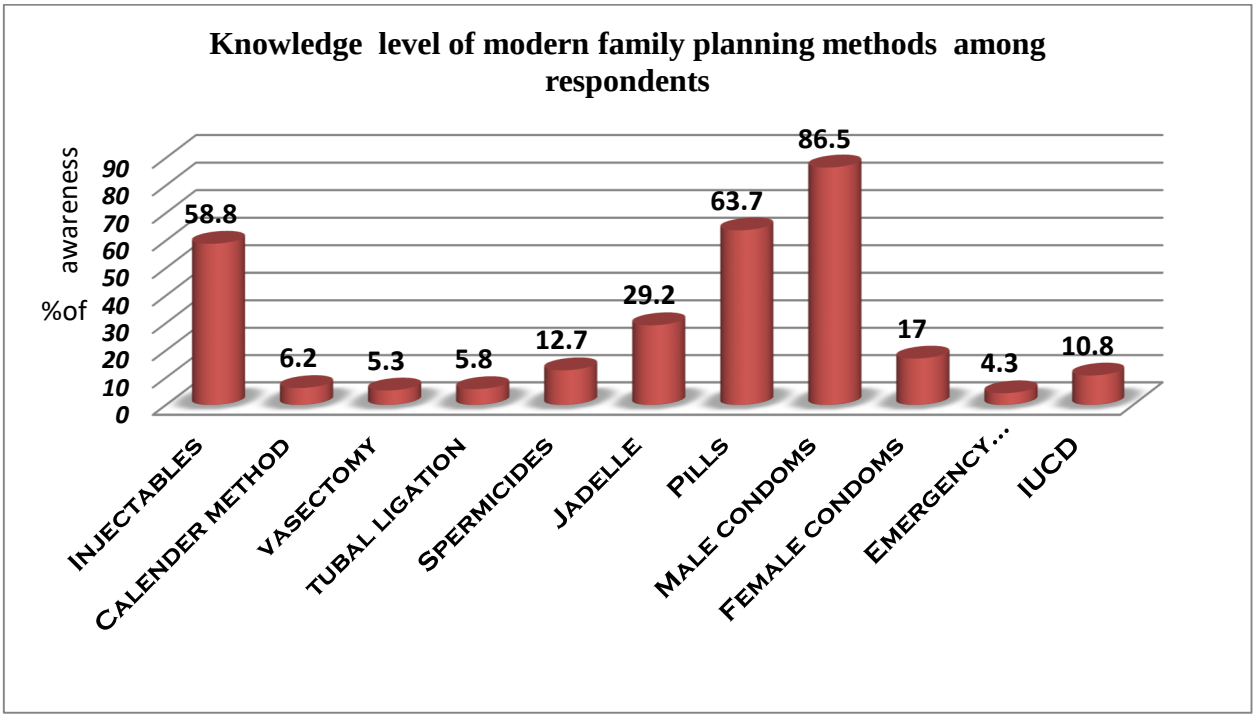


Fig. 4.2: Knowledge level of modern contraceptives methods among respondents

4.7 Source of Family Planning Information

The respondents reported their sources of family planning information and the clinic/health centre was the main one cited (Table 4.7)

Table 4.7: Sources of information about FP methods in the last month

Source of FP messages	Frequency	%
Never Heard	519	86.5
Clinic	74	12.3
Pharmacy	3	0.5
Friends	3	0.5
Media	1	0.2
Total	600	100

4.8 Quality of Family Planning Services at Health Institutions

The quality factors investigated were staff attitude, waiting time, privacy during consultation, communication between service providers and clients, staff qualification, in-service training for staff, and number of days family planning services were available. Out of the women who have ever used family planning services, most of them 97.4 % (148/152) reported the attitude of health staff was satisfactory. Privacy at the health facilities was generally considered to be adequate 98.1% (151/152).

The number of days family planning services were offered in a week were in the range of 5-6 days (Table 4.8)

Table 4.8 Number of days family planning services are offered in a week

Number of working days	Frequency	%	Valid %
1 to 2 days	22	3.7	16.5
3 to 4 days	2	0.3	1.5
5 to 6 days	99	16.5	74.4
throughout the week	10	1.7	7.5
Total	133	22.2	100.0
Missing(Not Applicable)	467	77.8	
Total	600	100.0	

Of the quality factors considered, free or interpersonal communication between clients and service providers was the only significant determinant of uptake of family planning services (chi = 4.2, P < 0.001) and clients ability to communicate with the service providers was strongly associated with the educational level of the mother (Table 4.9)

Table 4.9: Relationship between mothers' educational level and ability to communicate with service providers

			Ability to communicate with service provider on health matters		
			No	Yes	Total
Educational level of mother	None	Count	331	28	359
		%	92.2	7.8	100.0
	Low	Count	109	84	193
		%	56.5	43.5	100.0
	High	Count	8	40	48
		%	16.7	83.3	100.0
Total		Count	448	152	600
		%	74.7	25.3	100.0

4.9 Contraception Prevalence Rate

The number of women or respondents using modern family planning methods was 122 giving the contraception prevalence rate was 20.3 % (122/600)

4. 10 Available Family Planning Methods at the Facilities

The number of family planning methods available in the facilities ranged from 2 to 6 different methods. The facility with the highest number of family planning methods had 6 different methods whilst the one with the lowest had two methods as shown in Table 4:8

The methods that were available in these facilities are shown in table 4.10

Table 4.10: Number of family planning methods offered by health facilities

Number of family planning methods	Names of methods	Frequency	%
2	B & E	3	21.4
3	B ,C,&E	1	7.1
4	A,B,C,&E,	9	64.3
6	A,B,C,D,E &F	1	7.1
Total		14	100.0

A = Depo provera, B = Male condoms, C = Norigynon, D= Jadelle, E = Pills, F = IUD

4.11 Couple Year of Protection

The quantities of contraceptives distributed by the Ghana Health Service through its health facilities from 2009 to 2011 in the district were taken from the District Health directorate. Reports on the clients' uptake of the family planning services for the various methods in all the health facilities were compiled and the CYPs calculated. Table 4.11 below shows the CYPs for the various contraception methods and the annual CYPs for the district.

Table 4.11: Couple Year of Protection (CYP) for the various methods from 2009 to 2011

Method	Quantity issued to clients			CYP		
	2009	**2010**	**2011**	**2009**	**2010**	**2011**
Pills	4095	3209	2605	315	244.9	200.2
Female condom	27	20	15	0.22	0.16	0.12
Male condom	23568	21238	11255	196.4	176.9	93.8
IUD Copper T.	19	17	6	665	59.5	21
Depo Provera	2790	2468	2071	697.5	617	517.8
Jadelle	178	91	140	623	318.5	490
Norigynon	1473	454	1027	122.8	37.8	85.6
Tubal ligation	0	0	0	0	0	0
Vasectomy	0	0	0	0	0	0
Spermicides	0	0	0	0	0	0
Annual CYPs				**2619.92**	**1454.76**	**1408.62**

Legend: Pills = Number Dispensed÷ 13, Norigynon = Number ÷ 12, Male Condoms = Number dispensed ÷ 120, Depo- provera = Number dispensed ÷ 4, Jadelle = Number dispensed x 3.5, IUCD = Number dispensed x 3.5

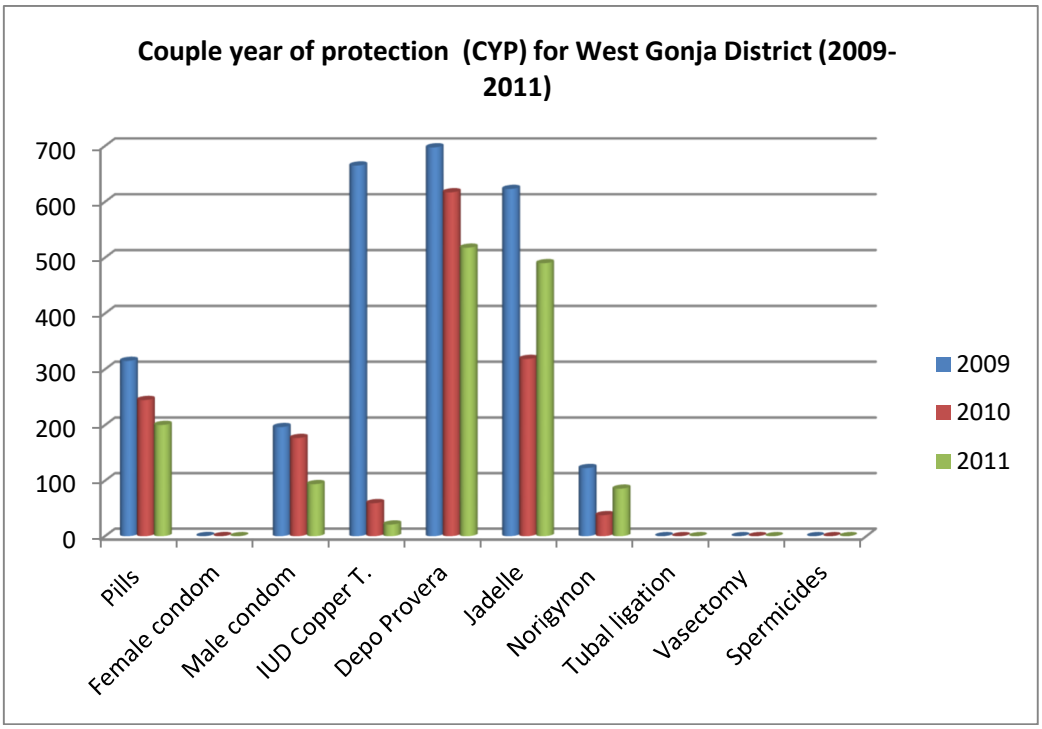


Fig 4.3: A bar chart showing the CYP for the various contraceptive methods for 2009 to 2011

4.12 Barriers to the Uptake of Contraceptives and family planning services

The barriers to the uptake of contraceptives and family planning services in the communities as reported by service providers are presented in Fig 4.4 below.

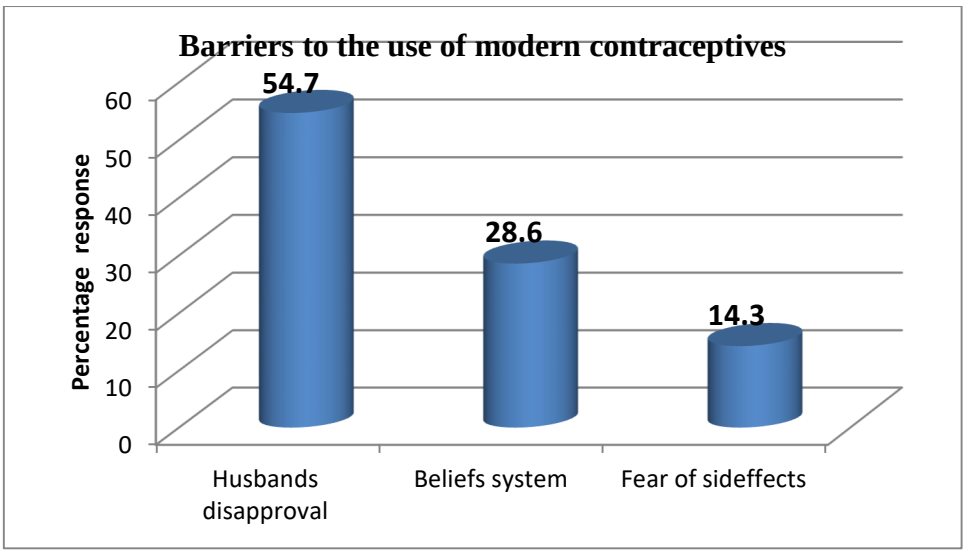


Fig 4.4: Socio -cultural barriers to the uptake of family planning services among respondents

4.13 Maternal Autonomy

Maternal autonomy or the mother's status in the household indicates her decision-making power with respect to movement, finance, healthcare use, and other household activities. Evidence suggests that autonomy of the mother is significantly associated with uptake of FP services and contraceptives use (Table 4.19). Women who use modern contraceptives had significantly higher maternal autonomy score, compared with women who were not using any kind of modern contraceptives (7.4 versus 2.1) $F(1,599) = 490.6$, $P < 0.001$. This association remained significant even in a multiple regression analysis ($P< 0.009$, CI = 1.09-1.83) (Table 4.12)

Table 4.12 Composite index of women autonomy (CIWA) and uptake of modern family planning methods

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
No	478	2.1381	2.45585	0.11233	1.9174	2.3588	0.00	9.00
Yes	122	7.3034	1.80704	0.16360	7.0695	7.7173	0.00	9.00
Total	600	3.2067	3.15339	0.12874	2.9538	3.4595	0.00	9.00

4.14 Role of Maternal Autonomy, Education and Economic Status in the Uptake of Modern Family Planning Methods

The analysis showed that maternal education was consistently related to maternal autonomy in the study sample. Women who attained higher education had greater autonomy in taking critical decisions that affect their welfare, compared to their illiterate colleagues (7.3 versus 1.9) $F(2,599) = 133.9$, $P < 0.001$ (Table 4.13).

Table 4.13: Maternal autonomy and maternal educational level

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
None	359	1.8830	2.25664	0.11910	1.6488	2.1172	0.00	9.00
Low	193	4.6425	3.28057	0.23614	4.1767	5.1083	0.00	9.00
High	48	7.3333	2.17660	0.31417	6.7013	7.9654	1.00	9.00
Total	600	3.2067	3.15339	0.12874	2.9538	3.4595	0.00	9.00

4.15 Determinants of Uptake of Family Planning Services

Results of logistic regression analysis in Table 4.14 show that educational level of the spouse has positive and highly significant effect on the uptake of family planning services. Compared to women whose husbands had no education, women whose husbands attained secondary or higher education had significantly greater odds of utilizing a family planning service (AOR = 3.7, CI: 1.4-9.5).

These results also show that uptake of family planning services in the study sample is significantly related to many other factors including ability of the woman to communicate with health service provider on health matters, household wealth index of mother (access to resources), and maternal autonomy (that is, empowerment to make key decisions). The greater the number of daughters a woman has, the lesser her chances of patronizing family planning services.

Table 4.14: Determinants of the uptake of family planning methods (Model 1)

Determinant	B	Wald	P-value	Exp(B)	95.0% C.I. for EXP(B)	
					Lower	Upper
Number of daughters alive	-0.608	10.085	0.001	0.54	0.37	0.79
Household Wealth	0.835	16.376	0.000	2.31	1.54	3.46
Maternal Autonomy	0881	82.530	0.000	2.41	1.99	2.92
Education of husband		10.621	0.005			
Low level(1)	0.142	0.083	0.774	1.15	0.438	3.03
High level(2)	1.305	7.397	0.007	3.69	1.44	9.45
Constant	-8.680	70.513	0.000	.000		

The educational level of the mother and her/ husband remains an important determinant of uptake of family planning methods but the effect of education becomes irrelevant or the effect is reduced with the inclusion of the variable that takes care of maternal ability to communicate

with health service provider on health matters variable. The ability of the woman to discuss health matters with the service provider makes irrelevant the contribution of maternal autonomy in the uptake of family planning services (Table 4.15). Maternal education up to the JSS level also had no significant explanatory power on the use of family planning methods when the ability of the woman to discuss health matters with service providers is taken into consideration in the multivariable logistic regression model (Table4.15). This, then, suggests that the ability of the woman to discuss health matters including family planning is mediated through education whereby women educated up to SHS level have greater opportunities to take decision on their own health, compared to her illiterate colleagues. Inclusion of the woman's ability to communicate with health provider on health matters increased Nagelkerke R Square from 73.5 % to 81.7 %. This means that variable alone accounted for 8.2 % of the variance in the uptake of family planning services. A woman who is able to discuss health matters with the service provider was 148 times more likely to use a modern contraceptive (adjusted odds ratio = 148, CI: 30.5-726).

Table 4.15: Determinants of the uptake of family planning methods (Model 2)

Determinant		B	Wald	P-value	Exp(B)	95.0% C.I.for EXP(B)	
						Lower	Upper
	Number of daughters alive	-0.754	12.035	0.001	0.47	0.31	0.72
	Household wealth index	0.995	16.552	0.000	2.70	1.7	4.4
	Maternal autonomy	0.346	6.887	0.009	1.41	1.09	1.83
	Ability of the woman to communicate with health service provider	4.703	28.454	0.000	1.10	1.9	2.4
	Planned number of children to have	0.909	4.673	0.031	2.5	1.1	5.7
	Constant	-8.494	44.438	0.000	0.000		

4.16 Results of Qualitative Data

The women who took part in the focus group discussions included farmers, traders and civil servants. Table 4.23 shows the occupational distribution of female discussants.

Table 4.16: Occupational distribution of female discussants

Occupation	Number	%
Farming	209	70
Trading /commerce	52	18
Civil service	13	5
Unemployed	26	9
Total	300	100

4.16.1 Use of Contraceptives among Discussants.

From the focus group discussions, it was realized that the number of women who had ever used a modern contraception method was slightly higher than the women were currently using a

modern contraception method. Among female discussants, more than 75 % of them had never used any modern contraception method.

Among the male discussants, 28.7 % of them had ever used a modern contraception method specifically the male condom whilst 71.3 % had never used the male condom or any other modern contraception method.

4.16.2 Occupational Distribution of Male Discussants

The men who took part in the focus group discussions were involved in different economic activities or occupations; majority of them were farmers while civil servants were the least. Table 4.25 shows the occupational distribution of male discussants

Table 4.17: Occupational distribution of male discussants

Occupation	Number	%
Farming	249	83
Trading /commerce	28	10
Civil service	23	7
Total	300	100

4.16.3 Fertility Rate and Preference for Male and Female Discussants

The fertility preference and ideal number of children for male discussants was higher than that of their female counterparts. The fertility preference rate for male discussants is 11.95 whilst that of the females is 8.36.This was calculated by summing up the number of preferred number of children by all the discussants and finding the average. Table 4.26 shows the fertility preference of male and female discussants.

Table 4.18: Fertility preference of male and female discussants./the mean desired number of children

Sex	Number of discussants	Sum of individual fertility preference	Average fertility
Men	300	3,584	11.95
Women	300	2,508	8.36

4.16.4 Factors Influencing the Fertility Rate

From the focus group discussions held, the following factors were identified to influence the high fertility rate and preference of the discussants;

- Fear of child mortality
- Children as a source of security for parents
- Prestigious purpose or reasons
- Polygamous marriages among men
- Filling-in for parents who did not give birth to many children

4.16.5 Barriers to the Use of Modern Contraceptives among Women

The barriers that were mentioned by discussants are categorized into the following themes in order of their magnitude or severity:

i. Fear of side effects of modern contraceptives
ii. Spousal opposition or disapproval of contraceptives use
iii. Knowledge/information gap
iv. High fertility preference
v. Poor physical or geographical accessibility
vi. Monopoly of men in decisions regarding health of women

vii. Religious barrier

4.16.6 Barriers to the Use of Modern Contraceptives among Men

From the interaction with the male focus group discussants, these were the barriers militating against the use of modern contraceptives among the men:

i. High fertility preference
ii. Poor physical or geographical accessibility
iii. Religious beliefs and traditions
iv. Knowledge or information gap

4.16.7 Benefits of Family Planning Services According to Discussants

The men and women who took part in the focus group discussions mentioned the benefits of family planning as follows;

i. Improves maternal health
ii. Improves child's health
iii. Promotes unity among couples in their sexual life
iv. Improves financial status of couples
v. Helps young people to achieve their life's aspirations and dreams before starting their families

4.16.8 Ways to Improve Uptake of Family Planning Services

The members of the focus groups suggested the following as ways by which the uptake of family planning services could be enhanced:

- Educating people especially the men on the importance of family planning
- Introduction of family planning methods that has minimal side effects

- Introducing more methods of family planning for men

4.16.9 Sexual Rights of Women

During the focus group discussions with the women it came to light that women were considered to be empowered or have autonomy if the fell in the following categories:

- Women who have the power to refuse sex when the need arises
- Women who have the power to go for contraception without husband's consent

4.16.10 Expected Roles of Men and Women in Family Planning

The discussants stated or mentioned the roles that men and women should play in the uptake of family planning services. These roles include:

- Men should allow their wives to go for family planning services
- Women should educate each other on family planning services
- Women to report side effects of family planning at health facilities
- Women should visit health facilities to get more information from family planning service providers.

4.17 Information from Focus Groups

The qualitative data was gathered according to selected topics of interest which include fertility preference of the men and women who took part in the discussions, factors influencing the fertility preference of wives and husbands, barriers to the use of modern contraceptives among couples, benefits of family planning, ways to improve uptake of modern contraceptives, roles of men and women in the use of contraceptives, and the sexual rights of women. The results or findings of the focus group discussions were arranged according to the themes or areas of interest and the themes were linked to the results of the quantitative analysis. These were again compared or linked with findings from related studies or existing literature. In all, sixty focus

group discussions were organized, thirty focus groups were organized for men in the study communities and another thirty focus groups were for women in the communities. The women in the focus groups were from 15 to 49 years whilst the men were from 17 to 50 years.

4.17.1 Demographic Characteristics of the Focus Group Discussants

The members of the focus group discussions were men within the age group of 17 to 50 years and women within age group of 15 to 49 years who are referred in this study as WIFA group who have given birth and were either married or unmarried. The age group for the women was consistent with that of the quantitative data that was collected and analyzed.

The women who took part in the focus group discussions were farmers, traders and civil servants.

4.17.2 Fertility Preference/Mean Desired Number of Children for Male and Female Discussants

The fertility preference and mean desired number of children for male discussants was higher than that of their female counterparts. The higher fertility preference of the males buttresses or is consistent with the women's report in the quantitative study that majority of their husbands approve of the use of modern contraceptives. Family planning service providers also mentioned that most of the men were against the use of modern contraceptives so women were not or refused to take their family planning attendance cards issued to them in the health facilities to the house because they didn't want their husbands to know that they were on modern family planning methods. In the quantitative data or study, 57.1 % of the family planning service providers stated that spousal (husbands) disapproval of modern contraception was a major obstacle in the uptake of modern contraceptives and family planning among women. This could also be a contributing factor to the refusal of women to discuss their family planning issues or needs with service providers or health professionals which was identified as a major

determinant in the uptake of modern family planning methods from the multivariate logistic regression analysis of the quantitative data.

4.17.3 Determinants of the Uptake of Family Planning Services and Modern Contraceptives

Although the women displayed some level of awareness and knowledge of family planning services and also some level of use of contraceptives, majority of them reported that they have never used any modern contraceptive. Few of them reported that they have ever used modern contraceptives but are currently not using them. This was consistent with the quantitative data where those who have ever used contraceptives were more than those who were currently using them.

In probing to find out the factors or determinants of the use of contraceptives there were some factors that were mentioned which kept recurring in the discussions in all the study communities. These factors include:

Economic status of the women: From the focus group discussions organized it was realized that the economic status of a woman has an influence on her ability or propensity to use modern contraceptives just as it was observed in the bivariate analysis of the quantitative study. This became clearer when women made statements such as;

……..*"my husband is the one who controls the money we get from our farm produce and he is the one who married me so he takes care of our children. He decides on the number of children he can take care of and I have to obey him"……..…*

…..*"I don't go to the hospital alone; I always go to the hospital with my husband. He takes me on his bicycle to the hospital and pay my hospital bills so he knows what I go to the hospital*

to do. He will not pay for me to go for family planning because he does not need it, but I cannot also get up and go to the hospital by myself without his knowledge"…….

……"you know that we the women here do not have work on our own unlike those who are in Techiman, Kumasi or any other place in the southern part of the country. In the southern part women have a say in their marriage because they have work to do and have money to buy whatever they want to buy. But here it is your husband who is having all the money and will not give you some to be working because he thinks that when a woman is rich she will not respect her husband. This is why some women don't do family planning"……

Empowerment status of women: The level of involvement of women in household decision making and the level of respect and dignity that their husbands attach to them was seen to have an influence on their uptake of contraceptives. Women who reported that they were using modern contraceptives had to decide with their husbands or went for it on their own volition because their husbands did not agree to their decision. Some of the excepts from the women include;

……."my husband is married to me and I am also married to him so I respect him and he should also respect me. I discussed it with him that I wanted to go for family planning, and he asked me my reasons which I explained to him and he agreed"……..

…. "I am a civil servant and I take salary at the end of the month. I also know my rights so my husband respects me and I also respect. Anytime I want to go to the hospital I just inform him and sometimes he gives me money and other times he doesn't and I am okay with it. I am using Depo provera and he is aware but he has not complained"……..

……. *"We women are such that men don't respect us. So they don't want to take our advice and always want us to do what they want. That is why they don't allow us to do family planning"……..*

Number of children alive: From the discussions in the focus groups, it was seen that the number of children alive has an influence on the use of modern contraceptives either to space or limit births. Women who had five or more children showed some interest in using contraceptives as compared to those who had lesser number of children. Again, women who have suffered child mortalities showed apathy towards modern contraceptives. These are some statements made by some of the discussants;

……."for me nature or God have done family planning for me because I have given birth to six children but as of now only three of them are alive. I have divided them with death. What do you think will happen if I were using modern contraceptives then l wouldn't have a child by now"……..

……..."I have only one child why should I use modern contraceptives? Those who have more children should be using them "……..…

……. "I will only use contraceptives when I become an old lady and decide not to give birth again "……..

Education level:. An interaction with the men and women in the focus group discussions showed that family planning is considered to be the preserve of the elites or educated couples. Some of the statements that exemplify this notion include:

……."family planning is the white man's ideology ,so it should be used by those who have gone to school but not for we farmers. The food we eat is different from what the white man eats……"

……*"the women whom I have heard of and those I have seen using family planning methods are those who have gone to high schools and those women who have money"……..*

Ability to freely discuss their health needs: The ability of women to discuss their health needs with health professionals and also their friends was seen to have a positive association with their uptake of family planning services. The following statements are excerpts to buttress the association:

……..*"when I gave birth to my second child and went for postnatal care, I talked to one of the nurses about how I can prevent early pregnancy. She taught me the various methods so I went for Jadelle which I am still using"……..…*

……*"it was my friend who told me about the Depo provera when we were in a bus going to the market. I told her that I didn't want to give birth in the next three years but didn't know any contraceptive method. So the following week I went to the health center for Depo provera"……..*

Occupation of the couples: The type of occupation of the respondents was also seen to have an association with the use of modern contraceptives as it shown by bivariate analysis in the quantitative data. Majority of the women and men who reported that they were using modern contraceptives were in the civil service and commerce. This relationship was linked to the assertion that these categories of people (civil servants and traders) had enough time for their health matters or issues. Also, most of the discussants who were farmers especially the men recounted the importance of large family size to their occupation in terms of provision of free labour. These are examples of their statements;

……*"when we were young we were helping our fathers on their farms. We were twenty two children of father helping him in the farm and we helped him in all farming activities. He didn't*

employ any labour so I don't know why you say we should not give birth to plenty children with our wives "…….

…….."as for we the farmers we need more children to help us on our farms unlike the government workers who are paid at the end of the month"…

….. "everywhere in Ghana it farmers who have plenty children because it is good so that the children will be helping you on the farm. There is no need for you to do family planning as a farmer"……

4.17.4 Knowledge Level of Modern Contraceptives

The knowledge level of contraceptives among discussants varied greatly especially in the lines of education level and their place of residence (urban, peri-urban and rural).The knowledge level also differed with regards to the various methods which is similar to the results of the quantitative study. Majority of the women and men had knowledge of the male condom and the injectables. Knowledge of the male condom was almost universal among the male discussants with the female condom least heard of, as majority of the male and female discussants said they have never seen it before. Male vasectomy and female sterilization were known mostly among the women and men with a secondary and post secondary education. Those who were in the urban and peri-urban areas had more knowledge of different modern contraceptives method. Some of the statements that were made by the discussants with regards to their knowledge of the family planning methods are;

……. "I have never heard of female condom before, I know the male condom and my husband have ever used it"……..

……..."we know of the male condoms ,the injectables and the pills but I have never used any of them before"……..…

……."it is the women who know the family planning methods because they use them, as for we the men we don't use them so we don't even look for these things"……..

4.17.5 Preferred Family Planning Method among Discussants

Although the women were using different modern contraception methods, the use of Depo provera was more prevalent among the women who were currently or had ever used modern contraceptives just as the quantitative study revealed. These were some statements made by some of the women to support this point;

…*"I use Depo provera because my husband doesn't see it and will not know that I am using it"…..*

……*"the reason why most of us use Depo provera is that it makes you grow fat and you develop a good shape around your pelvis so that you look attractive to your husband"……*

……*"Depo provera is good because it is an injection which will last for three months. You can go for it and be roaming with it, however with the pills you have to be taking it every day in a month and you can forget which will create problem or trouble for you. But when you are using Depo provera you will not forget so it is safe"……..*

……*"initially I was using the pills and my husband saw it and threw them away, so this time I am using Depo provera which he cannot see and he can't ask me why I am not pregnant. If he asks why I am not pregnant, I will only tell him that I am not God"…….*

The men also gave some reasons why they were not using the male vasectomy. Some of these include:

……*"I don't know male vasectomy so I cannot say it is good or not good. But I heard it is like castration "……..*

……..*"condom is good but I only use it when I have sexual act with a woman who is not my wife"……..*

4.17.6 Barriers to the use of contraceptives

Even though the knowledge level of modern contraception methods was very high especially among both men and women; the use of contraceptives was faced with some obstacles. In probing to find out why majority of the women and men were not using contraceptives the following reasons were given with some of their quotations.

Fear of side effects of modern contraceptives: Majority of the women and men gave the fear of side effects of modern contraceptives as one of the reasons for not using them. These are some statements made by some of the women:

……"I am a woman with four children, and I safely gave birth to three of my children in the house without the help of a doctor or a nurse. A friend advised me to go for Depo provera which I whole heartedly did. Later when I became pregnant and was in labour, it was very serious and was at the crossroad of death and life. I became unconscious and was rushed to the hospital for a caesarian session. It was because of the family planning method that is why I didn't deliver safely at home so I have stopped using it and I have advised my friends and relatives never to use contraceptives."……..

A lot of the women in all the communities who took part in the focus group reported irregular menses as one of the problems with contraceptives especially Depo provera, Norigynon and Jadelle. These are some excerpts:

……..."I used Depo provera when I gave birth to my third child but I realized that I was not having my menses again for about 6 months. I thought I was pregnant but my belly was not growing bigger. I was having some weird feelings in body so I went to hospital for a pregnancy test which proved negative. I was then given some drugs but as of now I am still not having my normal menses. It is therefore a problem for me so it not good to use family planning especially injectables."…….

Some of the women complained of a complete cessation of their menses when they used modern family planning methods. This is what one woman said;

……*"I have not menstruated for fourteen months. It all started the very month I used Depo provera up to this time I don't menstruate so am I a woman? Nurses deceive us to use family planning methods which create big problems for us. As for me I will not advise anybody to use contraceptives."*……

Other women also complained of an overflow during their menses when they use injectables and Jadelle. Some of the excerpts are;

……*"my husband and I decided that I should go for Jadelle for about a year now but anytime I have my menses it lasts for about one week and sometimes more than that. It makes me feel uncomfortable because in Islam anytime you are menstruating you can't go to the mosque and pray."*……..

…..*"When I went for Depo provera, I was always having an overflow in my menses. I contacted a nurse and they told me it will become normal again but it didn't so I have stopped."*…..

Some of the women in all the groups who have never used any of the methods built their argument on the experiences of others who have used them and had some complications. These are some of the statements that were made:

"Some people say that when you do family planning you will not have your menses again"

……..*" I have heard from my friends who went for Depo provera that it is not good to do family planning because you will be menstruating by heart. All the time you will be menstruating."*……

Another issue that was raised by about 75% of the women was the issue of family planning methods or contraceptives making it difficult for a woman to become pregnant again when she wants to. These are some statements to exemplify their claims:

……*"when I gave birth to my first child I decided to go for Jadelle. Later I went to the Health Centre and had it removed, since then, I have struggled to become pregnant again but to no avail. Some of my friends are saying it is because of the Jadelle and I think it is true."…..*

…..*"Since I stopped using Depo provera for the past three years, I have struggled to become pregnant but it has not been successful so my husband have given me up to the end of this year that if don't become pregnant, then he would go for another woman. I have given birth to two children and decided to be use contraceptives which has created this problem for me."…..*

The men also raised an array of issues that discourage them from using family planning.

Some of the issues raised are captured in their statements below:

……*"As for me sex is something that is sacred according to the Quran. Sex should lead to child bearing therefore it is wrong for you to prevent pregnancy when you are having sex. If you are not ready for pregnancy don't have sex"…….*

……..*"How can I eat a toffee with its rapper? Or how can I eat meat without salt? Using condom is just like eating a toffee with its rapper and you won't enjoy it. That is why we don't use condoms"……..*

A lot of the men also alluded to the issue of side effects that the women face after using modern contraceptives. Some of them said;

…..*"our wives have been complaining of menstrual problems when they use modern contraceptives"……..*

……"when my wife was using Jadelle it became difficult for her to become pregnant again even up to now she has not conceived again"……

Spousal opposition or disapproval of contraceptives use: This was seen as a barrier to the use of modern contraceptives among the women as it was also cited in the quantitative data. Most of the women said that their husbands do not accept or approve of modern contraceptives use. Some of the women stated this in the following statements;

……"my husband told me that if I go for a modern family planning method, then he will marry another woman because he wants more children"…..

……"we the women don't have problem in using modern contraceptives, it is rather our husbands who don't want us to use them. As Muslims we can't disobey our husbands so it is better you talk to our husbands"…….

….."when you tell your husband to use condom he will tell you that you don't trust him or you think he has HIV/AIDS"…….

……"my husband told me that he is the one who is going to take care of the children so I have to give birth to all the children in my womb. He said he will divorce when she sees me using a modern contraceptive"…….

Some of the men also have the view that their wives do not have the audacity to take any decision about contraception. Some of their statements include;

……."I won't allow my wife to use contraceptive because I married her and I know the number of children I can take care of"…..

……"it is a man who marries a woman and not the other way round so the woman cannot tell her husband that I won't give birth again"……..

Knowledge/information gap: The use of modern contraceptives was also impeded by the knowledge or information gap especially among those with lower or no formal education. It was also observed among women and men who were staying in rural areas. Some of the excerpts are:

…….“we don’t know of the methods of family planning apart from the condom. So they should teach we the women and our husbands”……..

…….“we heard that when you use modern contraceptives you cannot become pregnant again”…..

Poor physical or geographical accessibility: Poor accessibility to modern contraceptives was stated as one of the reasons why some men and women were using contraceptives. Some of the women and men blame the inability to get easy access to the contraceptives for their non use. This was also realized in a bivariate analysis of quantitative variables that as the distance to the source of family increases, the uptake of family planning services decreased. Some of the people made the following statements that effect

……..“they don’t sell condoms in this village so if I want to have sex with a woman I cannot take the bicycle to travel 15 miles to buy a condom. I will therefore do it like that and face the consequences”……..

…….“I went for Depo provera in Tamale, but the distance is very far and it is difficult to get a car to that place.”……..

…….“even when our children are sick we find it difficult to get a car to the hospital or health centre. At times we rely on herbal medicines so we don’t see it necessary to go to the hospital or health center for just a family planning injection”……..

Use of local family planning method: The use of locally available family planning method was also reported in some communities. Some of the discussants in all the communities alluded to the fact that they knew these local methods but the use of these methods was reported in communities that were more rural. Two local methods were mentioned namely a herbal mixture called "Yege" and a rope that women tie around their waist to prevent pregnancy which is called "Kufulbi". Some of the women especially those within the age group of 30 to 35 reported using these methods. These are some excerpts;

……"I have been using "kufulbi" since I started giving birth. Anytime I give birth and don't want to become pregnant again I tie this rope around my waist until my child is able to walk before I untie it again and prepare for another pregnancy."……

……"for me I have my own way of doing family planning, I used some local herbs which I grind and soak it into a mixture which I drink anytime I have sex with my husband and I don't want to become pregnant"……

……"we the men have a way to do family planning with our wives. Thus we use a rope ("kufulbi") and tie it around the woman's waist and she won't become pregnant until you untie that rope"……

4.17.7 Benefits of Family Planning

Although the contraception prevalence rate respondents were not too encouraging, they knew some benefits of family planning. During the focus group discussions, the discussants mentioned some of the benefits of family planning as follows;

Family planning improves maternal and child health: In all the focus groups, it was mentioned that family planning helps to improve the health of mothers and children. Some of the statements to this effect include;

……..“any woman who is always nursing a child or who gives birth at short intervals looks filthy and smelly. Because the child will vomit, go to toilet and also breastfeed. These are the things that make mothers to smell. It is good that women will space their births and becomes very neat”……..…

……. “when you become pregnant and your child is still crawling, the pregnancy affects the health of the child and he/she will develop kwashiorkor”……..

Family planning improves financial status of households: Some of the discussants mentioned that family planning improves the economic status of couples. Some of the excerpts are;

……..…..“when your children are few, you can take good care of them in their education and the provision of food. This is because you will share the household money among few people”……

…..“a woman with few children always wear new clothes because she will have excess money for herself. But a woman with so many children always dresses shabbily because the children require money for their clothes”……..…..

……..…..“a man whose children are not many can sell some of his farm produce because the mouths he feed are not many”……..

Family planning promotes unity among couples in their sexual life: This point was reiterated among the female discussants. They said that with family planning couples do not fight over sexual rights. These are some of their statements;

…….“when I gave birth to my two children within two years, I started to deny my husband his sex request. We were always having confrontations because of that so I was advised to go

for family planning. So now we don't fight or argue over sexual issues again because I know I am protected from becoming pregnant"……..

……"as a woman if you are always nursing a child your husband will use that as an excuse to go for other women. In this community anytime you give birth you have to leave your husband's house and go to your mother. Before you return, your husband will go for another woman because of sex"……

Family planning young people to reach their life's aspirations: Some teenagers and young men and women in their twenties asserted that family planning helps the youth to reach their aspirations in life by preventing early parenthood.

Some of their statements include;

……..…."I have regretted giving birth at a tender age of 16 because now when I compare myself to my classmates who didn't give birth early, I feel embarrassed because I don't have a work and don't even know what I will achieve in my life"……..…..

……"we the young men who gave birth early have regretted for becoming fathers at such early ages. Now we have forcibly become old men because you are always under pressure to care for your children and wife. If you are not careful too, your child will become useless in life because you couldn't take good care of them. So they will grow and become like us which is bad"……..…..

4.17.8 Ways to Improve the Uptake of Family Planning Services

In probing to find out the ways by which the uptake of family planning services could be improved among women and men in the district the discussants suggested the following ways;

Men should be deeply involved in matters of family planning: The involvement of men in matters of family planning was seen to be crucial in improving the uptake of family planning services. These are some statements to support this assertion;

……*"in our societies it is believed that men are the main stakeholders in making decisions about fertility in marriages. If women can go for family planning then it will depend on what their husbands decide"*……..

……*"as for we the women, we don't have much problem with using contraceptives rather it is the men who always want to prevent us from using them. So you have to talk to our husbands"*……..

……..*"there should be more male controlled family planning methods the women apart from the condom. If there were pills for men like we the women will sneak and put it inside their foods so that they will not notice it. This will prevent them from impregnating us. But here is the case we don't have pills for males"*……..

CHAPTER FIVE
DISCUSSION OF RESULTS

5.0 Introduction

This chapter discusses the results and findings of the study in relation to other existing literature. The chapter is divided into two sections to look at the findings of the quantitative

and qualitative data. The information in the qualitative data was gathered from focus group discussions that were organized.

5.1 Demographic Characteristics of the Women

The women in their fertile age (WIFA) who were interviewed were from the ages of 15 to 49 years and who were either married or in an informal sexual relationship. There were some teenagers who were already mothers and this is consistent with the findings of the (GHS & GSS, 2008) in the Ghana Demographic and Health Survey that 13% of teenagers in Ghana are already mothers or are pregnant with their first child. The findings are however not consistent with the assertion by the GDHS that a higher percentage of teenagers in the Northern region are already mothers or pregnant with their first child.

With regards to the religious distribution of the women, majority of the respondents were Muslims while the rest belonged to different Christian and religious denominations with Catholics forming higher proportion of the Christians group. These results confirm the report of the (GSS, 2001) in the 2000 Population and Housing Census which stated that the West Gonja district comprises of 70 % Muslims and 9.3 % being Protestants or Pentecostals. The results however differ from the 12 % composition of African Traditional believers. This could be attributed to the smaller number of the sample size as compared to that of the Population and Housing Census which involved everybody in the district.

5.2 Socio-demographic Characteristics of the Respondents.

The results showed that majority of the respondents did not have any formal education. The percentage of women without formal education was almost three times higher than that of the national average of 21 % provided by the Ghana Demographic and Health Survey of 2008.

However, the findings are consistent with GDHS assertion that two-thirds of women in the Northern region of Ghana have no formal education. The results were consistent with the findings by the GDHS that 4 % of women in Ghana were educated to the tertiary level. The level of formal education attained by their husbands was higher that of the women even though men without formal higher education formed the majority. Men who attained tertiary education were slightly higher than the women. This finding agrees with the findings of the GDHS (2008) and the Ethiopian Demographic and Health Survey (2005) that men attain higher formal education than women.

5.3 Household Characteristics

The findings of the study supports that of the DPCU (2010) which reported that the average household size in the district was eight (8) persons per a household which was higher than the national average of five (5) persons per a household. Meanwhile the findings differed with respect to the mean number of households per house which was found to be 2.1±1.1 households instead of the 5.2 established by the DPCU (2010)

The findings were also inconsistent with that of the GDHS of 2008 that 38 % of households in rural areas have electricity supply whilst 85% in the urban areas or centers have electricity supply. In the study it was found that only 15.7 % of the households had electricity supply whilst 84.3 % did not have electricity supply. This does not conform to the findings of the study because the number of households with electricity supply was far lower than that found by the GDHS of 2008

This discrepancy is attributable to the vast arid land used by the Mole Game Reserve which has isolated the district from other developed towns and communities of the surrounding districts therefore making it difficult for the extension of electricity into communities of the

district. Also, because the district is the largest district in the whole of the Northern region and the communities are scattered and isolated from the district capital.

5.4 Socio –Demographic Characteristics of the Women and Uptake of Family Planning Services

The results showed that the uptake of family planning services increases with an increasing level of the mother's education. Women who had no formal education tend to have lower level of contraceptives use as compared to women with formal education. The level of modern contraceptives use was high among mothers with a secondary school and post secondary (Tertiary) education. This implies that more educated women were using modern contraceptives, compared to illiterate women. As the level of education increases the uptake of contraceptives and family planning services also increase. The finding is consistent with the results of the GDHS of 2008 which stated that modern contraceptive use increases with women's education; nineteen percent of married women with more than secondary or higher education use modern methods compared with 11% of women with no education.

The gap between those who were educated to the primary and JHS level and those who did not have any formal education was not significant. Thus female education to the JHS and primary school level did not have influence on their uptake of modern family planning services as was earlier on established by Oliver (1995) and Chacko (2001).

These findings have also been replicated in studies in different countries across the developing world showing a positive association between women's education and the uptake of contraceptives and family planning service. Studies by Beekle and McCabe (2006) and Korra (2002) in Ethiopia, Zaheer et al (2011), and Rehan et al (2011) in Pakistan reported of a similar trend. The positive association between maternal education and the uptake of modern family planning services has also been reported by Sylvia (2004), in Nigeria, also by (Measure DHS

Marco International Demographic and Health Surveys, 2006) using the Demographic and Health Survey (DHS) (2006) of Nepal, and Dang (2002) in Vietnam.

Husband's education level has an effect on the use of modern contraceptives either by the woman (wife) or by himself. The results showed that over 80% of men without any formal education do not approve of the use of modern contraceptives whilst all the men with tertiary education approved of the use of modern contraceptives. The results showed a trend that as the level of education of husband (spouse) increases, the approval of the uptake of contraceptives also increases thus husbands who are highly educated tend to approve the use of modern contraceptives by their wives or by themselves. This finding that husbands' education level has a positive association or relationship with the approval and use of modern contraceptives is consistent with the work of Ria (2009) and Mohamad et al (1988) in a study in Indonesia. Again the findings of Gereltuya et al (2007) in Kenya are similar with the findings of this study. They stated that wives' education levels were an important influence on the types of contraceptive method used but husbands' education levels has more influence on the use of modern contraceptives. Dang (2002) using data from the Vietnam DHS, also argued that husbands' education level has a greater influence on contraceptive use than did wives' education level.

This finding was also supported by the study conducted by Bina (2009) which stated that the husband's education level has more influence on the use of particular contraception method especially male-controlled methods of modern contraception. He argued that men with any secondary or higher education are more likely than those with none to rely on either of these methods. Furthermore, Chapagain (2005) argued that husbands education level play a significant role in influencing their wives to use contraceptives especially female controlled methods.

Educational level also has an influence on the choice of method of modern contraception. The results showed that the use of Depo provera was high among women with a higher educational level (Secondary or tertiary) compared to those with no formal education. The use of Jadelle was low among women with tertiary education. These results do not conform or support the findings of Nguyen (2012) that educated women tend to use more traditional methods of family planning like the calendar method than the pills and injectables.

5.5 Preferred Method of Family Planning

The study revealed that different methods of modern contraception were being used by the respondent. Depo provera was the preferred family planning method among current users of family planning methods. Five methods namely spermicides, female condoms, IUCD, tubal ligation and male vasectomy had zero uptake among the respondents. The results do not agree with the findings of the GDHS of 2008 that the use of any modern contraceptives method such as emergency contraceptives, Jadelle etc has the highest uptake among Ghanaian women. The findings however buttress the results of the study by Gyapong et al (2003) that the trends in IUD use in Ghana has stagnated and people are not using it. IUD use among respondents was there zero percent.

Some of the reasons given for the low use of IUD came out during the focus group discussions and these included the fear of side effects of IUD as some of the women said they were afraid of inserting IUD because it could cause cancer. Others also said their husbands expressed the fear that it would obstruct sexual intercourse by blocking the vagina. There were others who also expressed the fear that because IUD is made of metal it could corrode and cause other medical complications for them.

5.6 Relationship between Religion and Religious Affiliation and the Use of Modern Contraceptives

The use of modern contraceptives was also influenced by the religious affiliation of respondents. Members of the Pentecostal/Charismatic churches were highest users of modern contraceptives whilst those in Islam recorded the lowest use. There is a positive association between religious affiliation of women and the use of modern contraceptives. These findings are consistent with results of earlier studies by Ria (2009) and Vinod (2004) when they found that Muslim women were less likely to use modern contraceptives. According to Vinod (2004) Christian women are more likely (about four times) to use modern contraceptives than Muslim women.

5.7 Knowledge and Use of Modern Family Planning Methods

The results showed that there is a strong association between family planning knowledge and utilization. The more knowledge a woman has, the greater the chance of utilizing a modern (artificial) family planning method and this is consistent with the findings of Charlie (2011) that knowledge of modern contraceptives and family planning methods has a strong influence on their use. This was further supported by the findings of Hemmings et al (2008) in a qualitative study in Ethiopia which suggested that woman's education impacts upon their level of knowledge of modern contraceptives and their use. The findings are again consistent with that of the GDHS of 2008 which reported that, the use of modern contraceptives increases with increasing knowledge.

Again, the level of use of modern contraceptives increases with increasing knowledge through a high level of understanding and demystification of the fears of side effects which encourages knowledgeable women to use contraceptives. This is supported by the findings of Abu et al (2003) and Okwero et al (1994) that proper understanding of the various modern methods of family planning allays the fears of women and encourages them to use these contraceptives.

The findings are inconsistent with the findings of the GDHS of 2008 which stated that the knowledge of family planning was universal among men and women in Ghana. However, the knowledge of traditional method found by this study was almost the same as that stated by the GDHS of 2008.

These findings were also consistent with the findings of the GDHS of 2008 that the male condoms and injectables were the widely known methods of modern contraceptives among Ghanaians and male and female sterilizations were the least known methods.

The study also found that the respondents heard messages of family planning from different sources a month prior to the study. Some of them heard family planning methods from the media (both printed and electronic). The results showed that women who were exposed to family planning messages were using modern contraceptives than those who were not exposed to these messages. This supports the findings of Okezie et al (2010) and Antenane (2002) who stated that exposure to messages, either through hearing family message on radio or seeing advertisement about AIDS, or being visited by a family planning service provider; appears to be highly correlated with the use of modern contraceptives. The implication is that the use of contraceptive methods will increase with access to messages on contraceptive information.

5.8 Physical and Economic Accessibility and Uptake of Family Planning Services

In bivariate analysis, there was an inverse association between the distance travelled and the uptake of family planning services though the association was not sustained in multivariable logistic regression analysis. Women who stayed closer to a health centre patronize modern family planning services more than their colleagues who had to travel over 20 miles to access the services. This is consistent with the findings by USAID (2005), Timothy et al (2011) and Benefo (2006), that long distances that women have to travel before gaining access to family planning services, community access to motorable roads together with lack of transportation

and limited access to travel to services are some of the barriers to the uptake of modern family planning services.

The uptake of contraceptives and family planning services was high among women who were economically empowered and have their own financial savings and it was low among women who did not have savings at all and those whose partners only have savings. There is therefore a stronger relationship between women economic status and uptake of family planning services considering the Pearson Chi square value and P-value ($\chi^2 = 96.15$, $P < 0.001$). This association has been established by several studies in different countries and places. The GDHS of 2008 reported that the use of modern contraception methods increases with women economic status. Furthermore, Schoemaker (2005), Oliveras (2006), Benefo (2006), Eloundou-Enyegue (2010) and Ria (2009) found that wealthier women were more likely to approve of family planning and to use modern contraceptives than poor women. Most of them stated that economically empowered women more often consult their doctor about family planning than unemployed women and were also able to pay for family planning services. Also, the wealth index of women who were using one form of modern contraceptive was significantly higher than women who did not use any. The GDHS of 2008 reported that 12 percent of women in the poorest households use a modern method of family planning compared with 21 percent of women in the wealthiest households. The results are also consistent with the findings of Ria (2009) and Jayaraman (1995) that couples financial position has a significant association with the use of modern contraceptives.

5.9 Quality of Family Planning Services at Health Institutions

On the assessment of the quality of family planning services in the district the findings were inconsistent with the USAID (2005) findings citing family planning service provider's attitude and bias as one of the barriers to the uptake of family planning services. However, the results

support the findings of GDHS of 2008 that more than half of women who went for family planning were educated on the side effects of the contraceptives and they were satisfied with the services provided.

Of the quality factors considered, free communication between clients and service providers was the only significant determinant of uptake of family planning services. Mothers' ability to communicate with the service providers was strongly associated with the educational level of the mother. Among the respondents, women with a secondary or post secondary education were able to communicate or discuss their health issues (including family planning issues) with health professionals or service providers. This strong association between women's ability to discuss family planning issues with service providers or health professionals and the uptake or use of modern contraceptives was also found by studies conducted by Ghulam & Naushin (2003) and Bbaale (2009). The ability of women to discuss family planning issues with service providers makes it possible for them to know the different types of contraceptives and family planning methods that are available for them to use. It may also help them to discuss the side effects that they may encounter in the course of using any method.

5.10 Access to media and uptake of Family Planning services

The study revealed that women who watched television daily were more likely to use modern contraceptives than those who did not watch television at least once a week. Bivariate analysis also showed frequent listening to radio was positively and significantly associated with uptake of family planning services. The associations between modern contraceptives usage and frequency of watching television and listening to radio were however not significant in the multivariable regression model.

These findings are consistent with the results of a research conducted by Okezie et al (2010) in Nigeria in which they found that exposure to mass media messages on family planning had

an influence on the use of modern contraceptives. Women who were more exposed to these messages had the propensity to use contraceptives more than those who did not have that exposure.

5.11 Contraception Prevalence Rate

The contraception prevalence rate was 20.3 % (122/600) which is much higher than the figure (1.5 %) that was reported by the District health Directorate Annual Report (2010). This may be attributable to an improvement in the uptake of family planning services over the years or under reporting of the users of contraceptives.

5.12 Available Family Planning Methods at the Facilities

The number of family planning methods available in the facilities ranged from 2 to 6 different methods. The facility with the highest number of family planning methods had 6 different methods whilst the one with the lowest had two methods. Some methods were totally absent or not offered in the districts or in the facilities e.g. IUD, vasectomy, tubal ligation, female condoms and spermicides. These methods had zero percent uptakes among the respondents. The results portray the GDHS of 2008 report that female sterilization had only 2 % in Ghana. The findings were also consistent with Magadi et al (2001) proposition that broadening the choice of contraceptive methods increases the overall contraceptive prevalence. According to them, the provision of a wide range of contraceptive methods increases the opportunity for individual couples to obtain a method that suits their needs.

5.13 Spousal Approval and Consent and its Effect on Use of Modern Contraceptives

Spousal approval of contraception was assessed among the respondents which revealed that

there was a stronger relationship between spousal approval of the uptake of contraceptives and their current uptake by their wives or partners. Women whose husbands approved of family planning had a propensity to use modern contraceptives than women whose husbands do not

approve of the use of modern contraceptives. These findings were in agreement with that of Ria (2009) and Mohamad et al (1988) who found in Indonesia, that a husband's approval of contraception is the most significant factor affecting the use of modern contraceptives.

The results were also consistent with the findings by Casterline and Sinding (2000); Shah et al (2004) who asserted that a woman's perception of her husband's opinion about contraceptive use had a significant influence on her contraception practice, therefore it seemed that a husband's attitudes acted as a serious obstacle to a woman's contraceptive use.

5.14 Relationship between Occupation and use of Contraceptives among Women

Bivariate analysis between the occupation of women and the use of modern contraceptives showed a stronger association between the occupation of a woman and uptake of contraceptives and family planning services. Women who were in the civil service and those in commercial or trading activities were more likely to use modern contraceptives. Women in civil service were strongly associated with the uptake of family planning services. The least uptake of family planning services was found among women who were farmers. The findings support the results of the study conducted by Wubegzier and Alemayehu (2011) who stated that none use of modern contraceptives was identified with agricultural households whose livelihoods depend on petty mixed farming which require involvement of many household members including children who work on laborious farms free of pay. In such situation, large family size has been an accepted norm in to divide demanding farm workload among family members.

The findings also agrees with that of Eloundou-Enyegue (2010) who stated that women holding good jobs or good employment prospects face higher opportunity costs for childbearing. Those working outside of the home are further exposed to new ideas that can shape preferences, including their propensity to trade high fertility for child schooling. Furthermore, they are in a better position to meet the economic and social costs of contraception, and to overcome resistance by husbands.

5.15 Couple Year of Protection

The study showed that CYP for the three years thus 2009 to 2011 were 2619.92, 1454.76 and 1408.62. There was a 46.2 % decrease in the CYP from 2009 to 2011. CYP is generally used to estimate coverage and not necessarily use or impact. The data collected from the study just showed that. CYP obtained from 2009-2011 provided an immediate indication of family planning programme activity in the district and also allowed the programme to compare contraceptive coverage provided by family planning methods and client trends. Institutional data collected from the various family planning facilities agree with what has been stated by USAID (2011) that CYP was used to measure programme coverage rather than measuring births averted by most programmes. If data is available CYP could be used to measure specific for age, residence and education, however, the study found that this was not captured and the only information that have been captured over the years has been the volume of contraceptive distributed without calculating CYP based on the their level of education, age and wealth index. Data collected support what (Lee and William 1969) said that CYP for most programmes summarizes the total achievement of a one year programme of work into a single figure, satisfying at least some of the needs which demand such an assessment. Again, the results is consistent with what USAID (2011) & Population Services International (PSI), (2010), have said that the calculation and use CYP mainly reflects distribution and is a way to estimate coverage and not actual use or impact. The CYP generated during the three-year period provides an immediate indication of the volume contraceptives distributed through facilities in the district for family planning. From Table 4.17 it was evident that CYP generated was decreasing over the year which gave an indication that the volume of programme output was also decreasing. Available data at the time of the study did not indicate whether there had been stock-out which led to the decreasing trend for any remedial action to be taken.

5.16 Barriers to the Uptake of Contraceptives in the Communities

The study revealed some barriers to the use of modern contraceptives among respondents.

Opposition from husbands with regards to modern contraceptives usage was stated as a barrier to contraceptives use which was also identified Mustapha et al (2006) who stressed that the role of men in making family planning decision was becoming significant especially in sub Saharan Africa.

Some women who were not using modern contraceptives cited their beliefs system which were the high premium placed on child bearing, women do not have the power to take decisions with regards to their fertility, and barrenness or childlessness of a woman at some age especially from 25 years upwards is seen as a curse in the communities as barriers to the uptake of family planning services. These findings support the earlier findings of Ayoub (2005), who identified cultural traits as one of the impediments to the uptake of contraceptives.

5.17 Relationship between Age and the Uptake of Contraceptives

The results of the study showed variation in the uptake of contraceptives and family planning among the various age groups. The uptake of contraceptives was high among women within the age group of 21-30 and low among teenagers and women who were more than 30 years. The results were not consistent with the findings of Nguyen (2012) that teenagers have the highest uptake of contraceptives because of their frequent indulgence in sexual acts. The results are however consistent with the findings of Jejeebhoy (2004) who examined the differential in the use of contraceptives by putting three age groups thus 15 - 24, 25 - 39, and 40 - 49. The youngest group thus 15– 24 is in the period of building family, the mid-group 25 -39 is practicing fertility and the oldest group 40-49 has finished their target of childbirth. Hence, the use of contraceptive methods is lowest for the first group of age, then it rises to the top for the second age group and it is likely to decline for the third group.

The results also agrees with the findings of Nauru Demographic and Health Survey (2007) which reported that most teenagers were not using modern contraceptives because they have not discussed family planning with a health or field worker which was attributable to the fact that majority of women aged between 15 and 19 have not been exposed to any family planning messages via the media and also feel shy to visit health facilities for education on family planning, which creates a considerable knowledge void.

5.18 Maternal Autonomy

Maternal autonomy, which indicates her decision-making power with respect to movement, finance, healthcare use, and other household activities were assessed. The indices that were used to measure maternal autonomy or empowerment included; her taking part in decision making on household matters, household matters decided together with partner, deciding how to spend her own money, decision to buy her clothes, decision to buy large household items/furniture, decision to send sick child to hospital, decision to work outside of the home, her involvement in making decision to spend the families income and her involvement in decision to obtain health care for herself. These same indices were used to assess the empowerment or autonomy of a mother by the Ethiopian Society of Population Studies (2008), the 2008 Demographic and Health survey of Ghana and Measure DHS & Macro International Demographic and health Surveys (2008).

The results showed that autonomy of the mother is significantly associated with uptake of family planning services and contraceptives use. Women who use modern contraceptives had significantly higher maternal autonomy score, compared with women who were not using any kind of modern contraceptives (7.4 versus 2.1) $F(1,599) = 490.6$, $p < 0.001$. This association remained significant even in a multiple logistic regression analysis. The finding is consistent with studies conducted by different researchers in different parts of the world. In Asian

countries, women autonomy had been reported to be associated with contraceptive use, lower fertility, and longer birth intervals (Ushma &Deborah, 2010).

The findings also agrees with the proposition by Malhotra et al (2002), Woldemicael (2009) and Shabana & Bobak (2005) that women empowerment or autonomy is associated with contraceptives use as empowered women use modern contraceptives more than their counterparts who are not empowered.

A survey in Ghana conducted by Mai Do and Kurimoto (2012) stated that, more than three-quarters of autonomous women in Ghana were using a contraception method. Their study found that empowerment of women was associated with the use of female contraceptive methods through the existence of a better negotiation for sexual activity rather than using no method of family planning.

5.19 Role of Maternal Autonomy, Education and Economic Status in the Uptake of Modern Family Planning Methods

Kabeer (2000) defines women's empowerment or autonomy as a "process by which those who have been denied the ability to make strategic life choices acquire such ability. Narayan et al (2002) also sees women autonomy as expansion of freedom of choice and action to shape one's life. The results of this study showed that maternal education was consistently related to maternal autonomy in the study sample. Women who attained higher education had greater autonomy in taking critical decisions that affect their welfare, compared to their illiterate colleagues (7.3 versus 1.9) $F(2,599) = 133.9$, $P < 0.001$. This is consistent with the findings of Krista (2000) who found female education as a proximate to increase their autonomy or decision making with regards to their sexual or reproductive life. He argued that female education influences the distribution of authority within households, whereby women may increase their authority with husbands, and affect fertility and use of family planning or contraceptives.

A study by Zaheer et al **(**2011) in Pakistan supported this finding that female education affect the social life of women by increasing their desire for higher living standards and by providing improved perception of the reproductive means, and easy access to up to date and efficient contraceptive methods. Again, his study stated education pays in economic terms for women, by allowing them going out of their houses and work in different sectors of the country. The working women desire small family so they can easily handle the family matters as well as the official matters.

One link of education to the use of contraceptives was proposed by Cristian & Columbia University (2005) which supports the finding of this study that educated women have potentially more bargaining power (7.3 versus 1.9 as in this study) within the family and thus could be more successful at using modern family planning methods if other alternatives are not available.

Blanc and Wolf (2001) also demonstrated the influence of women's empowerment on the use of contraceptives through the dynamics of marital relationships and focused primarily on spousal communication of family planning. According to their study spousal communication is considered a strong indicator of power relations between couples and this has also been closely associated with educational background of the woman.

5.20 Determinants of Uptake for Family Planning Services

Results of logistic regression analysis showed that maternal educational level has positive and highly significant effect on the uptake of family planning methods. This is consistent with the findings of several studies conducted in different areas. Some of these include studies conducted by Wong (2000) in Zimbabwe, Bolivia and the Philippines. Also studies conducted by Gereltuya et al (2007) in Kenya, Agarwal (2000) in India, Ria (2009) in Indonesia and Benefo (2006) in Ghana showed similar results.

The results of the study further show that the uptake of family planning services in the study sample is significantly related to many other factors including ability of the woman to communicate with health service provider on health matters, which was also found by Ghulam & Naushin (2003) and Bbaale (2009) that ability of women to discuss family planning issues with service providers makes it possible for them to know the different types of contraceptives and family planning methods that are available for them to use. It may also help them to discuss the side effects that they may encounter in the course of using any method.

Household wealth index of mother (access to resources) was also found to affect the uptake of contraceptives and modern family planning services, which supports the findings of Ria (2009) and Hull & Mosley (2008) that women with better economic status or wealthier women are more likely to use contraceptives and to use a modern method than those who were in the middle and lower classes. According to her wealthier women were more likely to use a long-term contraception method which was attributed to their capacity or ability to pay private practitioners for a long-term contraceptive.

Maternal autonomy (that is, empowerment to make key decisions) was also found to be one of the determinants of the uptake of family planning services. This was earlier on identified by studies conducted by (Ushma &Deborah 2010), Malhotra et al (2002), Woldemicael, (2009) and Shabana & Bobak (2005) that women empowerment or autonomy is associated with the uptake of contraceptives and family planning services. In Ghana, this finding was replicated by Mai Do and Kurimoto (2012) who stated that, more than three-quarters of autonomous women in the Ghana were using a modern contraception method.

From the results of this study, the educational level of the mother remained an important determinant of uptake of family planning methods but its effect was reduced with the inclusion

of the variable that takes care of maternal ability to communicate with health service provider on health matters variable. The ability of the woman to discuss health matters with the service provider makes irrelevant the contribution of maternal autonomy in the uptake of family planning services. Maternal education up to the JHS level also had no significant explanatory power on the use of family planning methods when the ability of the woman to discuss health matters with service providers is taken into consideration in the multivariable logistic regression model. This then suggests that the ability of the woman to discuss health matters including family planning is mediated through education whereby women educated up to SHS level has greater opportunities to take decision on their own health, compared to her illiterate colleagues. This is supported by the findings of the GDHS of 2008 that the use of modern contraceptives increases with increasing education of a woman and also studies by Cristian & Columbia University (2005) which supports the finding of this study that women with secondary and post secondary education consult their doctors on health issues and have potentially more bargaining power than the least educated or none educated women.

Inclusion of the woman's ability to communicate with health provider on health matters increased Nagelkerke R Square from 73.5 % to 81.7 %. This means that variable alone accounts for 8.2 % of the variance in the uptake of family planning services. A woman who is able to discuss health matters with the service provider was 110 times more likely to use a modern contraceptive (OR = 110.2, 95 % CI: 19.6- 620.4).

CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

6.1 Summary of Main Findings

The main aim of the study was to investigate factors that contribute to the low uptake of family planning services in the West Gonja District. The CPR that was found in this study was higher than what was reported in the 2010 Annual report of the District Health Directorate (20.3% versus 1.5%).

Majority of the women in the district had no formal education however, their knowledge of modern family planning methods was high. The male condom and injectables were widely known among the women and the men but this did not translate to their use. It was found that having knowledge of family planning services did not wholly translate into the use of the

services. Although maternal educational level was found to be significantly associated with the use of modern contraceptives, the education level of the husband was found to be more influential to use of modern contraceptives.

The study revealed that the use of modern contraceptives was significantly associated with educational level of couples, economic status of women, women autonomy or empowerment, and the ability of women to discuss their health needs with service providers.

It was also found that the number of daughters that a woman had was a determinant to the uptake of family planning services. Women who had more daughters had fewer propensities to use modern contraceptives as compared to their counterparts with less number of daughters

The socio-cultural barriers to the uptake of family planning services that were identified in the study were fear of side effects of modern contraceptives, husbands' opposition to the use of family planning services and the beliefs system and values of the communities. Most of the husbands did not approve of the uptake of family planning services. Male involvement in family planning is very crucial if women in the district are to improve their uptake of these services.

The couple year of protection (CYP) reduced gradually over the three years preceding the study. The coverage of family planning programs in the district was universal.

6.2 Conclusion and Recommendations

The uptake of modern family planning services is low in the district. Women's education, economic and maternal empowerment or autonomy were significant determinants of the uptake of family planning services in the study population.

In conclusion, the uptake of family planning services in the West Gonja District is influenced by factors such as '; the educational level of the couples especially that of the husband, the ability of the woman to discuss her reproductive health matters or needs with a health service provider, the level of autonomy or empowerment of the woman and the number of daughters that a married couple has given birth to.

Coverage of family planning programmes was unsatisfactory owing to the fact that the couple year of protection reduced gradually over the years.

Based on the findings of this study, the following recommendations are made to stakeholders and future researchers;

- Health service providers should intensify their health education and encourage women to feel confident in discussing their health needs with them. The health education should not be targeted on the women since men have a greater influence on family planning decisions of their wives.
- Emergency contraception and other family planning methods should be aggressively promoted
- The importance of female education cannot be overemphasized although it is a long term measure.
- The contraceptive uptake reducing per CYP table was consistent over the three years which means that the coverage of family planning programs coverage were low so , efforts should be stepped.

- It is also recommended that further research should be conducted to investigate the causes of low male involvement in use of modern contraceptives in West Gonja District. This is warranted because most of the women reported that their husbands do not approve the use of modern contraceptives.

REFERENCES

Abu A. A, Tabenkin H and Steinmetz D (2003): Knowledge and Attitudes Among women in the Arab Village; regarding contraception and family planning and the reasons for having numerous children. Harefuah 142 (12)

Adongo P. B, James F. P, Beverly K, Cornelius D and Fred N. B (1995): Cultural factors constraining the introduction of family planning among the Kassena-Nankana of Northern Ghana." *Social Science and Medicine*

African Population and Health Research Center (2011): Use of contraceptives among women in Nairobi, Kenya. *Policy Brief No. 26,*

Agarwal D (2000): Study in sexuality of medical college students in India. *International Journal Adolescence Med Health. Volume 172.No.42*

Agustin C and Jose B (2000): The assessment of maternal mortality. *World Health*

Agyeman D. K, Agyei-Mensah S and Casterline J. B (2005): Reproductive Change in Ghana: Recent Patterns and Future Prospects, University of Ghana, Legon, 2005, 178- 192

Ainsworth M, Beegle K and Nyamete A (1996): The impact of women's schooling on contraceptive use.

Akitobi E, Elizabeth L and Nerquaye-Tetteh J (2009): A Case Study of Reproductive Health Supplies in Ghana.

Alan Guttmachcr Institute (1998): Hopes and Realities; Closing the Gap between Women Aspirations and their Reproductive Experiences. New York: Alan Guttamacher Institute

Alemayehu B (2012): Assessment of Male Involvement in Family Planning Use among Men in South Eastern Zone Of Tigray, Ethiopia. *Scholarly Journal of Medicine, Vol. 2(2) pp. 1-10 January, 2012*

Alsop R, Mette F. B and Jeremy F (2006): Empowerment in Practice: from Analysis to Implementation", World Bank.

www.econ.upd.edu.ph/opac/list.php?year=2006&month=05 - 82k

Amin A, Selim, N and Kamal N (2002): Causes and Consequences of early marriage in Bangladesh. Population Council, Dhaka, Bangladesh

Annual Report, District Health Directorate West Gonja (2010)

Antenane K (2002): Attitudes toward Family Planning and Reasons for Nonuse among Women with Unmet Need for Family Planning in Ethiopia.

Asare K, Geelhoed W, Nayembil D, Schagen L. H and Van Roosmalen J (2002): Contraception and induced abortion in rural Ghana. *Tropical Medicine and International Health volume 7 no 8 August 2002*

Ayoub S. A (2005): Effects of Women's Schooling on Contraceptive Use and Fertility in Tanzania**.** *African Population Studies Vol. 19 N°2*

Babalola S and Fatusi B (2009): Spousal communication and safe motherhood practices. Evidence from Tanzania DHS data. *Union for African Population studies.*

Bbaale E (2009): Female Education, Labour-force Participation and Fertility: Evidence from Uganda. *Final Report submitted to the African Economic Research Consortium, Nairobi, Kenya*

Beekle A.T and McCabe C (2006) : Awareness and determinants of family planning practice in Jimma, Ethiopia. *International Nursing Review*, 53, 269–276.

Benefo K. D (2006): The community level effects of women's education on reproductive behavior in rural Ghana. *Demographic Research* 14(20):483 to 508,

Bennett S, Radalowicz A, Vella V and Tomkins A (1994): A computer simulation of household sampling schemes for health surveys in developing countries. *International Journal Epidemiology* **23**, 1282-1291

Bertrand J. T, Hardee K, Magnani R. J and Marcia A. A (1993): Access, quality of care and medical barriers in family planning programs. *International Family Planning Perspectives 21: 64–69, 74.*

Bina G (2009): The Influence of Wives' and Husbands' Education Levels On Contraceptive Method Choice in Nepal, 1996–2006. *International Perspectives on Sexual and Reproductive Health. Volume 35, Number 4,*

Blanc A. K and Wolff B (2001): Gender and decision-making over condom use in two districts in Uganda. *Reproductive Health 5(3), 15 -28.*

Bongaarts J and Westoff C. F (2000): The potential role of contraception in reducing abortion. *Studies in Family Planning 2000; 31: 193-202.*

Bongaarts J, Odile F and Lesthaeghe R (1994): The proximate determinants of fertility in sub Saharan Africa .*Population and development review, 10(3)*

Bryant J (2007): Theories of Fertility Decline and the Evidence from Development Indicators. *Population and Development Review* 33 (1): 101–27.

Caldwell J. C and Caldwell C. P (2002): Family Planning Programs in the Twenty-First Century *Studies in Family Planning, Vol. 33, and No. 1: pp. 76-86*

Caldwell J and Sai F (2007): Family Planning in Ghana. *The Global Family Planning Revolution: Three Decades of Population Policies and Programs.* Washington, DC: World Bank.

Caldwell J. C (1982): Population Growth and Family Change in Africa: The New Urban Elite in Ghana." *Population-E* 58:1-27.

Casterline J. B and Sinding S. W (2000): Unmet need for family planning in developing countries and implications for population policy. Population and development Review 26(4) 691-793

Catherine N and Everd M (2008): Factors Related To The Uptake Of Natural Family Planning By Clients Of Catholic Health Units In Masaka Diocese, Uganda. *Health policy and development volume 6 number 3 December 2008*

Central Statistical Agency and ORC Macro (2006): *Ethiopia Demographic and Health Survey 2005*. ORC Macro, Calverton, MD.

Central Statistical Authority (CSA) [Ethiopia] and ORC Macro (2006): Ethiopia Demographic and Health Survey 2005 Addis Ababa, Ethiopia, and Calverton, Maryland,USA: Central Statistical Authority and ORC Macro.

Chacko E (2001): Women's use of contraception in rural India: a village-level study. *Health Place.* 2001; 7:

Chandani Y, Crowley J, Durgavich R, Lunt P, Nersesian N and Rosche T (2000): Ghana: Implications of Health Sector Reform for Family Planning Logistics. Arlington, VA: John Snow, Inc., for the U.S. Agency for International Development

Chapagain M (2005): Masculine interest behind high prevalence of female contraceptive methods in rural Nepal, *Australian Journal of Rural Health*, 2005, 13(1):35–42.

Charlie G (2011): Women's Education and Modern Contraceptive Use in Ethiopia *International Journal of Education ISSN 1948-5476 2011, Vol. 3, No. 1: E9*

Cleland J, Bernstein S, Ezeh A, Faundes A, Glasier A and Innis J (2006) :Family Planning: The Unfinished Agenda. *The Lancet* 368 (9549): 1810–27.

Clement S and Madise N (2004): Who Is Being Served Least by Family Planning Providers? A Study of Modern Contraceptive Use in Ghana, Tanzania and Zimbabwe. *African Journal of Health vol.342*

Collumbien M, Gerresu M and Cleland J (2008): Non Use and Use of Ineffective Methods of Contraception. In Ezzati, M.,Lopez, A., Rogers, A., Murray, C.eds. *ComparativeQuantification of Health Risks: Global and Regional Burden of Disease Attributable to Selected Major Risk Factors.* Geneva: *Compendium of Vol. 1, Nos. 1–14 (2001)*

Cristian Pop-Eleches and Columbia University (2005): The Supply of Birth Control Methods, Education and Fertility: Evidence from Romania.

Dang A (2002): Differentials in contraceptive use and method choice in Vietnam, *International Family Planning Perspectives*, 1995, 21(1):2–5.

David E. B, David C and Jaypee S (2002): The Demographic Dividend: A New Perspective on the Economic Consequences of Population Change, New York, Rand.

Diex R. A. V (1998): Bringing context back into epidemiology: variables and fallacies in multilevel analysis. *American journal of public health 88 (2): 216 to 222*

District Planning and Coordinating Unit (DPCU) (2010): Draft; Medium Term Development Plan 2010-2013.DPCU; West Gonja District

Eastwood R and Lipton M (2001): Demographic transition and poverty: effects via economic growth, distribution, and conversion.

Eloundou-Enyegue M (2010): Human Development, Family Planning, and Youth: Contributions to Future Population Growth in sub-Saharan Africa

Entwisle B and Mason S (2002): Geographic Information Systems, Spatial Network Analysis, and Contraceptive Choice. *Demography. 34 (2): 171-186.*

Eritrea Demographic and Health Survey (2002): Measure DHS, Marco International, Demographic and Health Surveys.

Ethiopian Society of Population Studies (2008): Gender Inequality and Women's Empowerment. Addis Ababa. bttp://etbiopia.unfpa.org/drive/Gender.pdf

Ezeh A. C, Mberu B. U and Emina J (2009): Stall in Fertility Decline in Eastern African Countries: Regional Analysis of Patterns, Determinants and Implications. *Philosophical Transactions of the Royal Society Biological Sciences* 364 (1532): 2991–3007.

Garenne M and Hohmann S (2003): Absolute versus Relative Measures of Poverty Application to DHS African Surveys .*Paper prepared for the 26th IUSSP International Conference, Marrakech, 27 September – 2 October 2009*

Gary S. B (1979): The Economic Way of Looking at Life," Nobel Lecture, Department of Economics. Chicago: University of Chicago Press, 1978

Gereltuya A, Falkingham J and Brown J (2007): Determinants of Current Contraceptive Use and Method Choice in Mongolia. *Journal of Biosocial Sciences: 117.Doi:10.1017/50021932007002003.*

Ghana Health Service and Ghana Statistical Service (1989): Ghana Demographic and Health Survey 1988)

Ghana Health Service and Ghana Statistical Service (2009): Ghana Demographic and Health Survey 2008

Ghana Health Service (2007): Ghana reproductive health report 2006. Accra: GHS

Ghana Statistical Service and Ghana Health Service Research Unit (2007): Ghana Service Provision Assessment Survey 2007. Calverton, Maryland: Ghana Statistical Service. Health Research Unit, Ministry of Health, & ORC Macro.

Ghana Statistical Service (2001): Population Census Report 2000. Accra, Ghana.

Ghulam Y. S and Naushin M (2003): Female Education and Fertility: Implications for Family Planning Programme.

Green C. P, Cohen S. I and Ghouayel H. B (1995): "Male Involvement in Reproductive Health, including Family Planning and Sexual Health". *Technical Report*, 28, UNFPA

Griffiths P, Hinde A and Mathews Z (2001): Infant and child mortality in three culturally contrasting states of India .*Journal of biosocial science vol 14 .No.4 Nov.2002*

Grimes D. A (2000): Unsafe abortion: the preventable pandemic. *The Lancet, Sexual and reproductive health journal Vol.23 December 2002.*

Guilkey D. K and Jayne S (1997): Fertility transition in Zimbabwe: determinants of contraceptive use and method choice. *Population Studies* 1997; 51:173–189.

Gyapong J, Anarfi K and Agyeman D (2003): An assessment of trends in the use of the IUD in Ghana.

Hemmings J, Wubshet T, Lemma S, Antoni T and Cherinet T (2008): Ethiopian Women's Perspectives on Reproductive Health: Results from a PEER study in the Guraghe Zone. London: Marie Stopes International.

Hennink M (1997): Trends in contraceptive use and method choice in Britain: A literature review .Unpublished paper .University of Southampton .UK

International Planned Parenthood Federation (IPPF) (2009): The truth about...men, boys and sex: gender transformative policies and programmes. London: IPPF; 2009.

Hull T. H and Henry M (2008): Revitalization of family planning in Indonesia. Bappenas, BKKBN and UNFPA. *International Family Planning Perspectives* 31 (3): 106-114

Jamal A. N, Tahir M and Shakir A.G (2002): Contraceptive Perceptions among Arab And Non-Arab Muslim Males. *Electronic Journal of Applied Statistical Analysis EJASA, Electron. J. App. Stat. Anal. Vol 53, Issue 6 (20-22)*

Jayaraman T (1995): Demographic and Socioeconomic Determinants of Contraceptive Use Among Urban Women in the Melanesian Countries in the South Pacific: A Case Study of Port Vila Town in Vannatu, Manila, Asian Development Bank

Jejeebhoy S. J (2004): Women's Education, Autonomy, and Reproductive Behaviour: Experience from Developing Countries: 32.

Jejeebhoy S. J and Sathar Z. A (2001): Women's Autonomy in India and Pakistan: The Influence of Religion and Region**.** *Population & Development Review* 2001, **27:**687-712.

Johnson-Hanks J (2003): Education, ethnicity, and reproductive practice in Sub Saharan Africa.

Kabeer N (2000): The conditions and consequences of choice: reflections on the measurement of women's empowerment, *Discussion Paper*, Geneva: United Nations Research Institute for Social Development, 2000, No. 1

Kabwigu S (2001): Obstacles to Male Participation in Family Planning: A Study In Kiyeyi - Tororo District.

Khan M. E and Bella C. P (1997): Male Involvement In Family Planning *A KABP Study of Agra District Uttar Pradesh*

Kishor S and Subaiya L (2008) Understanding Women's Empowerment: A Comparative Analysis of Demographic and Health Surveys (DHS) Data. Calverton, Maryland: Macro International Inc; Comparative Reports No. 20. Oct. 2008. http://www.measuredhs.com

Koc I (2000): Determinants of contraceptive use and method choice in Turkey. *Journal of Biosoc 2000; 32:329-42.*

Korra A (2002): Attitudes toward family planning, and reasons for non-use among women with unmet need for family planning in Ethiopia. Calverton, Maryland, USA: ORC Macro.

Kravdal Ø (2002): Education and fertility in sub-Saharan Africa: Individual and community effects. *Demography,* 39, 233–250.

Krista M. R (2000): Education and Traditional Contraceptive Use: An Analysis of Nine Countries Using Demographic and Health Survey Data

Lee L. B and William S (1969): Couple years of protection and births prevented: a methodological examination. *Demography,* vol. 5,

Lee-Rife S. M and Edmeades M (2011): Women's Empowerment and Reproductive Experiences over the Lifecourse. *Soc Sci Med 71(3):634-642*

Leisinger W, Rochat R. Jabeen M, Rosenberg A, Measham A, Khan M, Obaidullah Y and Gould P (2002): Maternal and abortion-related deaths in Bangladesh 2000–2002. *International Journal of Gynaecology and Obstetrics* 19(2):155–164.

Magadi M. A and Curtis S (2003): Trends and Determinants of Contraceptive Method Choice in Kenya. *Studies in Family Planning* 34 (3): 149–59.

Magadi M, Zulu E, Ezeh A and Curtis S (2001): Contraceptive Use Dynamics in Kenya: Further Analysis of Demographic and Health Survey Data. Nairobi, Calverton, Maryland

Mai D and Nami K (2012): Women's Empowerment and Choice of Contraceptive Methods in Selected African Countries. *International Perspectives on Sexual and Reproductive Health, 2012, 38(1):23–33, doi: 10.1363/3802312*

Malhotra A, Schuler S. R and Boender C (2002): Measuring Women's Empowerment as a Variable in International Development. Washington, DC; June 28, 2002.

Maluccio J and Thomas D (1995): Contraceptive Choice, Fertility and Public Policy in Zimbabwe. Living Standards Measurement Study Working Paper No 109 Washington DC: World Bank

Martin T and David C (2000): Women's Education and Fertility: Results from 26 OHS'. *Studies in Family Planning* 26(4): 187-202.

Mason K. O (1987): The Impact of Women's Social Position on Fertility in Developing.

Mason K. O and Herbert S. L (2000): Women's Empowerment and Social Context: Results from Five Asian countries", The World Bank, site resources. worldbank.org/INTEMPOWERMENT/Resources/486312-1095970750368/529763-1095970803335/mason.pdf

McNay K, Arokiasamy P and Cassen R. H (2003): Why are uneducated women in India using contraception? A multilevel analysis. *Population Studies*, 57(1), 21–40.

Measure DHS and Marco International Demographic and Health Surveys (2005) Ethiopian Demographic and Health Survey 2005

Measure DHS and Marco International Demographic and Health Surveys (2006): Nepal Demographic and Health Survey 2006

Mohamad R. J, Andrew L. B and Baudi U (1988): Husband's Approval of Contraceptive Use in Metropolitan Indonesia: Program Implications; *Studies in Family Planning* Vol. 19, No. 3: 162-168 *Reproductive Health, Vol. 8, No. 2: 124-136*

Mona S, Saifuddin A, John M and Agnes S (2010): Family Planning Trends in Sub-Saharan Africa: Progress, Prospects, and Lessons Learned.

Montgomery M. R and Casterline J. B (1996): Social learning, social influence and new models of fertility. *Population and Development Review* 22:151-175.

Moreland S and Talbird S (2006): Achieving the Millennium Development Goals: The Contribution of Fulfilling the Unmet Need for Family Planning. Washington, DC: Constella Futures, POLICY Project

Mturi A. J (1996): Pattern of fertility and contraceptives use in Tanzania .*PhD Thesis: Department of social statistics Faculty of social science university of Southampton*

Mturi A. J (2001): Parents' attitudes to adolescent sexual behavior in Lesotho .*Paper prepared for the XXIV General Population Conference*

Mtuuri A. J and Hinde A (2001): Fertility levels and differentials in Tanzania. *Workshop on prospects for fertility decline in high fertility countries*.

Mustapha C, Duze M and Ismaila Z, M (2006): Male Knowledge Attitudes and family planning Practises in Northern Nigeria. .*African Journal of Reproductive Health Vol. 10 No. 3. December 2006.*

Narayan D, Malhotra A and Schuler SR (2002): Empowerment and Poverty Reduction: A Sourcebook, Washington, DC: World Bank, 2002.

Narayan S. G, Gupta S. K and Hays B (2009): Knowledge of Family Planning and Emergency Contraception in a Rural Female. *Population Journal of GMC-Nepal. Volume 2. Issue 3, September 2009*

National Research Council, Committee on Population. (1993): Factors Affecting Contraceptive Use in Sub-Saharan Africa. Washington, DC: National Academy Press.

National Statistical Office [Malawi] and ORC Macrom (2005*): Malawi Demographic and Health Survey 2004*. Calverton, Maryland: Macro International Inc.

Nauru Demographic and Health Survey (2007): Facts and figures at your fingertips

Nguyen T. B (2012): Contraceptive Use in Vietnamese Families during the Period 2002-2008. *International Journal of Humanities and Social Science Vol.2 No. 1 January 2012*

Nsemuklia G. B (1999): A Study of Factors Associated With Maternal Mortality in 1998. Lusaka, Zambia: Ministry of Health, United Nations Population Fund, Central Board of Health, and University of Zambia; 1999

Ntozi J .P and Ahimbisibwe F. E (2001): Prospects for fertility decline n the face of HIV/AIDS in Uganda .Workshop on prospects for fertility decline in high fertility countries.

Okezie C. A, Ogbe A and Okezie C. R (2010): Socio-economic determinants of contraceptive use among rural women in Ikwuano Local Government Area of Abia State, Nigeria. *International NGO Journal Vol. 5(4), pp. 74-77, May 2010*

Okwero M, Sempebiva B Okwero P and Kipp W (1994): The realities of unmet need in Uganda. *Planned Parenthood Challenges* (1): 1-9. .

Olivera R, Čedomir Š.A.V, Ana T and Roberta M (2006): The Influence Of Education Level On Family Planning *Series*: *Medicine and Biology Vol.13, No 1, 2006, pp. 58 – 64*

Oliveras E (2006): Abortion in the fertility transition in Accra, Ghana. Unpublished

Oyedokun A. O (2007): Determinants of Contraceptive Usage: Lessons from Women in Osun State, Nigeria, *Journal of Humanities and Social Science, Volume 1, Issue 2*

Population Services International (PSI) (2010): Annual Health Impact Report 2009

PPAG & IPPF (2005): Access Denied; The impact of the Global GAG rule in Ghana.

Pradhan B (2000): Measuring empowerment: a methodological approach, *Development*, 2000, 46(2):51–57.

Rehan I, Mah R.S and Balal I (2011): Education and Utilization Of Contraceptive Methods Among Rural Married Women In Gujrat, Pakistan. *African Journal of Education and Technology, Volume 1 Number 3 (2011); pp. 111-117*

Rhonda S, Lori A, Jay G and Donna C (2009): Family planning saves lives .Fourth Edition

Ria R (2009): Contraceptive Use Pattern among Married Women in Indonesia. Indonesia. Supervised Research Project DEMO 9800.The Australian Demographic and Social Research institute, The Australian National University

Rutenberg N, Ayad M, Ochoa L and Wilkinson M (1991): Knowledge and use of contraception. *Demographic and Health Surveys Comparative Studies No. 6.* Columbia, Maryland: Institute for Resource Development/Macro Systems; July 1991.

Saha T (1998): The Effect of Settlement Zones and Economic Diversity on Reproductive Behaviour in West Africa. West Africa Spatial Analysis Prototype Exploratory Analysis. Calverton, Md: Macro International; 1998.

Schoemaker J (2005): Contraceptive use among the poor in Indonesia. *International Family Planning Perspectives* 31 (3): 106-14.

Shabana S and Martin B (2005)**:** Women's autonomy, education and contraception use in Pakistan: a national study.

Shah M A., Nasra M. S, Rafiqul I.C and Indu M (2004): Unmet need for contraception in Kuwait: issues for health care providers. *Social Science and Medicine* 59: 1573-80.

Singh S, Darroch J.E and Nadeau J (2005): Adding It Up: The Costs and Benefits of Investing in Family Planning

Singh S (1994). : Early marriage among women in developing countries'. *International Journal of Business and Social Science Vol. 2 No. 1; January 1997*

Singh S, Darroch J, Vlassof M and Nadeau J (2004): Adding It Up: The Benefits of Investing in Sexual and Reproductive Health Care. New York: UNFPA

Stephenson R (2002): Contextual influences on reproductive health service use in Uttar Pradesh, India. *Studies in family planning 33(4)*

Stephenson R, Baschieri A, Clements S, Hennick M and Madise N (2007). "Contextual Influences on modern contraceptive Use in Sub-Saharan Africa", *American Journal of Public Health*, Vol. 97, No. 7

Stover J, Ross J and Adelaja D (2004): Family planning programs in 2004: efforts, justifications, influences and special populations of interest. North Carolina. MEASURE-Evaluation Project, 2006

Susanna B, Timothy J and Alicia R (2010): Estimating Future Contraceptive Requirement Using the CAST COST.

Sylvia O. O (2004): Gender issues in contraceptive use among educated women in Edo state, Nigeria. *African Health Sciences Vol 4 No 1 April 2004*

Timothy C. O, Nelson W. W and Tom K. M (2011): Contraceptive Use among Women of Reproductive Age in Kenya's City Slums. *International Journal of Business and Social Science Vol. 2 No. 1; January 2011*

Tuman J. P, Ayoub S. A and Danielle R **(**2007): The Effects of Education on Fertility in Colombia and Peru: Implications for Health and Family Planning Policies**.** *Global Health Governance, Volume I, No. 2 (Fall 2007)*

Tuoane M (2003): Use of family planning services in Lesotho: the importance of quality of care and access. *African Population Studies.* 2003; 18:105–132.

UN (2001) (United Nations Department of Economic and Social Affairs). 2001. W*orld Population Prospects, the 2001 Revision*. New York: United Nations.

Upadhyay U. D and Hindin M. J (2005): Do Higher Status and More Autonomous Women Have Longer Birth Intervals? Results from Cebu, Philippines. *Soc Sci Med 60(11):2641-2655.*

USAID (2011): Couple years of protection (CYP), (2011) <http://www.usaid.gov/our_work/global_health/pop/techareas/cyp.html>, accessed Sept. 28, 2011.

USAID (2005): Strengthening Family planning Policies and Programmes in Developing Countries: An advocacy Toolkit

USAID/HPI (2007): Achieving Equity for the Poor in Kenya: Understanding Level of Inequities and Barriers to Family Planning Services, Washington D.C.

Ushma D. U and Deborah K (2010): Women's empowerment and achievement of desired fertility in sub Saharan Africa. Demographic and Health Survey (DHS) working papers vol.80 December 2010. Using data from Zimbabwe." *Demographic Research*

Vinod M (2004): Muslim/non Muslim differentials in fertility and family planning in india .*Population and Health series No.112, January 2004.*

Woldemicael G (2009): Women's Autonomy and Reproductive Preferences in Eritrea. *Journal of Biosoc Sci 41(2):161-181*. Washington, DC: PSI, 2010.

Wawire N. H.W (2006): Determinants of Tax Revenue in Kenya, *PhD Dissertation, Kenyatta University, Nairobi*

WHO and UNICEF (1978): The United Nations Children's Fund: Women or Children First?International Organisations Research Group White paper series number three.

WHO (2004): Unsafe Abortion. Global and Regional Estimates of the Incidence of Unsafe Abortion and Associated Mortality in 2000. *Fourth Edition. Geneva: World Health Organisation, 2004.*

Wolff B, Blanc A. K and Gage A. J (2000): Who decides? Women's status and negotiation of Sex in Uganda. *Health Policy and Planning* 15(1):43-51.

Wong E (2000): Women's Work, Fertility Level and Contraceptive Use: A Synthesis of Results from Bolivia, the Philippines and Zimbabwe

World Bank (2003): World Development Report 2004: Making Services Work for Poor People. Washington, DC: World Bank

Wubegzier M and Alemayehu W (2011): Determinants of low family planning use and high unmet need in Butajira District, South Central Ethiopia

Zaheer K. K, Muhammad J. K and Bashir A. K (2011): Effect of Female Education on Family Size in Pakistan: A Case Study of Quetta City. *Journal of International Academic Research (2011) Vol.11, No. 2*

APPENDICES

APPENDIX A: QUESTIONAIRE FOR WOMEN IN FERTILE AGE (WIFA) GROUP

Informed Consent

Hello, my name is ***BILLEY YAW KRAH*** and I am a student of the University for Development Studies offering a masters degree programme in community Health and Development. I am conducting a study on "***Factors contributing to low uptake of family planning services in the West Gonja District of Ghana***" .The West Gonja District is my case study area. I would very much appreciate your participation in this study .This information will help the District Health directorate ,private agencies, the community and other decision making bodies to plan how to make modern contraceptives and family planning services more accessible to everybody irrespective of your location.

The interview would last between 30 to 45 minutes to complete. Whatever information you provide will be kept strictly confidential and will not be shown to any other than the District Health Directorate and the University.

Participation in this survey is voluntary ,and if we should come to any question you don't want to answer ,just let me know and I will go to the next question ; or you can stop the interview at any time .However I hope that you will participate in this study since your views are important .

At this time do you want to ask me anything of this study? May I begin the interview now?

Signature of interviewer ---------- Date----------

Respondent agrees (A) Yes (B) No Record the time ----------

Instruction for Data Collectors

- ✓ ***Make sure that you interview women in age group 15-49 years.***

SECTION A- IDENTIFICATION

Locality name ----------

Name of household head----------

Household number ----------

Language of interview ----------

Translator used (A) Yes (B) No

Code of respondent ----------

SECTION B: SOCIO –DEMOGRAPHIC CHARACTERISTICS OF THE MOTHER

1. In what month and year were you born? ----------

2. How old were you at your last birthday? ----------

3. Have you ever attended school? (A) Yes (B) No

4. What is the highest level of school you attended? (A) Primary (B) JHS/Middle (C) SHS/Voc/ Tech (D) Tertiary

5. Can you read and write? (A) Yes (B) No If No, Go to Q7

6. Now I would like you to read this sentence to me.

Respondent (A) cannot read (B) Able to read whole sentence (C) Able to read part of sentence

7. Have you ever participated in a literacy programme that or any other programme that involves learning to read and write? (A) Yes (B) No

8. Type of residence, (A) compound house (B), semi-detached house,(C) detached house

9. Residential status, (A) own residence, (B) rented house, (C) family house, (D) others

10. House hold head, (A) self, (B) spouse (C) grandfather, (D) in-law

11. Number of households living in the house ----------

12. To which ethnic group do you belong? (A) Gonja (B) Dagomba (C) Hanga (D) Ewe (E) other

13. What is your religion? (A) Catholic (B) orthodox (Anglican, Presbyterian, Methodist) (C) Pentecostal/Charismatic (D) Islam (E) ATR (F) No religion

14. What religion or religious denomination were you brought up in? (A) Islam (B) Pentecostal/charismatic (C) Orthodox (D) ATR

15. Does your religion support family planning? (A)Yes, (B) No (C) don't know

SECTION C: ACCESSIBILITY TO FAMILY PLANNING SERVICES

16. How many miles will you approximately travel to access FP service and other health care services? ----------

17. How do you mainly or usually travel to the place of health care and FP service? (A) Foot, (B) bicycle,(C) motorbike,(D) passenger car, (E) others

18. How much time did you wait for the service provider to attend to you? ----------

19. Ability to discuss your health needs or problems with the service provider (A) Very well (B) Not well (C) Poorly

20. Privacy to prevent people from seeing your examination and listen to your consultation discussion (A) good privacy (B) No privacy (C) Averagely

21. What was the attitude of the staff towards you? (A) Satisfactory (B) Unsatisfactory (C) Bad

22. Cost for service or treatment ----------

23. Number of days family planning services are offered in a week (A) 1-2 (B) 3-4 (C) 5-6 (D) throughout the week

24. Seeking of consent from partner before providing service (A) No consent is sought (B) consent is sought

25. Does your husband approve the use of a contraceptive? (A) Yes (B) No

26. How often have you and your husband talked about family planning for the past year? (A) Once in 3months (B) Once in 6months (C) Once a year (D) Never

27. Have you and your husband ever discussed the number of children you would like to have? (A) Yes (B) No

28. How many children have you decided or agreed to have? ----------

29. Do you think your husband likes the same number of children you would like to give birth to? (A) Yes (B) No

30. Do you know where a person could go for an FP method? (A) Yes (B) No

31. In your view is it easy to get access to an FP service? (A)Yes (B) No

PARITY

32. At what age did you first marry? (A) Below 16, (B) 16-18 (C) above 18

33. Number of children ever born ----------

34. Do you have any sons or daughters to whom you have given birth who are now living with you? (A) Yes (B) No

35. How many sons live with you? ----------

36. How many daughters live with you? ----------

37. Do you have any sons or daughters to whom you have given birth to who are alive but do not live with you? (A) Yes (B) No

38. How many daughters are alive who are not living with you? ------

39. How many sons are alive who are not living with you? --------

40. What is your fertility preference or do you desire for more children? (A) Want others (B) want no more (C) undecided

If no

41. How are you going to prevent having more children? (A) Abstinence (B) Use of traditional methods of FP (C) Use of modern FP methods (D) Don't know

42. At what age did you have your first child? ----------

43. Did you intend having a child at that age? (A) Yes (B) No

44. What is your ideal number of children? (A) 0, (B) 1 or 2, (C) 3 or 4, (D) 5 or 6, (E) 7+, (F) non-numeric response

KNOWLEDGE ON FAMILY PLANNING

45. Have you ever heard of family planning or methods used to delay or avoid pregnancy?
A. Yes B. No

46. In the last month have heard any message on FP? (A) Yes (B) No

If yes

Where? ----------

If no

47. What FP method(s) do you know? (A) Knows no method, (B) knows traditional methods only, (C) knows modern methods

48. Have you ever used any modern contraceptive method? (A) Yes (B) No

If yes ,(proceed to the next question)

If no (go to Q 61)

49. Which method did you use? ----------

50. Which method is your preferred method? ----------

51. Why do you prefer that method? (A) Safety (B) Easy to use (C) Only available method (D) No side effects (E) Dual purpose

52. Are you currently using an FP method? (A)Yes (B) No

If no go to Q

53. Which FP method are you currently using? ----------

54. Do you intend using any?

55. Which type of contraceptive methods do you know? /multiple response allowed read from the list and mark all that apply/

I. Pills
II. Intrauterine device (IUCD)
III. Injectable (depo-provera)
IV. Norplant (buried under skin)
V. Condom
VI. Spermicides
VII. Tubal ligation/female
VIII. sterilization
IX. Vasectomy/male sterilization
X. Periodic abstinence/calendar
XI. Others [specify_____ _____

56. Do you use any contraceptive methods currently? A. Yes B. No (Go to Q 58)

57. Which type of contraceptive methods are you using?

I. Pills
II. Intrauterine device (IUCD)
III. Injectable (depo-provera)
IV. Norplant (buried under skin)
V. Condom
VI. Spermicides
VII. Tubal ligation/female
VIII. sterilization
IX. Vasectomy/male sterilization
X. Periodic abstinence
XI. Others

ECONOMIC STATUS, EDUCATION STATUS AND LEVEL OF EMPOWERMENT

58. How many rooms are available for use only by this household? ----------

59. What type of fuel do you use in cooking? (A) Charcoal (B) Firewood (C) Gas (D) Others

60. Is there electricity in the house? (A) Yes (B) No

61. Do you have access to the media? (A) Yes (B) No

62. Do you read a news paper at least once a week?

63. Do you listen to radio? (A) Almost every day (B) At least once a week (C) Less than once a week (D) Not at all

64. Do you watch television? (A) Almost every day (B) At least once a week (C) Less than once a week (D) Not

65. Which of the following do you own? (A) Radio, (B) television

66. What is the educational level of your husband? (A) None (B) JHS (C) SHS (D) Vocational/Technical (E) Tertiary

67. Did you drop out of school? (A) No (B) Yes

68. Why did you drop out? (A) Parental neglect, (B) early marriage, (C) poverty, (D) living in rural areas, (E) others

69. What is your occupation? (A) Unemployed (B) trader, (C) civil servant (D) Farmer

70. Which household resources do you control? (A) Financial, (B) food materials,

71. Do you have access to resources like land, cattle, ownership of a house? (A) Yes (B) No

72. Do you decide with your husband on how to spend his income? (A) Yes (B) No

73. Is wife beating acceptable in this community? (A) Yes (B) No

74. When is your partner justified to beat you (A) when you burn the food, (B) argue with him, (C) you go out of the house without telling him, (D) refuse him sex

75. When are you justified to refuse your partner sex? (A) When you know he has an STD, (B) sleeps with other women,(C) your are tired, (D) not in the mood

76. Employment status in the last 12 months? (A) Not employed, (B) employed

If you are employed

77.What is your occupation? (A) Professional/technical/managerial, (B) sales and services/clerical, (C) agricultural, (D) skilled manual, (E) unskilled manual

78. What type of earning do you earn for your employment? (A) Unpaid, (B) cash only or partly on kind, (C) In kind only

79. In what sector is respondent mainly working? (A)Public (government), (B) private formal, (C) private informal

80. What is the age gap between you and your partner? (A) Up to 5 years, (B) 6 to 10, (C) above ten

81. Do you have access to the media? (A) No, (B) frequent access,(C) infrequent access

82. Which medium do you have access to? (A) News paper/magazine, (B) radio (C) television

83. How many times in a week do you have access to this medium? ---------

84. Have you heard of family planning messages in the media? (A) Yes (B) No

85. Do you have the freedom to move or travel? (A) Yes (B) No

86. Do you earn more than your partner? (A) Yes (B) No

FAMILY HISTORY/BACKGROUND

87. How many children did your parents give birth to? ---------

88. How many are alive? ----------

89. How many are females? ----------

90. How many are males? ----------

91. How many were educated at least to the secondary school level? ----------

92. How many of them are males? ----------

93. How many are females? ----------

94. How many of the women dropped out of school to marry? ----------

WOMEN AUTONOMY STATUS/EMPOWERMENT QUESTIONS

95. Do you have the power to negotiate safer sex with your partner if your partner has an STD? (A) Yes (B) No

96. Do you have the power to refuse sex? (A) Yes (B) No

97. In which conditions do you refuse sex? (A) Tiredness, (B) menstrual period, (C) ill-health , (D)not being in the mood

98. What is your family's main source of income?

A. Husband's earnings
B. Own earnings
C. Yours and husbands earnings
D. Others
E. (specify)_____

99. Do you earn monthly income by your own? A. Yes B. No

100. How often do you have money that you alone can decide how to spend?

A. Always
B. Often
C. Sometimes
D. Never

101. Do you currently have any type of savings Scheme?

A. Yes, partners savings
B. Yes, mine and partners savings
C. Yes, self savings
D. No, we don't have any savings

HOUSE HOLD DECISION MAKING QUESTIONS

102. Do you take part in decision making on household matters? (A) No (B) Yes

If yes

103. Which household matters do you decide together with your partner? (A) Own Health care, (B) large household purchases, (C) daily purchase, (D) children's education, (E) household expenditure

104. Do you have the right to decide how to spend your own money? (A) Yes (B) No

105. Who makes the decision if you need to buy clothes for you and the family?

A. Your Husband/partner
B. You and husband
C. Spouse/myself

106. Who makes the decision if you need to buy large household items/furniture?

A. Your Husband/partner
B. You and husband
C. Spouse/myself

107. Who makes the decision whether a child is sick enough to go for treatment?

A. Your Husband/partner
B. You and husband
C. Spouse/myself

108. Who makes the decision whether you should work outside of the home?

A. Your Husband/partner
B. You and husband
C. Spouse/myself

109. Who makes the decision when your children have stationeries /school needs to be addressed?

A. Your Husband/partner
B. You and husband
C. Spouse/myself

110. Who makes the decision on how to spend the family's income?

A. Your Husband/partner
B. You and husband
C. Spouse/myself

APPENDIX B : QUESTIONNAIRE FOR FAMILY PLANNING SERVICE PROVIDERS

1. Facility type (A) public (B) Private

2. How long has this facility being in this community? ……

3. Hours of service at this facility ……

4. Seeking of consent from partner before providing service (A) No consent is sought (B) consent is sought

5. How many family planning methods do you offer in this facility? ----------

6. Names of the FP methods in this facility ----------

7. Which method do clients prefer or mostly take? ……

8. Which method is the least expensive? ----------

9. Which method is the most expensive? ……

10. What is the cost or price of the least expensive method? .....

11. What is the cost/price of the most expensive method? ……

12. How many days in a week do you provide family planning service? ……

13. Which methods are you not able to provide in this facility? ……

14. How many staff members in this facility provide FP service? ……

15. What is the qualification of these staff members? ……

16. What is the average age of these staff members who provide FP service? .....

17. Do you carry out IEC activities on FP in the community? (A) Yes (B) No

If yes

18. How many times do you carry out these activities? …….

19. What is your assessment of the uptake of FP services in this facility or community? (A) Satisfactory (B) Unsatisfactory (C) Extremely low

20. Why this answer to the question above? ……

21. What barriers have identified to the uptake of FP services in this community? ….

22. How can the uptake of FP services be promoted in this community? ……..

23. Do you sometimes get out of stock of contraceptives? (A) Yes (B) No

24. Which periods of the year? ……

25. Where do you get your contraceptives supply? ……..

26. Is it so easy to get your contraceptives supply? (A) Yes (B) No

27. What difficulties do you face in getting your contraceptives stock? ……..

28. Does your facility have the maximum privacy and confidentiality for clients? (A) Yes (B) No

29. Do clients complain about the attitude of you service providers? (A) Yes (B) No

30. Is there any other service provider in the community apart from your facility? (A) Yes (B) No

31. Is there a place purposely for FP services in this facility? (A) No (B) Yes

If yes

Can I have a look at the place?

Make my assessment of the following

Availability of electricity…….

Availability of water ……

Cleanliness of the place ……..

Functional state of the equipment ……

Records/register for clients of FP ……

32. Do you have the equipment for FP services? (A) Yes (B) No

33. Do you have emergency contraceptives? (A) Yes (B) No

If yes

34. Which brand or type of emergency contraceptives do you have? ----------

35. Stock of contraceptives and quantities issued.

Contraceptive	Stock	Quantities issued (January to December) 2011
Male condoms		
Female condom		
Norigynon		
Depo provera		
Pills		
IUCD		
Emergency cont.		

APPENDIX C: FOCUS GROUP DISCUSSION GUIDE FOR MEN

CONSENT FORM

Thank you for agreeing to participate. I am very interested to hear your valuable opinion on why the uptake of family planning services is very low in the West Gonja District and how we can enhance the uptake these services.

- *The purpose of this study is to find out why there is a low uptake of family planning services in the West Gonja District. We hope to learn things that the District Directorate of Health can use to improve the uptake of family planning services in the district.*
- *The information you give us is completely confidential, and I will not associate your name with anything you say in the focus group.*
- *I would like to tape/record the discussions so that I can make sure to capture the thoughts, opinions, and ideas we hear from the group. No names will be attached to the focus groups and the tapes will be destroyed as soon as they are transcribed.*
- *You may refuse to answer any question or withdraw from the study at anytime.*
- *I understand how important it is that this information is kept private and confidential. I urge all participants to respect each other's confidentiality.*
- *If you have any questions now or after you have completed the questionnaire, you can always contact me or the district director of health service our names and phone numbers are on this form.*

- *It is a learning process as we are going to learn from each other.*
- *We would like the discussion to be informal, so there's no need to wait for us to call on you to respond. In fact, we encourage you to respond directly to the comments other people make. If you don't understand a question, please let us know. We are here to ask questions, listen, and make sure everyone has a chance to share.*
- *Please check the boxes on page 2 and sign to show you agree to participate in this focus group.*

Name of community …….. Date ……Time discussion started ……..

Number of participants …… *Time ended ……*

Name of facilitator: ***Billey Yaw Krah***

NO.	*Name*	*Age*	*Marital Status*	*Sign.*
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

QUESTIONS

1. What are the benefits of family planning to the family, the community and the district as a whole?

2. What are the precipitating factors that serve as barriers to uptake of family planning services by both men and women? What accounts for the low uptake of family planning services?

3. What can we do to improve the uptake of family planning services in this community and the district at large?

4. What are the factors that determine the higher fertility rate in rural communities?

5. Which family planning methods have heard about or know? Which method will you go for or encourage your spouse to go for?

6. Do you use any family planning method? Do you support family planning? Why do you or do not support it?

7. Do you discuss family planning issues with your spouse? How often do you discuss with her?

8. What role can men play in the uptake of family planning services by their wives?

9. What is your fertility preference? What is your ideal number of children?

APPENDIX D: FOCUS GROUP DISCUSSION FORM FOR WOMEN

Name of Community ……Date …… Time discussion started……

Number of participants …… Time ended ……

Name of facilitator: ***Billey Yaw Krah***

NO.	*Name*	*Age*	*Marital Status*	*Sign.*
1				
2				
3				
4				
5				
6				
7				
8				

9				
10				

QUESTIONS

1. What are the benefits of family planning to you the women and your children?

2. What prevents you the women from taking family planning services?

3. What can we do to improve the uptake of family planning services in this community and the district at large?

4. What are the factors that determine the higher fertility rate in rural communities?

5. Which family planning methods have heard about or know? Which method will you go for or encourage your friends to go for? Why?

6. Do you use any family planning method? Do you support family planning? Why do you or do not support it?

7. Do you discuss family planning issues with your spouse? How often do you discuss with her?

8. What role can men play in the uptake of family planning services by their wives?

9. What is your fertility preference? What is your ideal number of children?

10. Do you have the right to refuse your spouse sex? Under what conditions will you refuse sex with your husband?

11.Are you involved in decision making in your marriage or family? Which decisions do you take independently?

12.Why are women usually withdrawn from school unlike their male counterparts to start their families?