Accessibility and Utilization of Family Planning Services in Selected Districts in Central Region of Ghana

By
John Amankwaa
(BSc. Biochemistry)

A Thesis submitted to the Department of Planning,
College of Art and Built Environment, Kwame Nkrumah
University of Science and Technology, Kumasi in partial
Fulfilment of the requirements for the degree of
Master of Philosophy (MPhil)
in Development Studies

August, 2015

DECLARATION

I hereby declare that this submission is my own work towards the MPhil Development Studies and, to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text.

JOHN AMANKWAA ....

(PG 1201713) SIGNATURE DATE

CERTIFIED BY:

MRS. DINA ADEI ....

(SUPERVISOR) SIGNATURE DATE

CERTIFIED BY:

DR. DANIEL K. B. INKOOM ....

(HEAD OF DEPARTMENT) SIGNATURE DATE

ABSTRACT

Family planning has been considered to contribute immensely to child survival and reduction in maternal mortality, hence targeted as one of the main reproductive health services in achieving the fifth millennium development goal (MDG 5). The 2011 Multiple Indicator Cluster Survey report indicates that use of modern contraceptives in Central region has improved from 17.0 percent in 2008 to 29 .1 percent in 2011 and subsequently decline of unmet need for contraceptives from 49.7 percent to 22.6 percent for the same years respectively. In spite of this improvement, there is huge variations in utilization of family planning methods especially between districts in the region, particularly in Upper Denkyira East and Mfantsiman, and the causes of this variations are not clearly known. Hence, the main aim of the study is to assess the level of accessibility and utilization of family planning services in the selected districts and factors influencing them.

The study design adopted was descriptive cross –sectional, using both quantitative and qualitative approach for data collection. The sample size was 373 women of reproductive age 15 – 49 years. Again, 66 husbands/male partners were also interviewed to solicit for their views about the subject matter. Eight health institutions as well as 22 religious establishments were also interviewed.

The study revealed high knowledge level of modern contraceptives among women of reproductive age (93 percent) and men (88 percent) in general. There is little (0.3 percent) difference in contraceptives use between the Upper Denkyira East (25.9 percent) and Mfantsiman (25.6 percent) district. Poor data management in facilities in Upper Denkyira East was accounting for the huge variations. Factors such as proximity to facility or clinic (12.5 percent), privacy and confidentiality at clinic (19.5 percent), wanting to delay pregnancy (49.2 percent) among others motivate use of contraceptives whiles factors such as desire for many children (14.8 percent) , health concerns (9.7 percent) and fear of side effects (7.6 percent) accounted for non-use. Again, social issues such as stigma of use (3.5 percent), husbands/partners opposition (4 percent) and religious prohibition (1.6 percent) among others hinder the use of contraceptives among women.

There is good physical accessibility with respect to location of clinic providing family planning services in all study districts. Again financial accessibility to family planning services is good despite unapproved charges for family planning services by health facilities in the study districts. Social accessibility regarding service providers' attitude,

privacy and confidentiality is also good in FP facilities, however social factors such as stigmatization, husband/partner opposition, religious opposition among others hinder access and utilization of contraceptives.

To improve on family planning services in the study districts, there is the need for family planning (FP) data collection tools' training for all FP service providers in the facilities in order to improve on FP data quality. Also, family planning awareness or education should be intensified particularly with respect to health concerns, side effects as well as prices of contraceptives or FP services.

ACKNOWLEDGMENT

I am very grateful to the Almighty God for the strength and knowledge given to me throughout the research programme. I also thank my wife Vivian Owusu Koranteng for her moral support in the pursuit of this programme.

My sincere gratitude goes to Mrs Dina Adei, my supervisor and a Lecture at the Department of Planning, Kwame Nkrumah University of Science and Technology, Ghana for her guidance, support and inputs which immensely contributed to the successful completion of this study.

Also, I extend my sincere thanks to Mr. Justice Hafoba, a Deputy Director of Nursing Services, Central Regional Health Directorate and Mr. Bright Addy Serlom, a lecturer at Department of Pharmacy, Central University College, Ghana, for their support and useful pieces of information which led to the completion of the research.

Again I will like to express my appreciation to Dr. Kwabena Sarpong and Ms Yvonne Graham-Hayford, the District Health Directors of Upper Denkyira East and Mfanstimen districts respectively for their cooperation and encouragement during the field work.

Finally, I thank the Districts Reproductive and Child Health heads namely Ms Stella Sackey (Mfantsiman), Emma Delali Forley (Upper Denkyira East) as well as Isaac Iwittor, the District Health Information Officer of Mfantsiman for their immense support for data collection and willingness to fill some questionnaires.

TABLE OF CONTENTS

DECLARATION ..... **ii**
ABSTRACT ..... **iii**
ACKNOWLEDGMENT ..... **v**
TABLE OF CONTENTS ..... **vi**
LIST OF TABLES ..... **x**
LIST OF FIGURES ..... **xi**
LIST OF ABBREVIATION ..... **xii**

CHAPTER ONE **1**
BACKGROUND OF THE STUDY **1**
1.1 Introduction **1**
1.2 Problem Statement **3**
1.3 Research Questions **5**
1.4 Research Objectives **5**
1.5 Justification **6**
1.6 Scope **7**
1.7 Limitations **7**
1.8 Organization of Report **8**

CHAPTER TWO **9**
FAMILY PLANNING: THEORIES, CONCEPTS AND EXPERIENCES **9**
2.1 Introduction **9**
2.2 The Concept of Family Planning **9**
2.3 Opinions about Family Planning **10**
2.3.1 Family Planning Seen as a Form of Abortion 10
2.3.2 Family Planning and Fertility 11
2.3.3 Family Planning Seen as Unnecessary 12
2.3.4 Family Planning Undesirable and Unnecessary due to the AIDS Epidemic 13
2.4 Family Planning Methods **13**
2.4.1 Traditional Family Planning 13
Abstinence 14
2.4.2 Natural Family Planning Methods (NFP) 14
The Calendar Method 15
Cervical Mucus (Billings) Method 15
Sympto-Thermal Method 16
2.4.3 Hormonal Contraceptives 16
Oral Contraceptives 16

Progestin Only Injectable 16
Contraceptive Implants 17
Intrauterine Devices (IUDs) 17
2.4.4 Voluntary Surgical Contraception (VSC) 17
2.5 Availability and Access to Family Planning Services 18
2.5.1 Factors that Affect the Accessibility to Family Planning Services 19
2.6 Utilization of Family Planning Services 22
2.6.1 Factors that Influence the Utilisation of Family Planning in Developing Countries 23
Geography and Method Choice 23
Financial Costs 23
Status of Women 24
Misconception about Family Planning 24
Socio-Demographic Factors 25
Education and Information 26
Environment of Service Provider 26
Family-Related Factors 26
2.7 Family Planning in Ghana 28
2.7.1 Status of Family Planning, Resource Requirement and Policy Issues in Ghana 30
2.7.2 Family Planning Method Offered in Ghana 35
2.8 Family Planning in Bangladesh 38
2.9 Family Planning in Kenya 41
2.10 Lessons Learnt 44
2.11 Conceptualizing Factors Influencing Accessibility and Utilization of Family Planning 45
2.12 Summary of Chapter 48

CHAPTER THREE 50
RESEARCH APPROACH AND METHODOLOGY 50
3.1 Introduction 50
3.2 Profile of Study Areas 50
3.2.1 Upper Denkyira East District 50
3.2.2 Mfantsiman District 51
3.3 Research Approach and Design Adopted 53
3.4 Data Types, Sources and Methods of Collection 54
3.5 Units of Enquiry 55

3.5.1 Women of Reproductive Age (15 – 49 years) 55
3.5.2 District Health Directorates 56
3.5.3 Service Providers 56
3.5.4 Staff Providing Family Planning Services 57
3.5.5 Married Men 57
3.5.6 Church Leaders 57
3.6 Sampling 58
3.6.1 Sample Size Determination 58
3.6.2 Estimation of Number of Households (2014) 59
3.6.3 Sampling Techniques for selection of Study Areas and Respondents 59
3.6.4 K^{th} Value for Systematic Sampling 63
3.7 Data Processing and Analysis 63
3.8 Summary of Chapter 63

CHAPTER FOUR 64
ACCESSIBILITY AND UTILIZATION OF FAMILY PLANNING SERVICES IN THE CENTRAL REGION 64
4.1 Introduction 64
4.2 Knowledge of Contraceptive Methods 64
4.3 Ever Use Of Contraceptive 68
4.4 Utilization of Contraceptives (Current Use) 70
4.5 Availability and Accessibility to Family Planning Services 77
4.5.1 Physical Accessibility of Family Planning Services 77
4.5.2 Assessment of Financial Accessibility to Family Planning Services 83
4.5.3 Social Accessibility of Family Planning Services 85
4.6 Factors Motivating Utilization of Family Planning Services 86
4.7 Reasons for Not Using Contraceptives 88
4.8 Institutional Capacity to provide Family Planning Services 91
4.8.1 Staff Assessment for Family Planning Services 91
4.8.2 Availability of Family Planning Commodities for Service Delivery 95
4.8.3 Availability of Essential Equipment and Educational Materials for Family Planning Services. 98
4.9 Religious Institutions Opinion about Family Planning Services 102
4.10 Summary of Chapter 102

CHAPTER FIVE **104**
SUMMARY OF FINDINGS, RECOMMENDATIONS AND CONCLUSION **104**
5.1 Introduction **104**
5.2 Summary of Findings **104**
5.2.1 Utilization of Family Planning Services. 104
5.2.2 Accessibility of Family Planning Services 105
5.2.3 Factors Motivating Utilization of Family Planning Services 106
5.2.4 Reasons for Not Using Contraceptives 106
5.2.5 Challenges Facing Family Planning Accessibility and Utilizations 106
5.3 Recommendations **107**
5.4. Conclusion **109**

REFERENCES **110**

APPENDICES **127**
Appendix 1: Questionnaire **127**
Appendix 2: Family Planning Acceptor Rates by Districts in Central Region, 2011 – 2013. ..... **148**
Appendix 3: Sample Size Determination **149**
Appendix 4: Healthcare Provider who provided the FP services to Women currently using Contraceptives **150**
Appendix 5: Facility types where women using Contraceptives obtained their current FP method from **150**

LIST OF TABLES

TABLE **PAGE**

3.1: Research Objective, Variables, Sources and Method of Collection 55
3.2: Minimum Sample Size of Study Area 58
3.3: Estimated Number of Households in Study Area 59
3.4: K^{th} Value for Systematic Sampling.....63
4.1: Knowledge of Contraceptives Methods in Percentage 65
4.2: Knowledge of Contraceptive Methods by Background Characteristics in Percentage 67
4.3: Ever Use of Contraception by Women in Percentage.....69
4.4: Current Use of Contraception among Women by Age in Percentage 71
4.5: Current use of contraception among Women by background characteristics in Percentage 74
4.6: Social and Physical Access to FP services.....82
4.7: Official Charges of Family Planning Services by Districts 83
4.8: Cost of receiving Family Planning Services at facilities and whether it is affordable or not to users.....84
4.9: Reasons for not using contraceptives by Women in Percentage 90
4.10: Family Planning Staffs available to provide services by Districts.....92
4.11: Family Planning Staffs Available by Facilities.....94
4.12: Trained Providers in the Long Term and Permanent Methods by Facilities 94
4.13: Commodities Available at District Medical Stores by Districts. 95
4.14: Contraceptives Available at facility Stores by facilities 97
4.15: Availability of Essential Equipment needed in Providing Family Planning Services by Facilities.....99
4.16: Educational materials for Family Planning services available by facilities 101

LIST OF FIGURES

FIGURE **PAGE**

2.1: Demand and Supply Determinants of Utilization of Health Care. 27
2.2: Historical Trends in Fertility and Contraceptive Use in Ghana.....31
2.3: Ghana Contraceptive Security Strategic Framework.....33
2.4: Conceptual Framework of Accessibility and Utilization of Family Planning Services 47
3.1: Map of study Areas in National context 52
3.2: Stages in Selecting Respondents.....62
4.1: Occupation and current use of contraceptives among all Women aged 15 -49 Years in selected Districts.....75
4.2: Income and current use of contraceptives among all Women aged 15 -49 Years in selected Districts.....76
4.3: Mfantseman Municipality Health Map 78
4.4: Upper Denkyira East District Health Map 79
4.5: Reasons / Factors motivating use of contraceptives among Women aged 15 -49 Years in selected Districts.....88
4.6: Reasons for Husband/Partner opposition to contraceptives use in selected Districts. 89
4.7 Number of Service Providers Trained in the Long Term and Permanent Methods by Districts 92

LIST OF ABBREVIATION

AIDS	–	Acquired Immune Deficiency Syndrome
BBT	–	Basal Body Temperature
CHPS	–	Community- Based Health Planning and Services
COC	–	Combined Oral Contraceptive
CPR	–	Contraceptives Prevalence Rate
CSM	–	Contraceptives Social Market
DHMT	–	District Health Management Team
EMOC	–	Emergency Obstetric Care
FAM	–	Fertility Awareness Method
FAO	–	Food and Agricultural Organization
FP	–	Family Planning
FPHP	–	Family Planning and Health Programme
FPMNCH	–	Family Planning and Maternal and Child Health
FRHP	–	Focus Region Health Project
GDHS	–	Ghana Demographic Health Survey
GDP	–	Gross Domestic Product
GHANAPH	–	Ghana Population and AIDS Project
GNI	–	Gross National Income
GSCP	-	Ghana Sustainable Change Project
GSGDA	–	Ghana Shared Growth and Development Agenda
GSS	–	Ghana Statistical Services
HIV	–	Human Immunodeficiency Virus
IUCD	–	Intrauterine Contraceptives Device
MDG	–	Millennium Development Goals
MICS	–	Multiple Indicator Cluster Survey
MOH	–	Ministry of Health

NDPC	–	National Development Planning Commission
NFP	–	Natural Family Planning
NGO	–	Non Governmental Organization
POP	–	Progestin –oral Pills
PPAG	–	Planned Parenthood Association of Ghana
RHMT	–	Regional Health Management Team
SOP	–	Standard Operating Procedures
STD	–	Sexually Transmitted Disease
TER	–	Total Fertility Rate
UDE	–	Upper Denkyira East
UN	–	United Nations
UNAIDS	–	United States Agency for International Development
UNFP	–	United Nation Population Funds
USAID	–	United State Agency for International Development
VCT	–	Voluntary Counselling and Testing
VSC	–	Voluntary Surgical Contraception
WHO	–	World Health Organization

CHAPTER ONE
BACKGROUND OF THE STUDY

1.1 Introduction

In the bid to achieving the fifth millennium development goal (MDG 5) which seeks to improve maternal health and reduce maternal mortality, one strategy being adopted is universal access to reproductive health services (UN-HABITAT, 2003). With regard to this, the United States has made a commitment to increasing its foreign assistance spending to family planning and reproductive health in developing countries. It aims to meet the development and health needs of 215 million women who have intention to delay childbearing, space births or stop having children any more in developing countries but are not using modern contraceptives (Singh et al, 2009). Amidst the rigorous efforts being made, the demand for family planning services is estimated to increase by 40 percent in 2050 since a lot of young women will reach their reproductive age (Speidel et al, 2009).

As indicated earlier, achieving MDG 5 involves increasing usage of skilled birth attendants and contraception and other family planning services. Increasing support to family planning programs has a lot of benefits such as improving maternal and infant health. In developing countries, contraceptive use has reduced the number of maternal deaths by 44 percent (about 270,000 deaths averted in 2008) and 73 percent of the deaths could have been prevented if the full demand for contraceptives were met (Cleland et. al. 2012; Ahmed et. al. 2012). Again, the use of contraceptives is an effective way of reducing unintended pregnancies and abortions and in some countries like, Bangladesh, Bulgaria, Chile, Estonia, Hungary Latvia, Romania and Russia, the increase in use of contraceptives led to reduction in abortion rates (Deschner and Cohen 2003; Guttmacher Institute 1999).

Family planning also helps in enhancing one's education and a report revealed that US-supported family planning program help young women avoid teen pregnancies, allowing them to stay in school (United Nations Millennium Project, 2004). According to Food and Agriculture Organization (FAO) (2005), economic and environmental cost of augmenting per capita food production could be too much for countries with rapid population growth than their economies thereby increasing the burden of poverty in such countries. This is evident in the fact that the total number of malnourished people in Sub—Saharan Africa

which was 88 million (representing one – third of the world's hungry) in 1970, rose sharply to more than 200 million in 2005 (Rosegrant et. al., 2005).

Although women are valued by achieving their reproductive goals worldwide, many countries could achieve their target for increases in contraceptive prevalence and declines in fertility by eliminating unmet need (Casterline et. al. 1997). They observe that the high rate of unmet needs is caused by some barriers such as lack of knowledge, fear of side effects to health and social and family disapproval. In developing countries it has been estimated that about 222 million women who want to avoid pregnancy are not using a modern method of contraception (Singh and Darroch, 2012; Carr et. al., 2012). Ensor and Cooper (2004) identify a lot of barriers to health services access from both demand and supply sides. Their findings pointed out demand side barriers as factors affecting demand and occurs at individual, household, or community level such as income, social, household and cultural characteristics as well as knowledge on care available to them. The supply side barriers include factors bordering on production of health care such as inputs prices, knowledge of technology of treatment, management efficiency among others. And they further indicated that, the poor and vulnerable groups are the most affected by these barriers. Also, a study in the Barekese District of the Ashanti Region of Ghana revealed that, married women who were not currently using contraception gave the following reasons for not patronizing family planning services; fear of side effect, health concerns, belief of contraceptives interfering with normal body process, opposition from partners and contraception being costly and inaccessible (Krakowiak-Redd et al., 2011).

For the poorest to have access to health services there is the need to overcome both demand and supply sides barriers (Sachs, 2001). Meanwhile Ensor and Cooper (2004) pointed out that, most health policy interventions give more attention to addressing supply side barriers such as improving on staff skills, protocols of treatment, availability of supplies among others, whiles little attention is given to demand side barriers in accessing health services by clients in low income countries. Further, a study on challenges in access to and utilization of reproductive health care in Pakistan revealed that, a lot of factors such as unavailability of Emergency Obstetric Care (EmOC) services in facilities, staff absenteeism, geographical remoteness, delayed access and ambulance shortages as well as cultural norms makes reproductive health services (i.e. EmOC) inaccessible thereby leading to low utilization (Moazzam et al, 2008). Although these reports focused on

barriers to access to general health services and EmOC per se, many of these factors discussed above could equally influence access to and utilization of family planning service. Some studies have indicated that family planning/ reproductive health facilities are accessible by only 10 percent of the population and 5 percent of these lived within walking distances to the facilities (Moazzam et al 2008; Guttmacher Institute 1999).

Notwithstanding the challenges outline in the forgoing, some factors have been identified to motivate patrons of family planning services. According to Kanthiti (2007) factors that motivate adolescents to use family planning services include: confidentiality and privacy, knowledge on reproductive and family planning services, health staff positive attitude, availability of service and friendly environment, convenient of opening hours and location of clinic, individuals risk perception, peer involvement and parental support.

In Ghana, contraceptive usage among married women is 24 percent in 2008 as against 25 percent in 2003 (GSS, GHS and ICF Macro, 2009). Again the 2008 Ghana Demographic Health Survey (GDHS) indicated, the unmet need for family planning (for both spacing and limiting) among women in Ghana as 35.3 percent and this has reduced to 26.45 percent according to 2011 Multiple Indicator Cluster Survey (MICS) (GSS, GHS and ICF Macro, 2009; GSS, 2012). The major cause of the maternal death is haemorrhage, followed by unsafe abortion and as indicated earlier, this unsafe abortion could be prevented or reduced by the use of contraceptive methods. A further reduction in maternal deaths could be achieved if reproductive health services are improved.

1.2 Problem Statement

The ability of a woman to space and/or limit her pregnancies directly impacts on her health and well-being as well as on the outcome of each pregnancy (Andrew, 2005). Family planning has been identified to contribute immensely to child survival and reduction in maternal mortality. Notwithstanding the benefits, more than 100 million women in less-developed countries, representing about 17 percent of all married women, who would prefer to avoid pregnancy, are not using any form of family planning (Eltomy et. al., 2013). They argue that demographic and service related factors usually influence the decision to use or otherwise.

The Central region of Ghana is one of the regions that have benefitted from a lot of health programmes with support from development partners such as United Nations Population Fund (UNFPA) and United Sates Agency for International Development (USAID). The most recent programme implemented in the Region is the USAID Focus Region Health Project (USAID/FRHP) implemented over the 2009 – 2013 period; which sought to among other things, improve access and use of high quality family planning services (USAID and JSI Research and Training Institute, 2012). The 2011 MICS report has revealed increase in use of modern contraceptives in Central region to 29.1 percent as against 17.0 percent in 2008 and subsequently reduction in unmet need for contraceptives from 49.7 percent in 2008 to 22.6 percent in 2011(GSS, GHS and ICF Macro, 2009; GSS, 2012).

However, there is huge variations in utilization of family planning methods especially between districts in the region and the causes of this variations are not clearly known (Ghana Health Service, 2012; 2013; 2014). Upon reviewing the regional family planning reports, Upper Denkyira East district consistently had highest acceptor rate increasing from 47.5 percent in 2011 to 63.60 percent in 2012 and finally to 89.67 percent in 2013 whiles Mfantseman Municipality has consistently been among the lowest with acceptor rate of 16.5 percent, 16.9 percent and 20.33 percent for 2011, 2012 and 2013 respectively. Despite huge variations between the districts' family planning acceptor rates, there is no published study or data on factors contributing to such trends in the above-mentioned districts.

Secondly, despite the fact that, 2011 MICS report indicates improvement in contraception use in the region, teenage pregnancy which mostly result in unsafe abortion and school drop outs has also remained steady around 13.9 percent in 2010 to 14.3 percent in 2013 (Ghana Health Service, 2013). Again, adolescent birth rate among women between the ages of 15 and 19, which is one of the monitoring indicators of the Millennium Development Goal (MDG) 5 remains as high as 61 per 1000 women in the region (GSS, 2012).

Studies have indicated that family planning practice is determined by a lot of factors including service provider -related ones and client related- factors (Kanthiti, 2007). A study in Gomoa West district of Central region revealed that frequent stock out

contraceptives, non -availability of preferred method and lack of appropriate information on methods results in low uptake of contraceptives (Oklettey, 2012). Again a final report on Ghana Sustianable Change Project (GSCP) in seven southern region of which central region is not an exception indicated that religious and cultural obstacles influence use of contraceptives (USAID/GSCP, 2009) and all these factors could also influence the trend of family planning acceptor rates in Mfantsiman and Upper Denkyira East districts.

Considering the above situation and especially the fact that, there is huge variation between district family planning acceptor rates over the years, it is becoming increasingly important to examine the factors that influence the accessibility and utilization of family planning services in the districts. Hence, the research seeks to assess the level of accessibility and utilization to family planning services in the selected districts in Central region of Ghana. The study describes the current family planning situation in the districts and the facilitating factors based on which policy recommendations were given to improve on accessibility and utilization of family planning services in all districts and the region as a whole.

1.3 Research Questions

Regarding the above problem statement, the study seeks to answer the following questions:

1. What is the extent of family planning accessibility in the districts?
2. What is the level of utilisation of family planning in the districts?
3. What factors motivate family planning use in the districts?
4. What factors hinders accessibility and utilization of family planning services in the districts?

1.4 Research Objectives

The overarching aim of the research study is to assess the level of accessibility and utilisation of family planning services in selected districts in the Central Region of Ghana. However, the specific objectives include: to

1. Examine the extent to which family planning services are accessible in the districts;

2. Assess the level of utilisation of family planning services in the districts;
3. Examine the factors that motivate users to patronize family planning services in the districts;
4. Examine the challenges associated with the accessibility and utilization of family planning services in the districts; and
5. Give recommendations to inform policy

1.5 Justification

Family planning has been identified as an important strategy in promoting maternal and child health in the sense that it improves health through adequate spacing of birth, avoiding pregnancy at high-risk maternal age and high parity (Brair and Eltayeb, 2013). Notwithstanding the wide acknowledged benefits, most women in the Sub-Saharan Africa have an unmet need for family planning services, although they want to delay or avoid future pregnancies (Miller et al., 1998 also cited by Darroch et al 2011). According to the National Population Council (2006), 4,419 maternal deaths would be averted due to a reduction in unwanted pregnancies over the period 2000 to 2015 if the unmet need for family planning which is 35 percent is addressed in Ghana. Increasing family planning uptake and avoiding unwanted pregnancies could be achieved by improving family planning service delivery by health workers, male involvement and client/community being well informed about contraception.

When the objectives of this research are achieved, the knowledge acquired can inform health workers to identify factors that will motivate utilization and access to family planning services among reproductive-age women. This will further inform family planning policy and program to design interventions to eliminate barriers to utilization as well as unmet need for contraceptives use. The attainment of this feat which has the potential of contributing to the achievement of the MDGs 4 and 5 which respectively seeks to reduce child mortality and reduce maternal mortality by 75 percent by 2015. This indirectly affects the MDG 3 aimed at empowering women in the sense that, delaying or spacing child birth affords women time to engage in productive activities, which they are unable to do during pregnancy and child nursing. By allowing couples to plan the timing and number of children, women would have greater opportunities to participate in activities that could improve the economic or social status of the family (Brockman, 2003).

1.6 Scope

Geographically, the scope of the study focused in the Central Region which is one of the ten administrative regions in the country and occupies about 6.6 percent of the total land area of Ghana (GHS, 2012). It is bounded by the Gulf of Guinea on the south and by the Western Region on the west. The region shares borders on the east with the Greater Accra Region, on the north with Ashanti Region and on the north-east with Eastern Region. Currently, it has twenty administrative districts with about 63 percent of the region is rural (GHS, 2013).

The Region is currently endowed with 384 health facilities with 169 of them being functional Community-based Health Planning and Services (CHPS) zones. The majority of the facilities are located in the urban areas putting the rural area at disadvantage with respect to distribution of health facilities (GHS, 2013).

The Central Region is selected for the study owing to the fact that its family planning acceptor rate has been declining over a period of five years (2008 – 2013) despite support of reproductive health services including family planning by USAID and UNFPA over the same period. Again teenage pregnancy has remained steady over the same years as indicated in 2013 annual regional report (GHS, 2013) coupled with high adolescent birth rate among women of 15 – 19 years of age (GSS, 2012). Curiously, although the regional performance on family planning acceptance is low, some districts perform markedly well compared to their counterparts. Increased in family planning uptake could prevent some of these teenage pregnancies.

Contextually, the study seeks to investigate the level of accessibility and utilization of family planning services as well as exploring for factors affecting them in the Region. It examines the factors that motivate or hinder women in reproductive age from patronising the services.

1.7 Limitations

The limitations of the study include the fact that only two districts in the region were conveniently studied due to financial constraints which might not be entirely representative of the whole region. Further, the researcher was not able to interview a lot

of men since they were not at home during the visit, hence most of the findings are limited to women perspectives.

That notwithstanding, this was overcome by selecting districts that consistently had high acceptor rate and one with low rate for over a period of three years and information from them could be used to inform policy for the whole region. Again the study's data collection tools adapted questions from the validated Ghana Demographic Survey tools used in 2008 as well as using some open – ended questions to validate the close- ended ones. Finally there was high level of participation by women who are major users of contraceptives, thereby results can be generalized.

1.8 Organization of Report

The study report is in five chapters. The chapter One gives the overview of the study, the problem statement, research questions, specific objectives, scope of the study and study justification. Chapter Two presents a review of literature and reports of studies conducted in relation to the research topic. Whiles chapter Three focused on the profile of the study areas and details out the methodology used for the study. Also it indicates the various methods, data collection tools and describe the sampling techniques adopted for the study. The chapter Four focused on research findings, analysis and discussions of results. The chapter also gives inferences taking into consideration researcher's own findings and literature so far as the research topic is concerned. Chapter five gives the summary of findings recommendations and conclusion of the study.

CHAPTER TWO
FAMILY PLANNING: THEORIES, CONCEPTS AND EXPERIENCES

2.1 Introduction

This chapter presents review of literature on accessibility and utilization of family planning services. The literature involves work done by other researchers and what is theoretically known so far as the research area is concerned. The literature was organized in relation to the objectives of the study and it includes the concept of family planning, various methods of family planning and arguments for and against family planning. The chapter further, lays emphasis on accessibility and utilization of family planning services as well as, factors influencing it. Also in the chapter, is a review of case studies in other countries with the aim of drawing lessons for the study. The chapter ends with the conceptual framework of the study.

2.2 The Concept of Family Planning

World health organization in 1975 as quoted by Virtala in 2007 defined family planning as "practices that help individuals or couples to attain certain objectives to avoid unwanted birth; bring about wanted birth; to regulate the intervals between pregnancies; to control the time at which birth occur in relation to the ages of the parents and to determine the number of children in the family". Education, counselling on family planning, the provision of contraceptives, the management of infertility, education about sex and parenthood, and organizationally related activities such as genetic and marriage counselling, screening for malignancy and adoption services are all seen as services which make family planning possible (Virtala, 2007).

Family planning is a means of supporting the health of women and families and it is part of the approaches to decrease the maternal and child mortality and morbidity. It is also a key part of reproductive health programmes (UN-HABITAT, 2003).

Bekele *et al., (*2003) indicated that, the main aim for family planning include enabling partners to determine the number, spacing and the time at which they have children and in doing so assisting women and their families preserve their health and fertility. This also contributes to enhance the quality of their lives. They also indicated that, family planning

helps to improving on children's health as well as have access to enough food, clothing, housing, and good educational.

Family planning is key for the health of women and their families, and it can facilitate a country's progress towards decline in poverty and attaining development goals. Regarding this, universal access to reproductive health services, of which family planning, is a key component is one of the targets of the United Nations Millennium Development Goals (MDGs) (Roudi-Fahimi *et al.*, 2012). Further, other international treaties, such as the Programme of Action of the 1994 International Conference on Population and Development, promote ones' liberty to decide the number and timing of their children as a basic human right and reproductive right (Roudi-Fahimi *et al.*, 2012).

2.3 Opinions about Family Planning

Family planning has become a topic of considerable interest, with differing views and values that result in different levels of acceptability. A large majority of leaders from developing world are of the view that population growth and birth rates are too high (United Nations, *2007*). However there is potential adverse effects such as poor health among women and children, slow economic growth and poverty. Again it leads to overcrowded schools as well as overburdened infrastructure such as health facilities and other environmental resources (Birdsall *et. al*., 2001). In addition, others argue that high level of unemployment and inequality in rapidly growing young populations may lead to political violence and social vices (Cincotta *et. al*., 2003; Cincotta, 2008; National Commission on Terrorist Attacks, 2004).

Although family planning concept is accepted and encouraged in most part of the world, there are some societies which have some reservations about family planning and therefore criticise the practice of family planning. Some of these views are discussed seriatim.

2.3.1 Family Planning Seen as a Form of Abortion

Some faith communities and individuals recognises any action that inhibit implantation of a fertilized egg to be a very early abortion. For some, if the primary mechanism of action is to inhibit fertilization, then it is acceptable but for others, any action with post-fertilization effect that would stop implantation is problematic (Cutrer and Glahn, 2005).

Although Roman Catholic Church acknowledges benefits of use of family planning methods to individuals and couples, it only subscribes to the natural family planning methods as genuine and legitimate means of birth control. The Roman Catholic Church is not supportive of artificial birth control methods since they see it as deliberate interruption of the design God built into the human race, which is natural law of sexual intercourse and procreation (Nakiboneka and Maniple, 2008)

2.3.2 Family Planning and Fertility.

Bongaart and Sinding in (2009) also indicated that some economists argue that couples give birth to the number of children they want and can take care of (also cited by Pritchett, 1994; Becker, 1960; Schultz, 1973**)** and consider it that parents mostly sees their family size in more or less the same way they see consumer durables. High fertility in poor countries is due to the fact couples want many children to help with household chores and agricultural work as well as to provide for them in old age. Regarding this, family planning costs are considered as minor issue in couples' decision making.

Conversely, others believe that most women who do not control their birth do not do so out of choice. According to Singh *et al*., (2003), over 137 million women in the developing world who do not want to get pregnant are not using contraceptive method. They indicated that factors contributing to unmet need for contraception include high cost family planning commodities, transportation, and healthcare provider charges for provision of services, even if government gives subsidies. Further, health concerns, social disapproval and partner opposition, as well as unnecessary medical impediments such as the need for a Medical officer instead of a nurse or other trained health provider to provide certain family planning methods contribute to unmet need for contraceptives (Casterline and Sinding, 2000). The unmet need is the cause of about the 76 million untimely pregnancies that occur every year with about half of them ending in abortion and the other half, in births, leading to health risks for mothers and children (Singh *et al*., 2003). For instance, a study in the Matlab district of rural Bangladesh revealed a 20-year fall in the fertility from more than six births per woman to about three, as contraceptive use in the same period increased from fewer than 10 percent of married women to more than 50 percent (Cleland *et al*., 1994). Parts of Bangladesh now have fertility significantly below three births per woman (NIPORT, 2005). The success of the Matlab study as well as subsequent success of Bangladesh's national family planning program, showed that

properly planned interventions can reduce unmet need for contraception, even in traditional settings.

Another reliable example of the effect of voluntary family planning is the program implemented in Iran in 1989 which recorded decrease in fertility from more than five children per woman in the late 1980s to just two in 2000 (Roudi-Fahimi, 2002**)**. No other country had a decrease of that magnitude during the 1990s. Although some fertility change would have occurred without these new services, the unprecedented rate of the fertility drop argues for a significant impact of the program. The implementation of family planning programs in developing world since then has resulted in decrease in fertility from more than six to fewer than four children per woman between 1960–1965 and 1985–1990, and the family planning programs is found to have accounted for almost half of that drop, 43 percent (Bongaarts, 1997).

2.3.3 Family Planning Seen as Unnecessary

According to the UN, contraceptive use has reduced average number of children per woman by half in developing world whiles in most of the industrialized world, it has further reduced the existing low fertility level to below the replacement level of two children per woman (United Nations, 2007). Critics of family planning have therefore based their argument on such report and claim that the world population explosion is over and therefore consider family planning as irrelevant (Eberstadt, 2006; Wattenberg, 1997).

Bongaarts and Sinding (2009) however disagree and argue that to ensure significant population stabilization, there is need to reduce average fertility level of six to three children per woman to two children per woman. Again Bongaart and Sinding in 2009 however reacted to Critics ((Eberstadt, 2006; Wattenberg, 1997) that family planning is still important due to the fact there is increase in life expectancy by 50 percent since 1950 as a result of enhanced welfare or quality of lives among population such as better standard of living and nutrition as well as expanded coverage of health services including public health interventions. They argue that this improvement in people's welfare has led to reduction in mortality in the population resulting in high population growth, hence the need for family planning.

2.3.4 Family Planning Undesirable and Unnecessary due to the AIDS Epidemic

Some critics contend that the death toll of the AIDS epidemic makes family planning undesirable and unnecessary (Mosher, 2000). They point out that about 25 million people died of AIDS in 2006 and this is likely to increase significantly since 33 million people are currently infected and many new HIV infections are recorded every year (UNAIDS and WHO, 2007). However, proponents argue that it is only in Southern Africa that the HIV/AIDS infection has become huge epidemics, that is one in five adults are infected whiles in other parts of the world the infection level is as low as a fraction of one percent. The high rate of multiple sexual partners, low levels of male circumcision and less use of condoms attribute to high epidemics of HIV/AIDS in southern Africa (Bongaarts, 2008). The epidemics in most countries has stabilized to the extent that proportion of adults that get infected with HIV is no more increasing and is most likely to decline. This could be attributed to massive preventive interventions such as abstinence, use of condoms, VCT, use of contraceptives and antiretroviral therapy by infected individuals among others implemented globally (Bongaarts, 2008). According to United Nations, high AIDS mortality is not likely to decrease population in any Africa country between 2005 and 2050 since the estimated mortality due to AIDS which is two million per year is equivalent to just 10 days' growth in the population in developing world. They estimated that population of Sub-Saharan Africa is likely to increase by one billion between 2005 and 2050, that is from 0.77 to 1.76 billion (United Nations, 2007).

2.4 Family Planning Methods

Since the concept of family planning started evolving in reproductive health care discourses and practices, numerous methods have been identified or developed. They have been classified as simple traditional methods and artificial modern methods. Some of these methods are discussed in the following sections.

2.4.1 Traditional Family Planning

The traditional family planning methods are used globally until the advent of modern family planning method. The effectiveness of these methods cannot be assured unless certain other instructions are adhered to. There are three types of traditional family planning methods namely (i) Lactational amenorhea method (LAM) (ii) Abstinence (iii) Coitus interruptus.

Lactational Amenorhea Method (LAM)

Lactation amenorrhea is family planning method involving breastfeeding effectively and exclusively for the first six months of birth and the mother does not need to give anything to the baby except breast milk (Bekele *et al,* 2003; WHO, 2012). During breastfeeding, the effective suckling suppresses ovulation during that period (Bekele *et al,* 2003). It has been identified to be highly effective (1-2 pregnancies per 100 women during first six months of use), no interference with intercourse and no systemic side effects. Some advantages in using the method is that it does not need clinical supervision and there is no cost to it.. Despite its benefits, it needs strict adherence to instructions with respect to breastfeeding practices until menses return or up to six months. The method does not protect one from getting STDs including HIV/AIDS.

Abstinence

Abstinence is an acceptable family planning method and its effectiveness depends on partners or couples ability to follow without exception (Zieman and Hatcher 2012). Again, many married partners are of the opinion that staying without sex is not an acceptable decision.

Coitus Interruptus

According to Bekele *et al,* (2003), coitus interruptus is the situation where just before ejaculation there is removal of the penis from the vagina so that the sperms do not enter. This method is not considered reliable because there is often possibility of pre-ejaculation leakage of sperms which can result to pregnancy. It is however not suitable for men who ejaculate quickly (WHO, 2012). Therefore, this method is rarely recommended.

2.4.2 Natural Family Planning Methods (NFP)

Natural family planning methods (NFP) or fertility awareness methods (FAM) involve the use of physiological changes which occur in the body and signs in order to recognize the fecund and infecund phases of the menstrual cycle. These methods are not suitable for population where literacy rate is low since it effectiveness requires clients ability to read calenda or charts and read thermometer as well. There are four main types as follows; (i) The rhythm or calendar method (ii) The basal body temperature (BBT) (iii) The cervical

mucus method or billings ovulation and (iv) The sympto-thermal method. The natural family planning method is a birth control method which has no systemic side effects and it is inexpensive as well. It has been identified to promote male involvement in family planning as both couples need to monitor the menstrual cycle and physiological changes hence improving knowledge of reproductive system. However, it has been noted with problems such as being moderately effective as a contraceptive (9-20 pregnancies per 100 women during the first year of use) and its effectiveness depends on client's ability to follow instructions. Again it is not recommended for women with irregular menstrual cycles. It also requires abstinence during fertile phase which is also difficult for some spouses and this sometimes result in unwanted pregnancy and the natural method does not protect couples against STDs like HBV and HIV/AIDS (Pallone and Bergus, 2009)

The Calendar Method

This method is a type of the "standard days" or fertility awareness based method of family planning (WHO, 2012). With this method, the woman keeps a monthly record of the days she menstruates and this enables her determine when she is fertile or not.

Basal Body Temperature (BBT) Method

After ovulation, the ovaries produce hormone called progesterone which results in slight increase in body temperature until menstruation and the basal body temperature could be taken to track this shift or fertile phase of menses. (Pallone and Bergus, 2009). This creates self-awareness of your fertility to help plan for pregnancy and also does not involve use of chemicals or physical devices (FPA, 2014).

Cervical Mucus (Billings) Method

The cervical mucus method is involves sensing the changes in cervical mucus secretions and in the sensations in the vagina (Bekele *et al., 2003;* FPA, 2014). It involves a woman paying attention to the changes in the colour and thickness of her cervical mucus to determine the safe periods to have sex (Patient Education Institutes, 2012). Before and after ovulation, the cervical mucus undergoes some changes such as becoming slippery, stretchy and thick respectively. Couples using this as birth control method need to avoid having sex when the mucus indicates that the woman is fertile. They also abstain during menstrual bleeding. In using this method, the woman needs to checks her vaginal secretion

every day for consistency and when the secretion is very elastic and thin it indicates that she is about to ovulate, hence avoid having sex.

Sympto-Thermal Method

This is considered as best natural family planning method involving the checking of woman's body temperature every day as well as her vaginal discharge. The use of sympto-thermal method involves checking signs such as abdominal cramps, changes in the firmness and position of the cervix as well as spotting (Patient Education Institute, 2012).

2.4.3 Hormonal Contraceptives

Hormonal contraceptives are artificial modern ones that contain either a prostagen combined with estrogen or progesagen alone namely (i) Oral contraceptives (ii) Progestin only injectable (iii) Contraceptive implants.

Oral Contraceptives

Oral contraceptives are pills taken orally by women to avoid pregnancy. They contain female hormones namely estrogen and progestin, that is combined oral contraceptives (COCs) or progestin-only pills (POPs). The Oral contraceptives suppresses ovulation, by thickening cervical mucus and inhibit sperm penetration, making the endometrium less suitable for implantation as well as decrease sperm transport in fallopian tubes (Bekele *et al.*, 2003). This method of contraceptive is very effective if clients adhere to instruction by taking it appropriately and consistently. It has also been found to decrease bleeding during menstruation. Side effects such as nausea, dizziness, mild breast tenderness or headaches and light bleeding occurs when using the method and this usually disappears within two or three cycles. Other side effects are heart attack, stroke, blood clots in lung or brain, liver tumours, although these side effects are not common, they are possible (GHS and USAID, 2013).

Progestin Only Injectable

These injectable consist of synthetic steroid and are given by deep intramuscular injection. Depo Provera and norethisterone enanthate (NET-EN) are the two available preparations. These steroids are slowly released into the bloodstream from the site of injection and it is effective for two months and three months in the case of NET –EN and Depo Provera

respectively. It is long acting and very effective to prevent pregnancy even if a client is a week late for return visit. However it does not protect against STI, AIDS (GHS and USAID, 2013).

Contraceptive Implants

Implants are progestin –containing capsules that are inserted under skin of upper arm of clients. In Ghana, there are two type namely Jadelle (a set of two small plastic capsules) and Norplant (set of six small capsules). It acts by thickening cervical mucus making it difficult for sperms to pass through as well as stopping ovulation in about half of menstrual cycles after first year of use. It is long acting and reversible and prevents pregnancy for about five years. It is easy to use and reduce menstrual blood loss. Despite its benefits, it does not protect against STIs and AIDS and has few side effects such as irregular bleeding, amenorrhoea (no bleeding at all for several months), headaches, mood changes, weight loss or gain (GHS 2007).

Intrauterine Devices (IUDs)

IUD is flexible plastic device inserted into the woman through the opening of the cervical canal and the commonly used one is copper – bearing CUT 380^{A} IUD which is effective for ten to twelve years of use (*WHO, 2012).* It works by preventing sperms from reaching the egg and preventing egg from fertilization as well as thickening the cervical mucus. It is very effective safe and long term, reversible and can be removed through same process.

2.4.4 Voluntary Surgical Contraception (VSC)

These are surgical methods of contraception performed for women and men who are very sure that they will not give birth again and it is permanent hence the need for the client to make an informed decision. They are very effective and convenient. The VSC for men is called vasectomy which prevents spermatozoa from passing into the seminal fluid whiles Tubal ligation for women prevents egg from passing through tubes to meet sperms. The VSC are performed under anaesthesia and by trained medical staff preferably medical officer. It is safe and does not interfere with sexual intercourse but it does not protect against STI/AIDS (GHS, 2007)

2.5 Availability and Access to Family Planning Services

Improving maternal health and reducing maternal mortality is the fifth United Nation's Millennium Development Goal (MDG 5) and one of the targets is to achieve universal access to reproductive health services (United Nations, 2013). Regarding this, US international family planning goal is to meet the development and health needs of 215 million women who have intention to delay childbearing, space births or stop having children any more in developing countries but are not using modern contraceptives (Singh *et al*, 2009). Increasing access to family planning programs has a lot of benefits such as improving maternal and infant health. In developing countries, contraceptive use has reduced the number of maternal deaths by 44 percent (about 270,000 deaths averted in 2008) and 73 percent of the deaths could have been prevented if the full demand for contraceptives were met (Cleland *et. al*. 2012; Ahmed *et. al*. 2012). Again, the use of contraceptives is an effective way of reducing unintended pregnancies and abortions and in some countries like Bangladesh, Bulgaria, Chile, Estonia, Hungary Latvia, Romania and Russia, the increase in use of contraceptives led to reduction in abortion rates (Deschner and Cohen 2003; Guttmacher Institute 1999). Despite the importance of family planning services coupled with its integration into routine reproductive health service in many countries, there are still issues with its availability and accessibility. The availability and accessibility is determined by a lot of factors such as geographic distribution, fixed and outreach health care facilities, cost of service in monetary terms and time forms to users and social acceptability of the services (Ali *et al.*, 2008).

Shengelia *et al*, (2003) defined access as probability of one in need of health service is able to get it and the service is effective according to current medical practice. Accessibility of family planning services can be looked at from different dimensions including physical, social and economic. Physical or geographic accessibility refers to the extent to which family planning services and supply points are within locations where expected clients can easily reach them (Brair and Eltayeb, 2013). Ali *et a*l., (2008) suggest that a health care facility is physically accessible if a population resides within 2 to 5 km or at 20 to 60 minutes walking distance to facility with requisite staff posted and available. They also argue that social accessibility is defined in terms of religious, tribal cultural issues affecting service delivery. For instance, in Pakistan society, tribal cultural issues such as women inability to travel alone are seen as challenge in improving their health

(Cleland *et al*., 1996 also cited by Moazzam *et al*, 2008). Again, a study also reported that majority of the women in Pakistan want male family members to accompany them when visiting health centre (Mumtaz and Salway 2005, Piet-Pelon *et al.*, 2000). At the same time, they prefer and feel comfortable discussing reproductive health issues with women doctors than male doctors particularly when it comes to gynaecological and obstetric consultations (Green *et al.*, 1997). This implies that in such societies, absence of female doctors or service providers in health care facilities will definitely make accessibility to reproductive health services socially unacceptable.

Economic accessibility on the other hand is the degree to which cost of reaching family planning service or supply point and at the same time receiving contraceptive services are affordable to most of the target clients (Brair and Eltayeb, 2013). They also identify some other forms of accessibility which includes cognitive and psychological accessibility. Cognitive accessibility describes expected clients knowledge about family planning services and methods availability as well as awareness about family planning service delivery points. Psychological accessibility also represents the degree to which expected clients for family planning services are not hindered or constrained by attitudinal and social factors such as stigma of use, religious opposition, tribal opposition, husband opposition etc.

2.5.1 Factors that Affect the Accessibility to Family Planning Services

Ensor and Cooper (2004) suggested a lot of barriers to health services access from both demand and supply sides. They identified demand side barriers as factors affecting demand and occur at individual, household, or community level such as income, social, household and cultural characteristics as well as knowledge on care available to them among other things. On the other hand, the supply side barriers are factors that border on production of health care such as inputs prices, knowledge of technology of treatment and management efficiency. In all cases, the poor and most vulnerable groups are most affected by these barriers as they benefit less from public spending (Demery 2000; Makinen *et al.*, 2000). For the poorest to have access to health services there is the need to overcome both demand and supply sides barriers (Sachs, 2001). Meanwhile Ensor and Cooper (2004) pointed out that, most health policy interventions give more attention in addressing supply side barriers such as improving on staff skills, protocols of treatment,

availability of supplies among others, while little attention is given to demand side barriers in accessing health services by clients in low income countries.

All the above mentioned factors such as cost, religion and husband opposition, distance to access services and knowledge of service availability could really influence access and utilization of family planning services. Stephenson and Hennink (2004) assert that the challenges of access to family planning or reproductive health services go beyond the physical or geographical access. However, it now recognizes issues of economic, administrative, cognitive and psychosocial access (Bertrand *et al* 1995; Foreit *et al* 1978). This paper pointed out that the greatest impediment to use of family planning in Pakistan among urban women are religious and husbands or personal disapproval. Majority of these women were also identified to be the poorest, have no education or no access to radio or television and living with mother – in – laws. Similarly, a study in squatter settlements in Karachi also indicated that mother –in –laws were opposition for women to accept family planning methods (Pasha, *et al.,* 2001) and this is an indication of traditional behaviour towards the use of family planning and is psychosocial barrier. Again a study in Jimma Zone in Ethiopia established that geographical access (closeness to family planning service delivery point) and awareness do not sufficiently mean that one will use the service, rather it is side effect of contraceptives and wanting to have child that matched with non- use of contraceptives (Tilahun *et al.*, 2013).

Factors such as scarce clinics or hospitals, high cost of reaching facility, lack of skilled staff, non-availability of essential commodities result in unmet need for reproductive and family planning service in remote rural communities. Full range of modern contraceptive particularly long- acting and permanent methods such as IUD, vasectomy, Jadele are provided in only urban health facilities (Marries Stopes International, 2011). This implies one can have access to the facility alright but non-availability of preferred choice of family planning method could deny the person of using family planning. According to Campbell *et al.,* (2006), barriers are factors that constrain availability of the technology and or appropriate message that women want to have in order to have control over when to have a child or not. Barriers to family planning use exist everywhere and even in a developed country like United State, it is a major problem (Gelberg *et al*.,2002).

Shengelia *et al*, (2003) also argued that, there are some gaps that limit an individual access to health services. Resource availability gap occurs when an individual lacks access to health services because the facility lacks trained health professional, equipment or medications needed to provide a particular service. Again, physical availability gap limit one's access when available resources needed for service provision are not located in adequate proximity to people that need them. Furthermore, access to health services is impeded when the individual needs to pay for it through health insurance or out of pocket but do not have money for that given rise to affordability gap whiles cultural acceptability gap occurs where access is limited because health service provision is in conflict with religion, social norms and cultural beliefs. Shengelia *et al*., (2003) also noted provider - related quality gap which impedes access when the quality of service provision is poor or inadequate and strategic choice gap occurs when wrong treatment is given by health care service provider. Also is adherence gap which affect access when individual behaviour sometimes limit effectiveness of health intervention particularly if the situation require taken medication for longer period of time. All these gaps as discussed could also influence access to family planning services.

Campbell *et al.,* (2006) also identify another factor that affects people's accessibility to family planning services termed "provider bias". This is related to the perception of service providers about method or mode of delivery which could also impede access to family planning method. In many countries health service providers are really respected and their opinions about the services are respected by most clients and these sometimes deny access to family planning during family planning consultations. For instance Karavus *et al*. (2004) indicate that one of the main reasons for women not using pills as method of family planning in Istanbul was that, during family planning counselling , service providers do not recommend oral contraceptives as first choice of family planning but pay more attention to health conditions that restrict the use of the pill. Provider bias has been identified to be more pronounce against poor clients. In 2001, family planning service providers were found to be denying access to method in Afghan refugee camps in northern Pakistan where service providers were asking whether clients have permission from husbands to access or use contraceptives. These women could also access family planning services from bazaar without such interference and the study indicated that six percent of the refugee women bought their injectable contraceptives from the local market and only four percent received from family planning service providers (Tomeczuk, 2000).

In Ghana, marriage requirements, minimum age were some of the restrictions service providers use in denying access to family planning methods for clients (Stanback and Twum- Baah, 2001). Regarding age, in urban Uttar Pradesh, India, a study identified that many clients were denied access to pills, intrauterine contraceptive device (IUCD), sterilization and injectables due to clients' maximum age by about 80 percent of medical officers. The doctors denied women of 48 and younger access to these methods although some of these women in this age range were having the likelihood of using family planning methods. In the same study it revealed that family planning service providers denied access to contraceptive practice due to parity. Many of the service providers, that is, about 50 percent require client to have two children before client is given pills (Calhuom *et al.,* 2013). Again in the same study in India, about 99 percent of medical officers denied access to sterilization due to marital status and this was in line with Government of India guidelines which indicated that sterilization is for ever-married ones.

2.6 Utilization of Family Planning Services

A lot of studies have proven that there is high awareness level of modern methods of contraception in many developing countries (Stephenson and Hennink, 2004; Akintade et al., 2011). For instance, in Pakistan 94 percent of married women know of a modern method of contraception however, only 17 percent of them use a modern method of contraception (Stephenson and Hennink, 2004). Also as high as 97.5 percent of female university students in Lesotho have knowledge about family planning while 55.3 percent were currently using a contraceptive method (Akintade *et al.,* 2011). In Ghana, knowledge about modern methods of contraceptive stands at 99 percent among men and 98 percent among women meanwhile the contraceptive prevalence rate is about 24 percent (GSS, GHS and ICF Macro, 2009). Despite high level of awareness of family planning in many countries there are still challenges with utilization of family planning services in many developing countries. Furthermore, about 17 percent married women in less developed countries would like to avoid pregnancy but are not using any family planning method and all these women are considered to be having unmet need for family planning (Ross and Winfrey, 2002).

Over the years, many countries have put in place a lot of family planning intervention to improve on contraceptive use thereby reducing unmet need for family planning. However studies reveal that there are still impediments other than geographical access hindering

women from using contraceptives (Ashford, 2003). Women with unmet need for family planning in developing countries form large fraction of the married women of reproductive age and according to Demographic and Health Survey, 36.9 percent in Rwandan and 35 percent in Senegalese married women had unmet need for family planning during the period 1990-2000 (USAID, 2005) whiles in Ethiopia it was 36 percent in 2000 and 33.8 percent in 2005 (Hailemariam and Haddis, 2011).

2.6.1 Factors that Influence the Utilisation of Family Planning in Developing Countries

The factors that influence the use of family planning in developing countries are discussed seriatim.

Geography and Method Choice

As indicated earlier, there is direct line between travel times from a women's home to health facility indicating that the shorter the distance the more likelihood for the women to use contraceptives (Rodríguez 1978; Chamratrithirong and Kamnuasilpa 1984; Ross *et al*. 1989; Bertrand *et al*. 2001). For instance a study in Bangladesh revealed that married couples were two and half times less likely to use contraceptives if they need to travel for only 30 minutes or more to family planning providing health facility (Levin *et al*. 2000). Also the available methods influences the decision whether or not to utilise the service.

Financial Costs

Family planning methods prices vary in different markets and in its brands as well and this could influence one's decision to access the method. Levin *et al*., (2000) as cited by Campbell et al (2006) indicated that there was little effect of cash prices of method of choice and its use in Bangladesh. However, Molyneaux (2000) contrast this by establishing that raising prices of family planning methods by 100 percent resulted in decline in use by three to five percent in Indonesia (cited in Matheny, 2004). Again, Ciszewski and Harvey (1994) also cited by Campbell et al in 2006 revealed that increase in price of 60 percent for condoms in Bangladesh led to 46 percent decrease in condom use. In Bihar, India, increasing price for female sterilization by 25 percent resulted in 32 percent decrease in number of procedure performed (Gopalakrishnan, 2003) quoted by Campbell et al (2006). A study also suggested that 97 percent of Africans would not be able to pay for full cost of modern family planning method (Green, 2002).

Another aspect of cost is related to time and distance covered to reach the facility. In Bangladesh, it was seen as second most expensive item after medicines for patients (CIET Canada, 2000). Rankin *et al*., (2001) indicated that in Australia, distance cost heavily affect the poor. They again indicated that one seeking health care is time intensive as clients need to give up periods of work or leisure to get treated in health facilities and it was found to be accounting for 60 percent cost of receiving surgical treatment for patients from rural areas in Australia. Convenient opening hours of facilities and distance as well were found to influence utilization of modern contraceptives among reproductive women in Nkwanta district in Volta region of Ghana (Eliason *et al.,* 2014). Bosu *et al*., (1997) and Segall *et al*., (2000) as quoted by Ensor and Cooper (2004) further indicated that suitable opening hours of health facility was found to be determining the utilization of services in Vietnam and Ghana as it helps individual to take some time off their economic activities such as farming to seek for health services

Status of Women

Some religious and cultural traditions seem to affect women in using contraceptives as some women in some countries need consent of husband in order to access health facility or use contraceptives. In the Punjab, Pakistan, Casterline *et al*., (2001) in their bid to find out about perceived cost of using family planning method and motivation revealed that, women are of the view that using contraceptives will conflict their husbands preferences and behaviour towards family planning and also the social and cultural cost of using family planning. Ashford (2003) observes that opposition by husbands or others accounted for about 30 percent of women studied in sub-Sahara Africa not patronising family planning services.

Misconception about Family Planning

Misinformation and fear of side effect of contraceptives such as being uncomfortable, interference with spousal sexual relation, costly is leading to non-use (Casterline and Sinding, 2000). One's perception of side effect of method could be influenced by social environment. In some societies some women avoid methods that make them have irregular or increased vaginal bleeding during menstruating. For instance in South Africa, many men prefer dry sex to wet one and vaginal wetness is considered to be second common side effect of after amenorrhea by women using progestogen only injectable

contraceptives and a reason for non-use (Smit *et al.,* 2002) while in Mali some women are of the view that oral contraceptives and injectables causes infertility (Castle, 2003). A negative propaganda about the use of oral contraceptive in Japan about a decade ago before its dissemination and approval in 1999 resulted in 70 percent of the women in fear of using the oral contraceptive (Potts, 2003; 2005). Further, a study in Barekese, a sub-district in Ashanti region of Ghana documented fear of side effect of hormonal method, contraception interferes with body normal process, husband/partners disapproval, lack of access or contraceptive too costly as some reasons for married women not using contraceptives (Krakowiak-Redd *et al, 2011*).

Socio-Demographic Factors

Hailemariam and Haddis (2011) indicated that socio – demographic factors affecting married women who intend to use family planning method but are not using them are more likely to be residing in rural areas, have lower level of education, lower level of knowledge of family planning, have no work other than household chores as well as have not received any visit by family planning service provider. Also, literacy level can positively influence contraceptive knowledge and one's wish to limit or space birth (Hogan *et al*., 1999). Similarly, a study in Uganda documented that women with secondary or higher education have lower unmet need (Khan *et al.,* 2008) and in Kenya it was found that women that did not complete primary education were about two times more likely to have unmet need for family planning in comparison with women that completed primary education or higher (Wafula and Ikamari., 2007).

Also, due to the fear of child death, number of living children was identified to affect people willingness to use family planning method or not. Hailemariam and Haddis (2011) indicated that women with less than five living children want to have more children due to fear of child death; hence they do not use contraceptives. In Ghana the demographic and health survey in 2008 indicated that the reasons for non-use of contraceptives among currently married women were more of method related factors such as health concerns, fear of side effects, lack of access/too far, cost too much, inconvenient to use, interfere with body's normal process, followed by fertility-related factors including infrequent sex or no sex, menopausal/had hysterectomy, subfecund/infecund, wants as many children as possible, and opposition to use comprising respondent opposed, husband/partner opposed, others opposed and Religious prohibition.(GSS, GHS and ICF Macro, 2009).

Education and Information

Many studies are pointing to the fact that education and information really impact on health and health care (Grossman and Kaestner, 1997; Agha, 2000; Ensor and Cooper, 2004). Ensor and Cooper, 2004 indicated that the effect of education and information could be considered in two parts; thus first, education on demand for services which measure the duration of schooling and it has been established that there is a direct relationship between good health and level of education (Grossman and Kaestner, 1997). For instance, a study in Pakistan indicated that maternal schooling was a major factor influencing child survival (Agha, 2000). Again high education level was identified to be a major factor for above average social development (Mehrotra, 2000). Education helps one to improve on the ability to produce good health through adopting healthy behaviours as well as improving on once literacy level thereby increasing their desire to use health facilities or services (Ensor and Cooper, 2004). The second effect of education and information has to do with information on health care services available to users. One's ability to assimilate the health education or messages is also a major factor influencing the demand for the service. For instance, Okumura *et al.,* (2002) found out in their research that excessive use of antibiotics through self-medication was due to lack of information on malign effect of it. There is much evidence that demand for family planning services is hindered by lack of appropriate information on family planning methods and side effects (DeClerque *et al*., 1986; Donati *et al*., 2000).

Environment of Service Provider

Kanthiti (2007) also identified some other factors that motivate adolescents to use family planning services, namely: confidentiality and privacy, knowledge on reproductive and family planning services, health staff positive attitude, availability of service and friendly environment, convenience of opening hours and location of clinic, individuals risk perception, peer involvement and parental support. These factors are not necessarily restricted to influencing adolescents but also adults.

Family-Related Factors

The utilization of family planning services by women is sometimes influenced by their male partners and other family and community members. . In Ilorin, Nigeria, a research revealed that men who are Christians really support contraception practice to avoid

promiscuity whiles those who are Muslims are not very supportive to family planning (Olawepo and Okedare, 2006). They also indicated that educated men were more receptive, have more access to sexuality information including sexual attitudes, essence of child spacing than uneducated men and so can positively influence their partners' decisions on the use of family planning. Again, they argue that men's attitude towards family planning was directly related to family size in the sense that men with fairly large family size tend to practice contraception more than those with small family size. Gender of children described this as situations where mothers have only one sex of children and changed their decision of not using contraceptives again as they are seeking for sex of children they do not have (Speizer *et al*., 2000).

From the forgoing discussions, it could be realized that factors influencing utilization of family planning can be viewed from both service provider (representing the supply side) and client (representing the demand) perspectives. Ensor and Cooper, (2004) suggested some factors on both sides that influences the utilization of health services (see *Figure 2.1*).

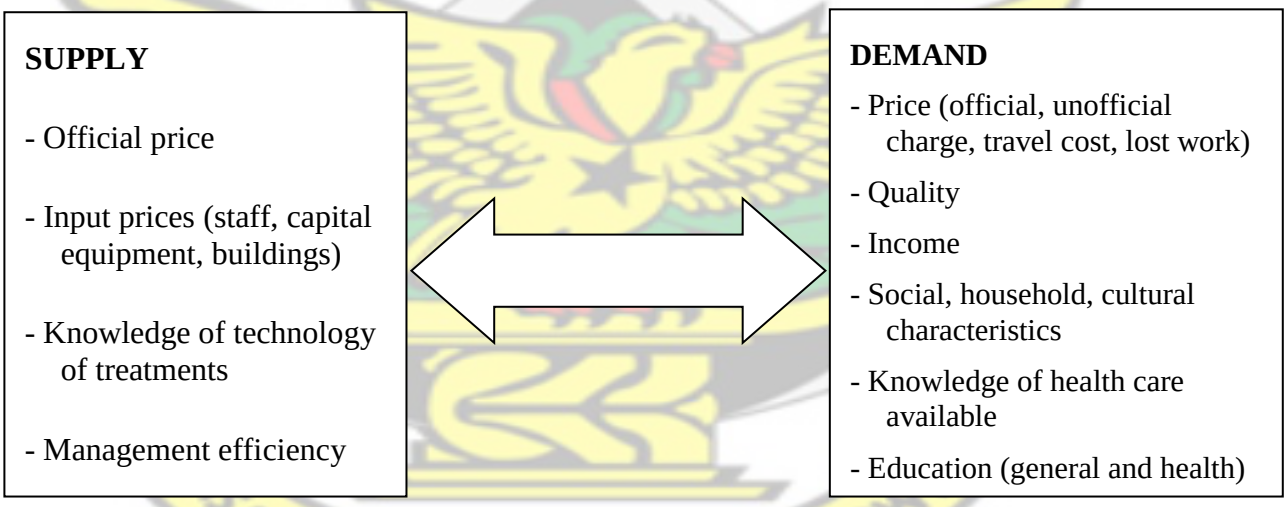

Figure 2.1: Demand and Supply Determinants of Utilization of Health Care.

Source: Ensor and Cooper (2004)

As indicated in the figure 2.1, supply factors involve combination of factors needed for production of effective health services. The official prices of health services could serve as barrier to utilization particularly when there is high cost of service as well as unofficial charges from providers. Input prices such as availability of quality staff and their wages, prices and quality of drugs and other consumables, equipment and buildings needed to

produce services can also influence utilization since lack of these items will virtually serve as barrier to utilization of services. Management and knowledge of technology is also one of the key factors at the supply side and it involves the service provider's capability of managing cases or giving treatment by applying appropriate skills or technology according to modern standard of medical practice. Poor quality of management of cases and inability of provider to treat disease conditions with given technology always impede utilization of services. The demand side factors occurs at individual and community levels and the individual level factors such as age, sex, income, knowledge of service and need for it determines someone's usage of service. Community issues such as cultural, religious and social also affect utilization. Apart from the service or treatment and travel costs, utilization of service is affected by opportunity (time) cost of receiving service or treatment since receiving treatment or health care can be time consuming particularly in developing countries. This influences one's thinking of utilizing services since the client needs to give up long periods of their economic activities to receive healthcare service.

2.7 Family Planning in Ghana

In Ghana, family planning services is considered as one of the main services and integral part of reproductive health services and it is the primary responsibility of all service providers at all levels of service delivery particularly those producing reproductive health services to render family planning services (GHS, 2007). Ghana was one of the first countries to adopt population policy in Africa in 1969 and at that time the use of family planning services was very slow until 1988 where modern contraceptive use reached five percent. According to the GSS and Macro International (1999), modern contraceptive use tripled from five percent to 13 percent and total fertility rate also reduced from 6.4 to 5 lifetime births per woman between the years of 1988 and 1998. In order to streamline the practice of contraception and improve quality of care for clients to access family planning services, Ghana developed and disseminated National Reproductive Health Services Protocol in addition to guidelines and standards, of which all service delivery points rendering family planning services could adhere to (GSS and Macro International, 1999).

Since 1969, the government has implemented family planning programs through major projects such as Contraceptive Social Marketing(CSM) project (1987 -1990), the Ghana Family Planning and Health Programme (FPHP) (1990- 1996) and Ghana Population and AIDS Project (GHANAPA) (1996- 2000). The main aim of these projects was to boost the

demand and utilization of modern contraceptive through social marketing. The FPHP helped in building and expanding public and private sectors capacities to provide contraceptives services, supplies and information including sexually transmitted infections and HIV infections (Miller *et al.*, 1998; Adamchak *et al*., 1995). Trend analysis of family planning services in Ghana by Hong *et al.,* (2005) using studies carried out in 1993, 1996, and 2002 indicated improvement in various areas of family planning services. Their findings are summarised as follows;

- Infrastructure and Service Availability

About 96 percent of the facilities provide family planning services five or more days per week. There is improvement in availability of private rooms for family planning examination from 59 percent in 1993 to 91 percent in 2002, availability of piped water, a functioning client toilet, and electricity also improved from 28 percent in 1993 to 34 percent in 2002. Clients were also identified to be quite satisfied with level of privacy and waiting times in receiving family planning services.

- Essential Equipment for Family Planning Services

Regarding this, only 47 percent of the facilities were fully equipped for rendering family planning services such as functioning blood pressure apparatus, stethoscope, weighing scale, vaginal speculum, and examination table). The Planned Parenthood Association of Ghana (PPAG) and maternity clinics were found to be better equipped than hospitals and health centres. With respect to consumable commodities, 95 percent of facilities having both clean gloves and sterile syringes and needles.

- Availability of Contraceptive Methods

The trend analysis indicated that contraceptive methods being provided by health centres remained unchanged while hospitals and private clinics have increased in different type of methods being offered. However percentage of facilities providing intrauterine device (IUD) decreased.

- Availability of Services with Family Planning

Other services such as sexually transmitted infection (STI) were found to be available at sites providing family planning showing improvement from 42 percent in 1993 to 71

percent in 2002. There was also significant improvement of availability of guidelines for STI services from 19 percent in 1996 to 70 percent in 2002. More providers were asking relevant questions to screen family planning clients for STIs as one in three observed family planning clients were assessed for STIs in 2002 (up from one in four in 1993 and one in five in 1996). Educational materials on STIs and HIV/AIDS for clients were more available, rising from 25 percent in 1996 to 37 percent in the year 2002.

Provider qualifications, experience, and training, with respect to training, there was significant improvement in number of service providers that have received in- service training on counselling for family planning during past five years from 38 percent in 1993 to 60 percent in the year 2002.

With respect to adherence to standards in practice, a little changed was observed as to initial history and examination for new clients is conducted. Again the use of visual aids during counselling was low and availability of client educational materials about family planning remained same for a decade. This is an indication that the family planning program in the country has considerable improved since its inception.

2.7.1 Status of Family Planning, Resource Requirement and Policy Issues in Ghana

Ghana's population has increased significantly by 30 percent that is rising from 18.9 million in 2000 to 24.6 million in 2010 (GSS, 2012). Considering that rapid population growth affects the social and economic development, the Government of Ghana strongly supported a policy for family planning programmes. The Revised National Population Policy indicated clear targets for fertility and contraceptives use as follows:

1. To reduce the total fertility rate (TFR) from 5.5 to 5.0 by 2000 and further to 3.0 by 2020
2. To achieve contraceptive prevalence rate (CPR) of 15 percent for modern contraceptives by 2000 and 50 percent by 2020: and
3. To reduce annual population growth rate of about 3 percent to 1.5 percent by 2020.

Although this policy was formulated in 1994, its targets are still being used in tracking progress made in Ghana's fertility rate and population growth as well. Also, some other national policies support family planning in the country. The Road Map for Repositioning

Family Planning in Ghana (2006–2010) advocates for increase in: (i) political commitment to family planning programs; (ii) public awareness and acceptance of family planning as important to national health and socio-economic development; and (iii) funding for family planning commodities and services (GHS, 2006). In addition, the current national blueprint for development, the Ghana Shared Growth and Development Agenda (GSGDA) *(*2010–2013*)*, explicitly aims that family planning be incorporated into national development plans and activities at all levels (NDPC, 2010).

With these policies in place and commitments of government as well as partner institutions in implementation, the country has been making headways in achieving some of its targets in National Population Policy. For instance, the 2010 population and housing census revealed that the annual population growth rate declined 2.5 percent (GSS, 2012). Also, the 2008 Demographic and Health Survey (DHS) also pointed out that Ghana's total fertility has reduced to average of 4 children per woman in 2008. The report also indicated that married women ages 15 – 49 years using modern contraceptives has risen to 17 percent (GSS, GHS and ICF Macro, 2009). However, there was a mismatch between the TFR and contraceptives prevalence rate from 1988 to 2008, in that as the TFR is gradually declining over the years, it does not always show corresponding increase in contraceptives prevalence rate (*see Figure 2.2*)

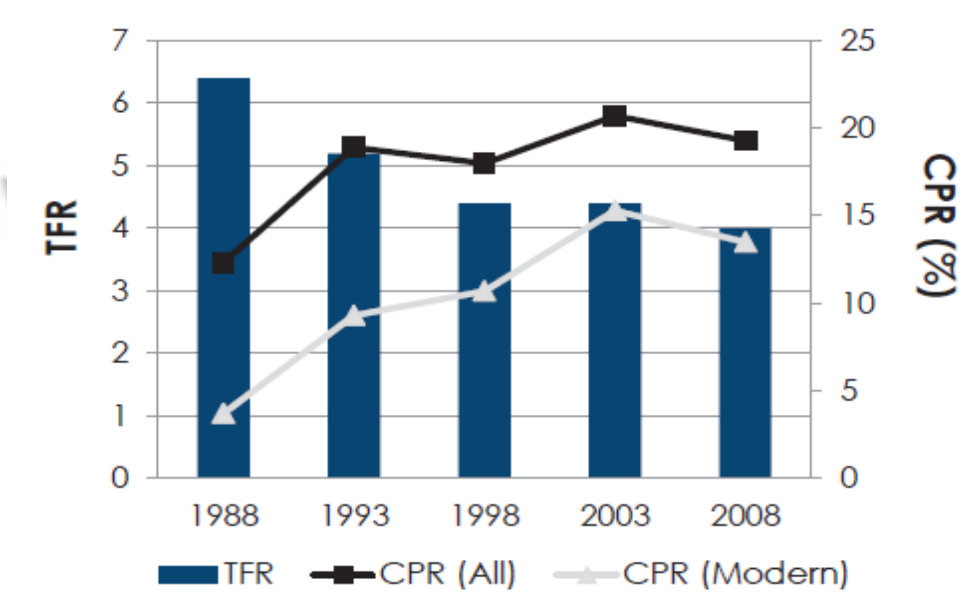

Figure 2.2: Historical Trends in Fertility and Contraceptive Use in Ghana

Source: Health Policy Project, 2012

From Figure 2.2, the total fertility rate (TRF) has steadily declined from 1988 to 2003 in Ghana with corresponding increase in contraceptives prevalence rate for modern contraceptives for the same period. However, contraceptives prevalence rate for all family planning methods showed increases in 1993 and 2003 with a dip in 1998. In the year 2008, further decline in TFR did not show corresponding increase in contraceptive prevalence rate (CPR) for both all and modern contraceptives, rather a decline. This implies that much work must be done by all stakeholders to achieve expected trends of TRF and CPR thereby achieving targets regarding fertility and contraceptives use in the Ghana.

Furthermore, the 2008 GDHS reported that unmet need for family planning (for both spacing and limiting) among women was 35.3 percent (GSS, GHS and ICF Macro, 2009) which has reduced to 26.45 percent in 2011 as indicated by the 2011 Multiple Indicator Cluster Survey (MICS) (GSS, 2012). Also maternal mortality trend reduced from 451/100,000 in 2007 to 350/100,000 live births in 2008 (WHO/UNFPA/World Bank, 2008 cited by Aboagye, 2012). Despite all these achievements made, there are still challenges in the accomplishment of targets set by the country as well as ensuring sustainability of family planning programs. The Reproductive Health Commodity Security Strategy (2012 – 2016) revealed some of the constraints as: (i) scarce public funding for FP and reproductive health commodities: and (ii) an over dependence on donors for commodity procurement (MOH, 2011).

In order to address some of these challenges and strengthen family planning programmes thereby achieving the national targets, the National Population Council (NPC) and its partners in collaboration with the USAID-funded Health Policy Project estimated family planning costs, and projected funding for the years 2010–2015 and using an application of the GAP (Gather, Analyse, and Plan) Tool. The GAP tool was used to make projections regarding the contraceptive, service provision, and programme support funding gaps in Ghana to enable policymakers, decision makers, and development partners know the costs involved in achieving national family planning goals and addressing constraints to progress (Health policy project, 2012). The projection indicated that Ghana needs a total cost of about US$41 million to undertake family planning activities (commodities plus program cost) in 2010. Furthermore, the Health Policy Project (2012) revealed that, in order to achieve the National Population policy goal by 2020, Ghana should have a

contraceptives prevalence rate of 33 percent and resource requirement is estimated to be US$78 million and funding gap estimated to be US$15 million by 2015.

Considering the above estimation of funding for family planning service delivery in the country as well as achieving the national population targets, it is becoming increasingly important for the Government of Ghana and development partners to make effort to increase funding for family planning and other reproductive health services. The government should increase its budget and expenditure for family planning commodities, review policies and standards of operation so that family planning service providers could be expanded to other cadres at the lower level of health service delivery. Again developments partners were urged to take cost of training, logistics and supervision of family planning delivery and contribute to procurement of family planning commodities (Health policy project, 2012). Furthermore, the government in its effort to achieve the national population goals partnered donor agencies to develop Ghana National Contraceptive Security Strategy to provide a strategic framework as well as steps needed to achieve Contraceptive Security in Ghana. According to the strategy, the contraceptive security is to ensure that every woman, man, youth can make a choice, obtain and practice contraception and use of condoms they need for family planning and prevention of sexually transmitted infections (Government of Ghana, 2004).The strategic framework or plan revolves around the Ministry of Health five key strategic objectives or pillars which define the activities and approach as shown in Figure 2.3.

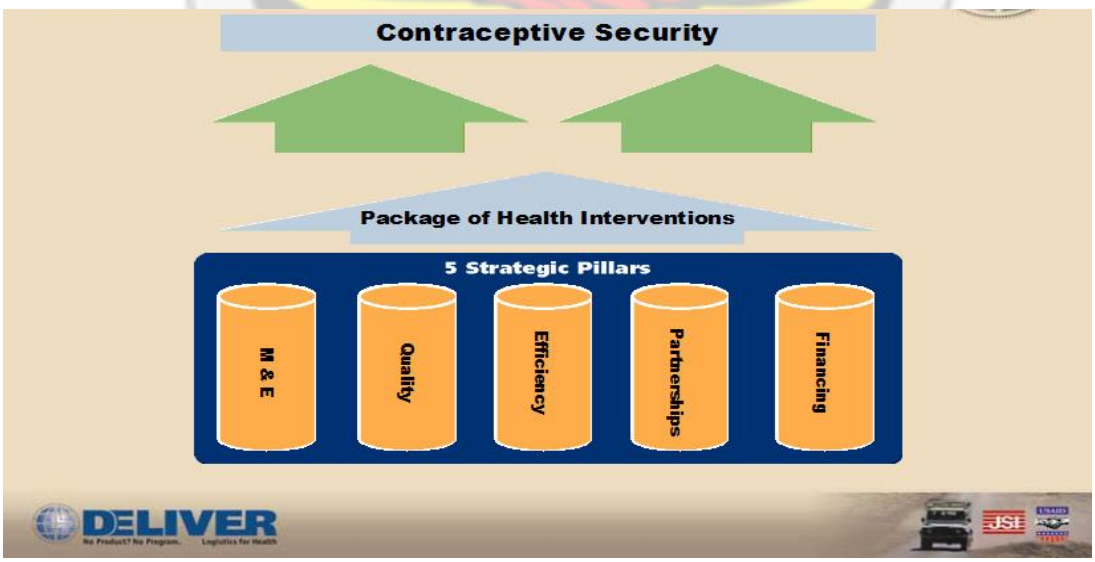

Figure 2.3: Ghana Contraceptive Security Strategic Framework

Source: Government of Ghana, 2004.

From Figure 2.3, in order to ensure contraceptive security in the country as well as delivery quality services to clients, there is the need to ensure quality; meaning to maintain standard of contraceptives being procured, intensify forecasting and quantify the needs for the country. Also there is need to improve on skills of contraceptive service providers and remove barriers to access and utilization. Efficiency as pillar refers to improving on storage facilities and use of standard operating procedures (SOP) in management of contraceptive. Again, the ensuring timely clearing from port, avoiding cross –border and internal leakage of contraceptives into the country and monitor the supply system as well. Regarding financing, there is need for advocacy for financial support for contraceptives activities across all sectors including donor support, waive tariffs for contraceptives, rationalize brands and methods and regulate prices of contraceptives. While partnership involve advocacy for participation of donor partners in contraceptives security activities, conducting advocacy conferences for policymakers to get their support and involving the private sectors health care providers. Ensuring partnership, there is also the need to coordinate and advocate with CHPS community mobilization at the District Assembly level with DHMT. The monitoring and evaluation is to have a monitoring plan as a country with data collection tools to monitor progress so far as contraceptives activities are concerned. Stakeholders such as Government, Donor partners, NGOs, Private sector organization and individual should also hold quarterly meetings to review the contraceptive security activities. From the above discussions, it would be realized to strengthen the contraceptives security, there is the need for participation of a number of stakeholders and the strategic pillars require a lot of health interventions at all levels of health delivery.

Box 1: The Five Pillars of the Contraceptive Security Strategy

Quality
- Maintaining standards
- Improving acceptability of products to client
- Improving equipment at service delivery points.
- Rationalizing the range & availability of products
- Improving gender & age access
- Reducing barriers to access
- Improving physical access
- Improving provider attitudes and personal biases

Monitoring & Evaluation
- Developing data collection tools
- Launching an M&E plan
- Quarterly and annual reporting
- Regular meetings of ICC/CS and Implementation units

Efficiency
- Improving supply chain efficiency
- Improving procurement planning & systems
- Decrease length of time for port clearance

Financing
- Rationalize pricing structure
- Improve market segmentation
- Diversify and expand financing base
- Quantifying funding gaps, need and commitment
- Improving Forecasting and Procurement capacity
- Rationalize brand and method mix
- Improving advocacy within GoG for contraceptives

Partnerships
- Strengthening coordination mechanisms with partners
- Expand coordination with other sectors, market segmentation and rationalization
- Expand use of private & civil partnership
- Improve inter-ministerial collaboration

Source: Government of Ghana, 2004.

2.7.2 Family Planning Method Offered in Ghana

In Ghana, the family planning program provides varieties of family planning methods and services using both clinical and non-clinical settings. These family planning methods and services are provided through Ministry of Health (MOH)/Ghana Health Services (GHS) which is public, PPAG and GSMF (non- governmental and private sector), private midwives, medical practitioners, pharmacists and chemical sellers. The family planning methods being offered in Ghana includes two brands each of combined oral contraceptives (Lo-femenal / Microgynon) and progestin only pills (Ovrette and Micronor); two brands of Progestin-only injectables (Famplan / Depo-Provera); a monthly combined injectable (Norigynon); Condoms (male condom and female condoms (introduced in 2000); vaginal foaming tablets (Neosampoon); Implants (Norplant); and intra-uterine devices (Copper-T). Female and male sterilization services are provided in public and private facilities with trained providers (GHS, 2007). Most of these products are donated by DFID, USAID and UNFPA. In 2000 and 2001 the Government of Ghana

through World Bank loan supported procurement of contraceptives by a total amount of $4.2 million (Government of Ghana, 2004).

Family planning programme is said to be successful if the zeal to practice contraception is growing and this is normally translated to rise in number of people using contraceptives. As indicated earlier, contraceptive use in Ghana among the married has increased from13.0 percent in 1988 to 23.5 percent in 2008 (GSS, GHS, and ICF Macro, 2009). Again proportion of sexually active women using contraceptive has increased from 43.5 percent to 50.4 percent in 2003 to 2008 respectively. Regarding men's habit towards use of family planning method, about 57 percent of the men aged 15 to 59 indicated that they have used male method at one time with condom forming about 46.0 percent. Knowledge about contraceptive methods is very high among both women and men (GSS, GHS, and ICF Macro, 2009). That is 97.8 percent of all women and 97.9 percent of married women, then 98.9 percent of all men and 99.5 percent of married know about contraceptives methods. Although the knowledge level of family planning method among both men and women is very high, utilizations of family planning is low and faced with a lot of challenges in Ghana (Stanback and Twum-Baah, 2001). These challenges could be either provider or client related thus supply and demand factors.

A situational analysis in 1993 and 1996 by Stanback and Twum-Baah (2001) pointed out restrictive practices by family planning service providers that deny clients access to family planning methods in Ghana. The practices includes marriage and spousal consent requirements where married clients are considered for one non-permanent method with simple reason that single women should not be allowed to use family planning. Regarding intrauterine device (IUD), providers indicated that such restriction helped them screen for IUD clients who are potentially promiscuous to reduce possible risk of post insertion infection. Spousal requirement was for the reason that family planning is decision for both partners, so that service provider will not be blamed in case of any side effect, infertility or promiscuity since the husband could accuse the wife of infidelity without his consent and this could lead to divorce or punishment.

Secondly, age restriction was also mentioned by Stanback and Twum-Baah in 2001 revealing that most of the providers were using minimum and maximum ages as requirement for method to be given to clients particularly injectables. The minimum age

for this method was 30 years with reason that women should be old enough to marry and give births. Again most of providers were of the view that family planning is not for younger people and the minimum age will prevent younger ones from indulging in promiscuity. Another restrictive practice by service providers in Ghana was parity restriction where providers were requiring women to have certain number of children before given a family planning method. With respect to injectables, a woman should have three, four or five children before given and the reason was that providers believe that hormonal methods such as injectables could delay fertility or cause infertility. The parity requirement for IUD clients is one to five children with reason of possible infertility and tight cervix.

The Ghana Health Service National Family Planning Protocol suggests that clients have right to information, choice, privacy, dignity, continuity, and access to quality service, safety, confidentiality, comfort and opinion when providing family planning services (GHS, 2007). Hence client rights should be respected by all family planning service providers in Ghana and clients should be assisted to make informed choices about family planning methods options. The national protocol also pointed out that it is good to counsel both partners if practically possible but consent of partner for contraceptive is not a requirements (GHS, 2007). Although the protocol indicates that partner consent is not requirement for one to practice contraception, the GDHS 2008 revealed that 86 percent of married women using contraception indicated that their husband or partner are aware about their use of family planning whiles 11 percent said that their husband/partner are not aware about their use of contraception, and three percent were not sure whether husband or partners are aware (GSS, GHS, and ICF Macro, 2009).

Regarding informed choices, service providers are supposed to inform clients about all family planning methods available, side effects of all methods and what they should do in case of side effect and alternative methods to use and this help in compliance by clients in using the method. And again the GDHS 2008 report, pointed out that 54 percent of health workers informed client of side effects or problems of the method to use while 53 percent discuss with clients about alternative methods to use. More so, about 51 percent of the health workers educate them on what to do if they experience some side effects in using method and this according to the survey indicates little or no improvement in helping clients make informed choices over the past five years (GSS, GHS, and ICF Macro, 2009).

Utilization of family planning in Ghana is influenced by a lot of factors and studies have indicated that fear of side effect, fear of infertility, wanting to have more children, family planning is harmful and closed relatives were found as barriers to utilization in Kwabre district in Ashanti region (Akyeah, 2007). A study by Biney in 2011 at Korle Bu and Tema Hopsital in Greater Accra which sought to explore the use of contraceptives by women with induced abortion also revealed that most of these women lack information about family planning methods prior to abortion, those with prior knowledge about the methods also stated reasons of rumour of side effect and personal bad experience in using the method and finally failure of contraceptives leading to unintended pregnancy which were later aborted (Biney, 2011) .

Furthermore the Ghana demographic and health survey in 2008 revealed several reason for people not wanting to use family planning in future such as infrequent sex/no sex, menopausal/had hysterectomy, subfecund / infecund, wants as many children as possible. Other reasons include respondent opposed, husband/partner opposed, others opposed, religious prohibition**,** lack of knowledge of method and source, health concerns and fear of side effects. Lack of access/too far, cost too much, inconvenient to use, contraceptives interfere with body's normal process were also cited by respondents as reasons for not wanting to use contraceptives in future (GSS, GHS, and ICF Macro, 2009). Notwithstanding the challenges facing access and utilization of contraceptives and family planning programme as a whole, Ghana Health Service in collaboration with development partners are making all efforts to improve on the family planning programs through review of standard documents or protocols and training of health staff due to changes in the area of contraceptives technology, particularly where new methods such as female condom, monthly combined injectables contraceptives, 6 –rod implant changed to norplant Jadelle and standard days method beads have been introduced in Ghana (GHS, 2007).

2.8 Family Planning in Bangladesh

Bangladesh is one of the most densely populated countries in the world with population of about 162 million in 2009 (UNFPA, 2009). That notwithstanding, it is among the countries in the world with the lowest per capita GNI PPP nearly USD 1440.00 (Gribble and Voss, 2009). Despite a little rise in adult literacy reaching 56 percent of males and 49 percent of female population about 15 years now, about half of the population cannot read and write (BBS 2009). Currently, Bangladesh is still faced with a lot of health and

infrastructural problems such as high population, rapid unplanned urban growth, high illiteracy level, poor reproductive health status leading to increase in maternal and infant mortality and morbidity, increase incidence of communicable diseases, malnutrition and high teenage fertility rate (Khan and Khan, 2010). These challenges are against the backdrop that the country saw significant decrease in fertility rate between 1970s and 1980s.

The sharp decline in fertility rate among the people of Bangladesh was due to population and development policies adopted in 1971, taking into consideration the need to reduce population growth rate which was putting too much pressure on their scarce resources as well as negatively impacting on health of women and infants due to limited access to quality health services. Khan and Khan, 2010 in quoting the work of the Bangladesh Planning Commission in 1974 indicated that the above assertion reflected in their first Five-Year Plan which stated that "no civilized measure would be too drastic to keep the population of Bangladesh on the smaller side of 15 crores for the sheer ecological viability of the nation". In the mid-1970s, the country put in much efforts in increasing access to family planning services and broaden choice of contraceptives thereby increasing the contraceptives prevalence. These population programs were sustained by all subsequent governments with strong commitment to implementation until mid-1980s where interest and commitment to implementation started waning (Khan and Khan, 2010).

Bangladesh current population policy was formulated in October, 2004 with the objective of reaching replacement – level fertility by 2010 and to stagnate/stabilize the population level at 210 million in the year 2060 (MOHFW cited by Khan and Khan, 2010). This policy sought to ensure that the country will make efforts of putting in place interventions such as strong and effective family planning programs to ensure that rate of birth matches with rate of mortality leading to zero growth rate of population. It was also realized, there was a need to give policy consideration to increasing age of marriage, delay child bearing and increasing birth intervals within marriage. This is because under the replacement fertility level program, any further mortality decline would offset fertility decline on population growth rate. In spite of all these challenges, family planning programs has been very effective in showing a lot success over a period of twenty years by lowering fertility rate. From mid-1970s to 1990s, Bangladesh total fertility rate (TFR) reduced from 6.3 in 1975 to 3.4 in 1993-94 with concurrent increase in contraceptive prevalence from 7.7

percent to 44.6 percent for the same period. Further, the country within the next ten years recorded rise in contraceptives prevalence from 44.6 percent to 58.1 percent although there was little increase in total fertility rate for the same period. However between 2004 and 2007, contraceptives prevalence has stagnated with little decline in total fertility rate reaching 2.7 in 2007 (Khan and Khan, 2010).

The fertility decline in Bangladesh is notably attributed to strong family planning program through increased in contraceptives practice but not any significant socioeconomic changes (Cleland. 1994). Under the family planning programs, there was increased in access to family planning service as well as introduction of wide range of effective modern methods such as lubricated high quality condoms in place of old dry ones, minilaparotomy procedure for female sterilization, performed on an outpatient basis without general anesthesia, IUDs (such as Copper T IUD 380A), long acting injectable contraceptives, menstrual regulation, female and male sterilization, oral pills, including low dose formulations and condoms – all at the same facility. Most of these programs were replicated nationwide in 1979 to 1980 though they were initially introduced by NGOs. The success of Bangladesh family planning program was also attributed to the introduction of policy of financial compensation to service providers, acceptors and referrals in accepting methods. Again very effective supervision and monitoring system was put in place and extended to all clinics providing family planning services to ensure that quality services are provided to build family planning clients confidence.

Bangladesh significant increase in contraceptive prevalence and decline in fertility in the past years could also be attributed to National launch of home delivery of family planning information and methods between 1996 and 1980 where 13,500 female family welfare assistants were trained to provide information about various family planning methods available and encourage women to use contraceptive, supply contraceptive such as condoms, pills, injectable contraceptives in some instances to client in their homes and also make referral of some women to health facilities particularly if they need clinical methods. Nearly 28,000 female assistants are currently offering such services in their own villages or nearby ones (Schuler, Hashemi and Jenkins, 1995). The strategy of using female family planning workers was described as culturally sensitive as women were discussing with colleagues women about sexual matters. And the fact that, most of them were working in their own village fit into their pattern/way of traditional life as women do

not deal with outsiders and this makes it culturally acceptable to have interaction with colleagues women. Although the family planning program in Bangladesh is faring well, it is also faced with challenges of lack of full support of husbands, misconception (e.g. Long use of pills causes infertility), the fear of methods and side effects of some procedures such as IUD, sterilization etc. and bad experiences with some method cause non- use, discontinuation and anxiety among clients (Schuler, Hashemi and Jenkins, 1995). Also are women dependency on husband and lack of adequate support from health worker when experiencing side effects affect family planning uptake.

In conclusion Bangladesh family planning interventions have really shown successes as indicated above despite all the challenges. Again contrary to the earlier assertion, that the improvement in family indicators were not resulting in significant changes in socioeconomic situation (Cleland, 1994), Gribble and Voss (2009) indicated that, there is returns on long- term investment in family planning program in Bangladesh. The paper revealed that a study of Matlab FPMNCH program showed that there was general improvement of community and household well- being. This includes higher incomes, higher valued homes, greater savings and assets, higher educational achievement, and greater access to water, in addition to better health status of women and children in areas where integrated family planning and maternal and child health (FPMNCH) programs were being implemented in comparison with areas without (Gribble and Voss, 2009). Hence improved economic well-being and this is consistent with the fact, that family planning is considered as one of the most health interventions that saves lives and improve on maternal and child health (Smith et al Cited by Gribble and Voss, 2009).

2.9 Family Planning in Kenya

Kenya is considered as one of the most populated countries in Africa with estimated population of about 42.7 million and it is found to increase in population by nearly one million every year between 2000 through 2010 (Ngethe, 2014). This poses a lot of threat to their socio-economic development particularly to reproductive and maternal and child health situation if no action is taken, hence impeding achievement of MDGs. Kenya need to improve on its contraceptive prevalence in order to manage its rate of population growth and existing unmet need for family planning by improving its current contraceptive prevalence rate of 45.5 percent (Kenya Family Planning costed Implementation Plan 2012). Although Kenya was the first country to establish national

family planning program in sub-Sahara Africa i.e. in 1967, it has high fertility among the youth resulting in two-thirds of its population below 30 years and about five percent above 60 years describing it as youthful population (Ngethe, 2014).

Kenya's initial family planning programs resulted in drop in average number of children per woman from eight in the late 1970s to five births per woman in mid 1990s. Again in the 1990s, the implementation of the family planning program slowed down and funding for the program dwindled due to rechanneling of resources to HIV/AIDS by leaders (KSPA, 2010 cited by Ngethe, 2014). In 2007, Kenya's Ministry of Health adopted the country's National Reproductive Health Policy with the theme "Enhancing the Reproductive Health Status for All Kenyans". This policy sought to increase budgetary allocation for reproductive health activities including monitoring in order to reach deprived communities and vulnerable ones with reproductive health activities including family planning (Ngethe, 2014).

Further, Kenya's 2010 constitution also ensured that everyone should enjoy highest standard of health including reproductive and family planning programs. It assures that everyone should have freedom from discrimination and freedom to controls their own health and body (HERAF, 2012 cited by Ngethe, 2014). In addition, Kenya has other policies that support increased access to family planning programs including National Reproductive Health Strategy 2009-2015; the Adolescent Reproductive Health and Development Policy, 2003; the National Condom Policy and Strategy (2009-2014; the Contraceptive Policy and Strategy (2002-2006); the Contraceptive Commodities Procurement Plan (2003-2006); the Contraceptive Commodities Security Strategy (2007-2012) in order to improve on contraceptive prevalence thereby reversing the countries rapid population growth. (Ngethe, 2014)

With the polices in place and high commitment level of leaders towards family planning programs, Kenya for the past decades has made a lot of progress in its fertility and family planning programs. The country in 1980s and 1990s saw increase in contraceptive prevalence from seven percent of married women ages 15 – 49 in 1978 to 39 percent in 1998 whiles total fertility rate, which is the average number of children born by a woman over her lifetime declined from 8.1 to 4.6 (USAID, 2010). Though, contraceptive prevalence and total fertility rates plateaued for sometimes due to decreased funding for

family planning programs, the 2008/2009 Kenya Demographic and Health survey indicated increase in contraceptive prevalence to 46 percent from 1998 to 2008 and this is mostly contributed by clients accepting more of modern contraceptive, however unmet need for family planning is still hovering around 20 percent (USAID, 2010).

Okech, Wawire and Mburu (2011) indicated that the high unmet need and total fertility rate is affected by demographic, socioeconomic and facility related factors such as partner's approval, religion, knowledge of family planning services, friendliness of family planning staff, quality of family planning services, proximity to family planning facility and income of the woman. Okech 2012 also noted that, factors such as cost of service, transportation, inaccessible locations of service and inadequate information about service options serve as impediment for poor women in all countries to use family planning particularly modern methods. Despite that Kenya is one of first countries to initiate family planning programs in Africa and its successes chalked, the country's family planning program is still faced with key challenges. And these key challenges though listed in Governments National Reproductive Health Policy of 2007 remain valid to date (USAID, 2010, Okech, 2012). These include socio-economic disparities in CPR; lack of security for contraceptive commodities; lack of sustained demand creation for family planning services; relatively low community and private sector participation in family planning service provision and low involvement of males; inadequate wide method choice and cost-effectiveness; inadequate family planning training for service providers; and low level of integration of family planning with HIV/AIDS services. Further, challenges such as inadequate service provision, periodic stock-outs of contraceptives in some areas, and poor accessibility of services by the poor and vulnerable groups such as orphans, migrants, children and adolescents and disables. (USAID, 2010).

The unmet need for family planning in Kenya has been identified to be affected by a lot of socioeconomic factors; it declines with women's age, level of education, household wealth, exposure to family planning messages and occupation. The unmet need increases among women of higher number of living children and those with primary level of education. However, the working women with unmet need usually mention method related factors for non- use of family planning (Ojakaa, 2008). High population growth usually affects economic developments particularly where resources are scarce. It has also been established that for Kenya to achieve its Vision 2030 which seeks to ensure that Kenya

becomes globally competitive and prosperous middle-income nation by 2030, its rapid population growth needs to be controlled, hence the need to invest in family planning programs (Okech, 2012). Again the it has been indicated that under current fertility rate of Kenya 4.6 in 2008, the country's population will increase from 38 million in 2008 to 82 million in 2040 and this will double number of primary schools students by 2040 thereby doubling the number of primary teachers that would be needed by 2040. Further, under the scenario of high fertility rate, Kenya would need to double number of health professional particularly nurses and health facilities for its people in 2040. Also Kenya GDP per capita would be about US$6,500 under the high fertility scenario whereby it can reach US$8,100 under the low fertility rate scenario and the country will require about 980,000 new jobs to be created in 2040 instead of 530,000 under low fertility rate (Okech, 2012).

This implies that there is need for Kenya as country to contain its rapid population growth by reducing its unmet need for family planning for women which stands at 25 percent by investing in family planning programs through increased funding for family planning services, ensuring availability of commodities, expanding access to family planning and improve on education on family planning at all levels.

2.10 Lessons Learnt

The review of family planning programs in both Bangladesh and Kenya indicated that these countries are similar to Ghana, they all started implementing family planning programmes in 1960s and all had strong political backing leading to the formulation of population development policies. Again these countries had strong political will and commitment to family planning programs leading to reduction in total fertility rate and increase in contraceptives prevalence for the past few decades. Similar to Ghana, though Bangladesh and Kenya have good policies to support family planning programmes, funding for it has dwindled recently due to emerging priorities such as HIV and AIDS.

The success of family planning programs in Bangladesh and Kenya is attributed to a lot of factors and notable among them are expanding access to family planning and improved education to deprived communities, for instance home-delivery of family planning services in Bangladesh by only female family assistants built the confidence of women and made it more easier as well as free in discussing sexual matters. The introduction of wide range of effective family planning methods in the two countries also removed the

barrier of women having limited choice to make. Again in order to build confidence of clients in family planning programs, supervision and monitoring at all levels was key, thereby contributing to its success.

Similar to Ghana , reasons for clients not wanting to use contraceptives in Bangladesh and Kenya includes lack of full support of husbands, misconception (e.g. Long use of pills causes infertility), the fear of methods and side effects, bad experiences with some methods lead to non- use, discontinuation and anxiety among clients. Also periodic stock of commodities as well as some socioeconomic, demographic and facility factors result in non- use of contraceptives. These include religion, knowledge of family planning services, friendliness/attitude of family planning staff, quality of family planning services, proximity to family planning facility and income of individuals influence family planning uptake.

Despite the challenges facing family planning programs in all the three countries namely Ghana, Bangladesh and Kenya, it has been established that family planning has cross – cutting contribution to poverty reduction, better health and enhances education for women and children.

2.11 Conceptualizing Factors Influencing Accessibility and Utilization of Family Planning

The conceptual framework indicates the ideas or key factors and variables that influence the accessibility and utilization of family planning services. This model was developed based on concepts or ideas relevant to the phenomenon being studied and not on any theory. As indicated earlier, accessibility and utilization of family planning is influenced by both demand and supply side factors. The supply side involves factors from health service provision that affect accessibility and utilization of family planning services whiles demand side represents factors from client, household and community which also affect family planning uptake. As suggested by Ensor and Cooper (2004), there are a lot of barriers to health care services access from both demand (e.g. income, social, cultural issues) and supply side (e.g. Input prices, knowledge of technology etc) and family planning services is no exception. These barriers mostly affect the poor and vulnerable ones.

The conceptual framework also indicates some of the key variables that would be measured during the study. Variables such as religion could really affect utilization of family planning as ones religious doctrine could prohibit the use of contraceptives. Gender of children is a major factor particularly in societies where spouses appreciate to have both sexes of children, in this situation, spouses with one sex of children continue to give birth till they get the other sex of children, and therefore such spouses do not use contraceptives. Again healthcare facility or service provider factors are key, for instance a client can have preference for a particular method and if service provider is not trained in providing such method or does not have requisite equipment to provide such preferred method, it makes the service inaccessible to the client.

Again frequent shortage of preferred contraceptives in facility also denies client of the method, therefore affecting accessibility and utilization. Fear of side effect of contraceptives particularly hormonal methods coupled with lack of appropriate counselling on the use of method from both client and service provider also affects utilization of family planning services. Educational level also affects one's ability to assimilate health information or messages, this could affect one's ability to understanding family planning services and benefits as well, hence influencing accessibility and utilization of the service by individual. Parity is also a key variable or factor influencing utilization of family planning services. In communities where spouses are highly respected or valued for having more children, people continue to give birth up to a certain number of children and do not see the essence of using contraceptives.

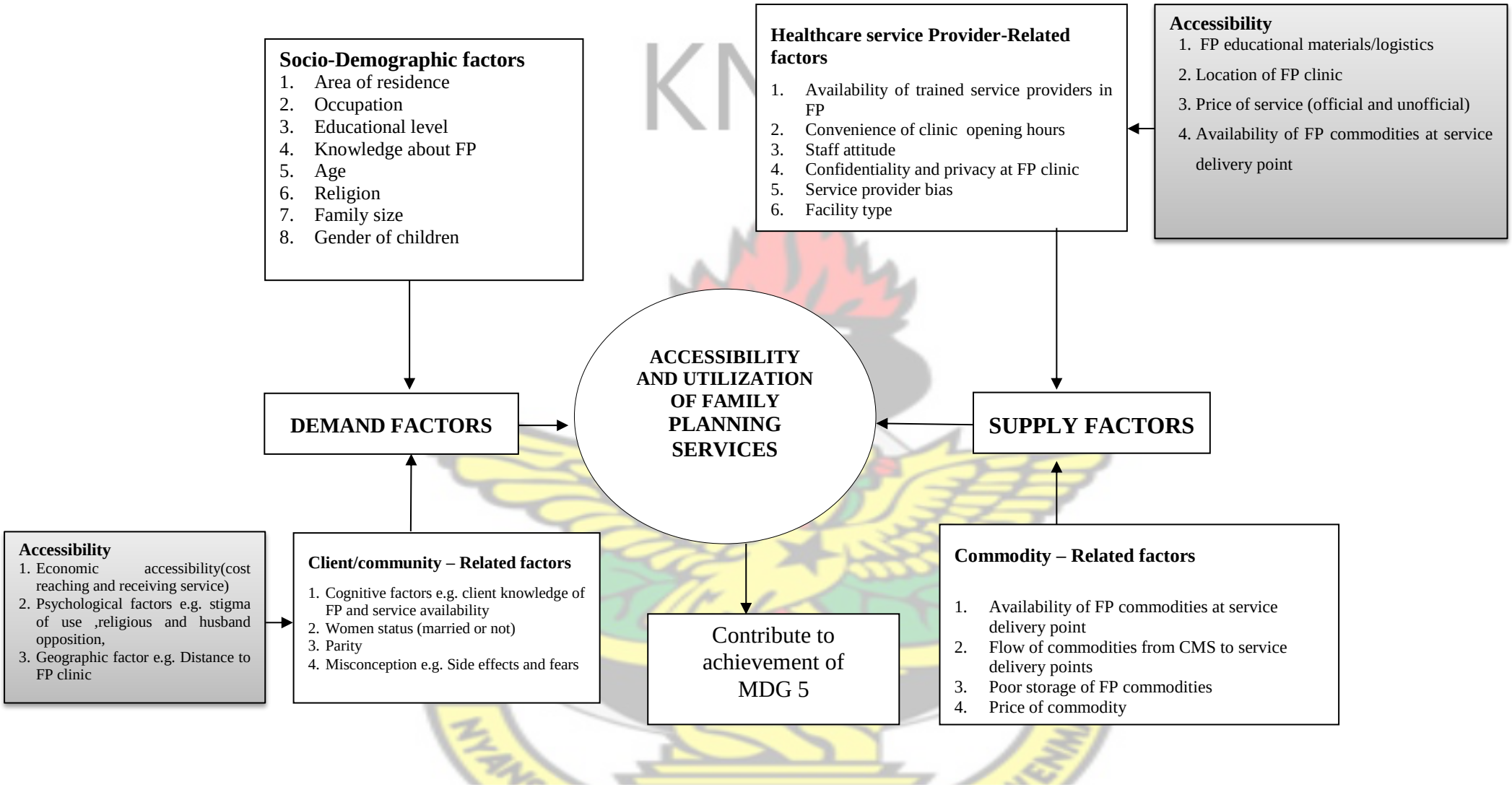

Figure 2.4: Conceptual Framework of Accessibility and Utilization of Family Planning Services

Source: Author's Construct, 2014.

2.12 Summary of Chapter

The chapter has presented literature in relation to research topic. It covered range of topics including concepts of family planning and definition as "practices that help individuals or couples to attain certain objectives to avoid unwanted birth; bring about wanted birth; to regulate the intervals between pregnancies; to control the time at which birth occur in relation to the ages of the parents and to determine the number of children in the family (WHO cited by Virtala, 2007). Some arguments about the family planning practices are also discussed. While some argue that high population growth and birth rates result in poor health outcome among women and children, slow economic growth and poverty, as well as overcrowding in schools and clinic thereby putting a lot of pressure on infrastructure in developing countries.

Again, some, particularly faith based communities and individual, argue that population and birth control using family planning is an abortion, as it prevent implantation of fertilized eggs. The chapter also highlights some of the contraceptive methods being used by women which range from traditional methods to modern artificial methods. All methods of family planning are very effective if practiced accordingly; however they do not protect against STI/HIV and AIDS except the use of condoms.

The chapter also defined access to family planning services as the probability of one who need family planning, getting an effective service in accordance with standard medical practice. It also features some factors such as resource availability, physical or geographical issues, affordability, adherence to treatment, provider related factors and cultural issues as factors that can influence accessibility to family planning services. Although family planning services could be accessible, the one utilizing it can be influenced by a lot of factors such as geographical issues, financial cost, women's status, misconception, socio demographic factors, education and information, service provider factors and familial issues such as parity and gender of child. Again the chapter presented an overview of family planning situation in Ghana as targets in national population policy anticipates TFR of three by 2020, CPR at 50 percent by 2020 and annual population growth of 1.5 by 2020. Although Ghana is making progress in achieving these targets, the country should have contraceptives prevalence rate of 33 percent and resource requirement is estimated to be US$78 million and funding gap estimated to be US$15 million by 2015.

The literature also presents the conceptual framework which indicates the demand and supply side factors that can influence access and utilization of family planning services. The demand factors include socio demographic issues and client or community issues influencing accessibility and utilization whiles supply side factors comprise service provider factors and family planning commodity issues. These factors in the framework and their variables will be explored in the subsequent chapter to find out about their relationship to accessibility and utilization of family planning services in the study area.

CHAPTER THREE
RESEARCH APPROACH AND METHODOLOGY

3.1 Introduction

The previous chapter placed emphasis on literature on level of accessibility and utilization of family planning services as well as factors influencing them. This chapter provides information on profile of the study areas and framework for assessing whether these concepts really affect accessibility and utilization of family planning services in the study area as well. It also outlines the research design adopted for data gathering, the study population, respondents and various sampling techniques used. Further it indicates the data type, variables to be measured in answering study objectives, sources, methods of data collection and framework of data analysis. In effect the chapter details out the main processes involved in the research.

3.2 Profile of Study Areas

This section presents brief information about the selected districts for the study with respect to its profile.

3.2.1 Upper Denkyira East District

The Upper Denkyira East Municipality is one of the twenty (20) administrative districts of the Central region. It shares boundaries with Adansi South in the North, Assin North in the East, Atti-Mokwa in the west and the Upper Denkyira West in the North-West as shown Figure 3.1. The district has a total land area of 501.9sq kilometres, representing 17 perecnt of the total land area of the region. The population of the Municipality is currently 84,831 with an annual growth rate of 3.1 percent (G.S.S, 2012) and it constitutes 49.2 percent males and 50.8 percent females. Almost half of the population (49 percent) are 19years and below. The municipality is predominantly Denkyira people, however, Ashantis, Fantis, Ewes, and northern tribesmen are also within the municipality.

The major occupations in the district are farming/fishing, petty trading, artisanry, and small scale mining. Healthcare service delivery operates at three levels, namely community level made up of CHPS compound/ Clinics, Sub-district level made up of Health centres, RCH units and private maternity Homes and the district level made up of private and public Government Hospitals (GHS, 2014). The District Health Directorate

manages and is responsible for the implementation of priority health care policies at all levels of care. The district has sub-districts namely Dunkwa, Kyekyewere, Oponso and Pokukrom. Again the district has 18 functional CHPS compound, 4 Health centres, 3 clinics and 3 hospitals whereby 2 of the hospitals are private ones (GHS, 2014). These health facilities provide reproductive and child health services, curative care and other preventive service to the people in the district. In all twenty- one health facilities provide family planning services in the district. The district consistently had highest family planning acceptor rate in the region, increasing from 47.5 percent in 2011 to 63.60 percent in 2012 and finally to 89.67 percent in 2013 (GHS, 2013; GHS, 2014). The same report indicated that, teenage pregnancy rate is steady that is 12.8 percent in 2012 and 12.3 percent in 2013 despite consistent increase in family planning acceptor rate.

3.2.2 Mfantsiman District

The Mfantsiman district is also one of the districts in the Central region which is bounded to the West by Abura-Asebu-Kwamankese District, to the North-East by Ajumako,Enyan Essiam District, to the East by Ekumfi District and to the South by the Gulf Of Guinea *(see Figure 3.1)*. The district covers about 412 sq km. It has total population of 154,578 comprising of 45.9 percent males and 54.1 percent of females with annual growth rate of 2.8 percent (GSS, 2012). Fantis dominate the district although other tribes such as Ashantis, Ewes, and Northerners are also in the district. The main occupations include fishing and farming.

With respect to health service delivery it has five sub-districts namely, Saltpond, Dominase, Anomabo, Biriwa and Mankessim. In all, the district has 19 health facilities providing healthcare services to the populace and 14 of the facilities provide family planning services (GHS, 2014). The health facilities consist of 6 CHPS compound, 6 clinics, 4 health centres and 3 hospitals. The health facilities provide both curative care and preventive services. The major health concerns of the district among others include, high teenage pregnancies (11.3 percent in 2012 and 14.1 percent in 2013), TBA delivery of 13 percent, and low modern family planning acceptor rate of 16.5 percent, 16.9 percent and 20.33 percent for 2011, 2012 and 2013 respectively. (GHS, 2014)

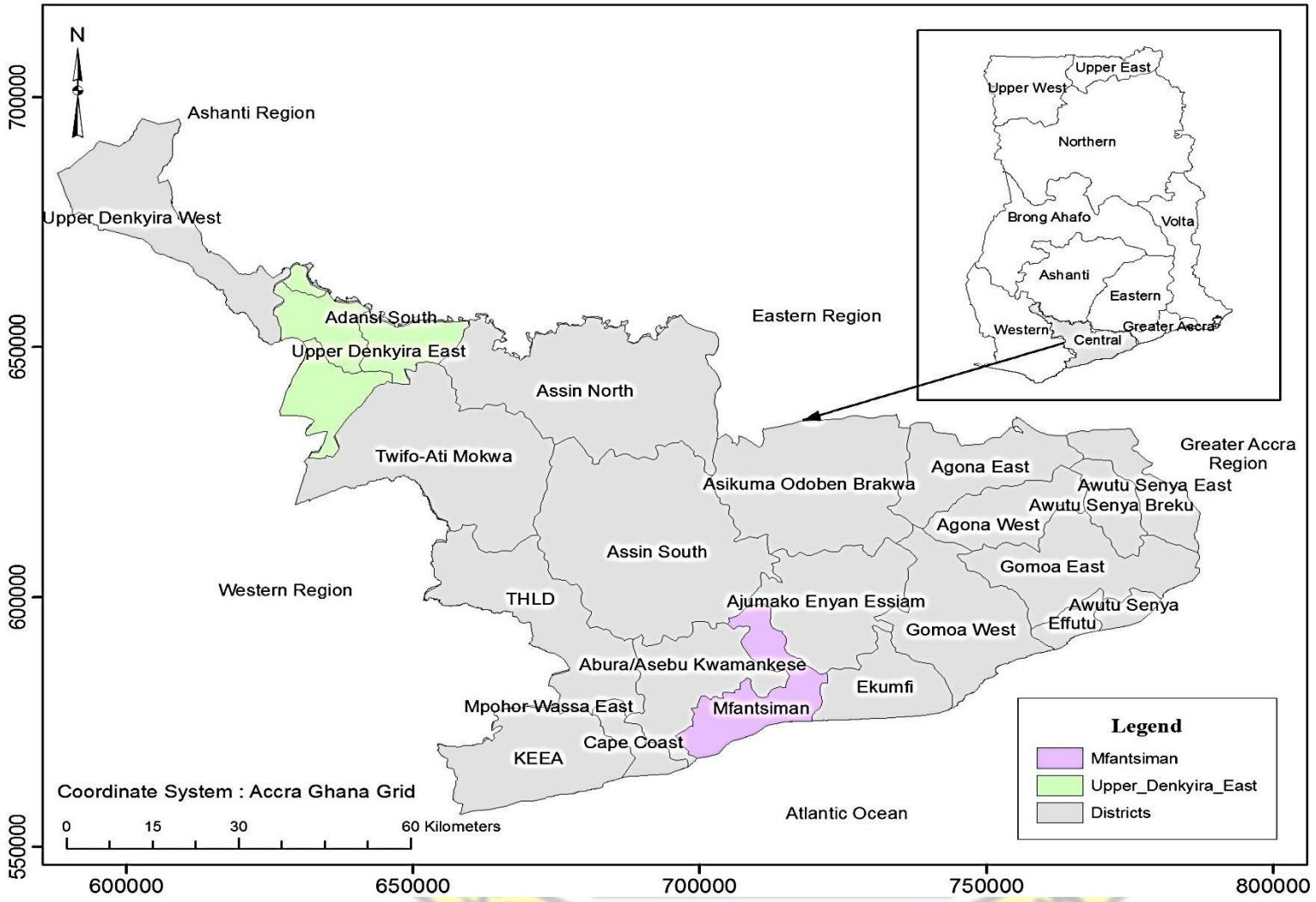

Figure 3.1: Map of study Areas in National context

Source: Ghana Health Service, 2013

3.3 Research Approach and Design

Research design is a logical model which serves as a guide to the research as to how to collect data, analyse and interprete the observations and it could be exploratory, descriptive or analytical (Degu and Yigzaw 2006). Bhattacherjee (2012) defined research design as processes of data collection, development of instruments and sampling. Further, in research, the type of data collected determine whether to use quantitative method which involve numerical scores, metrics etc. or qualitative method including interview, observations among others. The use of both quantitative and qualitative data help in getting more understanding and insight into the social phenomenon being studied which might not be available if only one type of data is used, therefore there is need to use the mixed-mode design which combines both quantitative and qualitative data most often. For example, and as indicated by Bhattacherjee, (2012), in using structured survey questionnaires which intends to collect quantitative data, it is advisable to leave room for few open-ended questions that will allow for qualitative data that give more insight about the situation which might not be available from structured quantitative data alone irrespective of the specific research design chosen.

The study therefore used both quantitative and qualitative approaches to explore for people's knowledge and perception about family planning services as well as their accessibility and utilization of the service. Quantitative techniques were used for variables that could be structured and measured numerically. And qualitative techniques were also used in order to get a deeper understanding of why people were using or not using family planning which allowed them to express their opinions, particularly if it was related to culture, values or religion. Mostly these opinions were in a form of words either own written or spoken and cannot be easily quantified. As indicated by Czarniawska, (2004), qualitative approach involves collecting data in a form of stories from individuals and reporting people's experiences in a chronological manner to get meaning of those experiences. Also indicated by Lather (1992), Robottom and Hart (1993) as cited by Baxter and Jack (2008), these stories enables individuals explain their opinions about the reality and this enables the researcher better understands the individuals' behavior.

Given the fact that the research seeks to assess the level of accessibility and utilisation of family planning services, it becomes prudent to take a snapshot of the situation at a

particular point in time. Regarding that, the study adopted a cross-sectional study design. A descriptive cross sectional study is defined as one which provide information about the situation at one point in time and further described its pattern or distribution by the persons, place and time (Degu and Yigzaw, 2006). The approach was adopted to investigate the phenomenon very well to find out the factors that encourage or hinders people's access and use of the family planning services. This design was applied to enable the researcher explain the pattern of human behaviour and attitudes at the point the study is being carried out, that is, it took snapshot of the practices, beliefs or the situation in the study population by using either survey questionnaires or structured interview.

3.4 Data Types, Sources and Methods of Collection

The data used for this study was obtained from both primary and secondary sources. The primary data was obtained from the women of reproductive age 15 – 49 years and the heads of institutions, men and church leaders through the field survey. Whilst secondary data was obtained from published journals and reports from the Ministry of Health (MoH) as well as the Ghana Health Service (GHS). Data from the women in reproductive age were collected using questionnaires and that of institutions and men were collected with the help of interview guides. Table 3.1 shows some of the variables studied with their sources and methods of collection presented based on the research objectives.

Table 3.1: Research Objective, Variables, Sources and Method of data Collection

Research Objective	Variables	Source	Method of data Collection
Examine the extent to which family planning services are accessible in the region.	Facility type/capabilities, staff attitude, confidentiality, clinic opening hours, availability of service, peer involvement, partners support	Women of reproductive age currently using family planning method, Heads of facilities and staff providing FP services	Interviews and questionnaires administration
Assess the level of utilisation of family planning services in the Region	Age, sex, education, occupation, religion, contraceptive prevalence in communities	Women of reproductive age, health facilities FP reports and registers	Questionnaires administration and data/report reviews
Examine the factors that motivate users to patronize family planning services in the region	Facility type/capability, staff attitude, confidentiality, clinic opening hours, availability of service, peer involvement, partners support, privacy, culture and religion, side effect, individual risk perception, service cost	Women of reproductive age currently using family planning method, Heads of facilities and staff providing FP services	Interviews and questionnaires administration
examine challenges associated with accessibility and utilization of family planning services in the region	Facility type/capability, staff attitude, confidentiality, clinic opening hours, availability of service, peer involvement, partners support, privacy, culture and religion, side effect, individual risk perception, service cost	Women of reproductive age that have discontinued using FP method and those that have not ever used FP method, Heads of facilities and staff providing FP services	Interviews and questionnaires administration

Source: Author's Construct, 2014.

3.5 Units of Enquiry

The unit of enquiry refer to a study population from which sample will be drawn from, for the study. The units of enquiry to achieve the objectives of this study include: women of reproductive age (15 – 49 years), heads of district health directorates, heads of facilities providing family planning services, staff providing family planning services, married men or male partners of reproductive age and Church leaders.

3.5.1 Women of Reproductive Age (15 – 49 years)

Women of reproductive age served as the focus of the study since they form the larger proportion of people using family planning services (although men also use family

planning methods), coupled with the fact that women enjoy most of the potential benefits of family planning directly. Some of the benefits include; averting maternal and child mortality, women empowerment, freedom of voluntary reproduction (that is regarding number and timing of children), these give women the opportunity to partake in the work force instead of being stuck with domestic activities, hence enhanced welfare.(Cleland et al, 2006). In Ghana, there are several types of marriage which includes customary, civil, religious marriage and informal union (that is man and woman living together although formal civil, customary or religious ceremony has not taken place), (GSS, GHS and ICF Macro, 2009). This study also adopted this definition of marriage by GSS, GHS and ICF Macro (2009) where all married women selected were either customary, civil, religiously married as well as women living together with men as considered as informal union. Again, sexually active unmarried women including divorced, separated and widows who were within the reproductive age 15 – 49 years were also interviewed.

Women of reproductive age currently using family planning services provided information about motivating factors for utilization whiles those that have discontinued or those that have never used family planning method gave information about knowledge and barriers to utilization. The exclusion criteria were all women that have discontinued use because their husbands have travelled abroad and those that are pregnant.

3.5.2 District Health Directorates

For accessibility and utilization to family planning to improve there is need to involve all stakeholders including the district health directorates (DHDs) that monitor activities of facilities and staff providing family planning services. The heads of the DHDs selected were interviewed to basically capture their perceptions on the accessibility and utilization of family planning services in their respective districts, family planning commodity management and capabilities of service providers as well as facilities in providing the service.

3.5.3 Service Providers

Because of the fact that family planning services are administered by health facilities and other service providing institutions, the institutional study involved collecting data from them to enable the researcher understand the challenges they face in delivering the FP services to their clients. This allowed the researcher explore their views about accessibility

and utilization to family planning services considering the helping factors and barriers as well.

3.5.4 Staff Providing Family Planning Services

Staff providing family planning is very important as far as the study objectives are concerned. These family planning service providers have day–to-day interactions with clients and their perception about or inputs help improve on contraceptives use. Because these staff are closer to clients or users of family planning services, they were relevant in giving information about factors influencing the levels of utilization of family planning service particularly in relation to infrastructure, equipment/materials, trainings among others. Data from these staff members helped the researcher understand their capabilities of improving on utilization and access to family planning and facilities capabilities.

3.5.5 Married Men

Decision for woman to use contraceptive is sometimes influenced by men particularly their husbands or partners. As noted by some reports, one of the reasons for non-use of contraceptive among currently married women in Ghana is opposition from husbands/partners (GSS, GHS and ICF Macro, 2009). Again a study in Barekese, a sub-district in Ashanti region of Ghana revealed that husbands/partners' disapproval was one of the factors for non-use of contraceptives among married women. The researcher also interacted with married men or male partners in the study area to gather information about their perception of family planning use.

3.5.6 Church Leaders

Some selected church leaders in the study areas were also interviewed for information about the use of family planning per the church doctrines. This was necessary because the church doctrine could have influence on family planning utilization by its members. Again in Ghana, religious prohibition was found to be one of the factors contributing to non–use of contraceptives (GSS, GHS and ICF Macro, 2009).

3.6 Sampling

Sampling refers to selecting a certain number of study unit from the defined study population for the study. This is done since information cannot be collected from all members of the study population and sample number should be representative enough of the population (Degu and Yigzaw 2006).

3.6.1 Sample Size Determination

Given the obvious fact that not all women in the reproductive age in the selected communities could be interviewed, there was the need to take a representative proportion through sampling. The researcher therefore adopted the mathematical formula to determine the minimum sample size required to make the findings acceptable. The Slovin's mathematical formula was therefore adopted; $n=\frac{N}{1+N(\propto)^{2}}$, where n is the sample size, N is the sample frame, α is the margin of error and 1, a constant (Tejada and Punzalan, 2012). The total number of households (5547) in the study areas served as the sample frame from which the sample size was determined. This was determined by reviewing population and housing census reports on the study areas. At a confidence level of 95 percent, the sample size was calculated using 0.05 margin of error. This gave a minimum sample of 373 which was then shared proportionally among the study areas. See Table 3.2 for details.

Table 3.2: Minimum Sample Size of Study Area

District	Sub-district	Community	Total Households (2000[1])	Estimated Households (2014)	Minimum Sample	Sample Proportion (%)
Mfantseman	Saltpond	Kormantse	1302	2185	147	39.4
		Hinii	214	529	36	9.7
	Dominase	Abeadze-Dominase	514	608	41	11.0
		Taabosom	115	145	10	2.7
Upper Denkyira East	Kyekyewere	Kyekerewere	661	923	62	16.6
		Amoafo	76	125	8	2.1
	Dunkwa	Mfuom	505	900	60	16.1
		Babianiha	94	132	9	2.4
Total			**3481**	**5547**	**373**	**100**

[1] 2000 Population and Housing Census

Source: Author's Construct, 2014

3.6.2 Estimation of Number of Households (2014)

The Table 3.3 indicates the projections made to estimate the number of households in 2014. This involved projecting the population of the respective study communities with the 2000 populations as the base. This was necessary because there was not any recent data available on the population in the communities. The projections were done by the geometric population projection formula given as follows:

$P_t = P_o(1+r)^t$

Where Pt is the population projection

P_o is the base population (i.e. the population as at the year 2000)

r is the estimated growth rate (i.e. for 1984 – 2000 inter-censal years)

t is the time interval (i.e. 2000 to 2014 which is 14 years)

Table 3.3: Estimated Number of Households in Study Area

Community	2000 Population	2014 Population	Household Size	Estimated Number of Households (2014)
Kormantse	6296	10486	4.8	2185
Hinii	915	2276	4.3	529
Abeadze-Dominase	2193	2613	4.3	608
Taabosom	536	682	4.7	145
Kyekerewere	2932	4059	4.4	923
Amoafo	379	627	5	125
Mfuom	2296	4048	4.5	900
Babianiha	599	847	6.4	132
TOTAL	**16146**	**25639**		**5547**

Source: 2000 Population and Housing Census; Author's Projections, 2014

3.6.3 Sampling Techniques for selection of Study Areas and Respondents

The region for this study was Central region against the background that Central regional family planning acceptor rate shows great variations among the districts for a period of three years from 2011 to 2013, although the MICS report in 2011 indicated improvement in family planning use in the region. Further, the Central regional health reports 2013 indicates that, teenage pregnancy has also remained steady from 2008 to 2013 coupled with high adolescent birth rate(61 per 1000 women) among women of 15 – 19 years of age

according to 2011 MICS report (GSS, 2012). The majority of the health facilities in the region are located in the urban areas putting the rural area at disadvantage with respect to distribution of health facilities (GHS, 2013). Increased in contraceptive uptake in the region, could prevent some of these teenage pregnancies and adolescent births as well. Hence the need to examine the level of accessibility and utilization of family planning services as well as the factors that motivate or hinder women in reproductive age from patronising the services.

The study adopted multi-stage sampling procedures where both probability and non-probability sampling techniques were employed at specific stages. Out of the twenty districts in the Central Region, two districts were selected for the study *(see Figure 3.1)*. These districts were purposively selected; with one of them representing a district with high utilisation level being consistent and the other, low utilisation areas. Analysing the data available from the Central Regional Directorate of the Ghana Health Services over the period 2011 – 2013, the Upper Denkyira East (UDE) district has consistently had the highest acceptor rate of family planning services whilst the Mfantseman Municipality has consistently been among the lowest acceptor rating district (*see Appendix 2 for details*). The UDE and Mfantseman districts are essentially chosen to represent the high and low utilisation areas respectively.

From this level, two sub-districts were selected from each district; from which two communities each were selected for closer analysis. These two communities were selected using the simple random approach/lottery approach where the lists of communities were put in a container for blind picking. From these selected communities/study areas, households were selected using the systematic sampling procedures from which the women of reproductive age were interviewed (*see Figure 3.2 for details*). With this technique, the households were used as proxy from which all women of reproductive age were selected. The technique ensured that all women of reproductive age in the study communities had equal chances of being included in the study. The selection of the respondent women was based on a constant sampling interval K (see *Table 3.4 for details*). This systemic sampling technique was used at this stage to ensure that, there was no over representation of some households in a particular area, thus selection of households could be uniformly spread over the entire study population in selected community.

Heads of the health directorates in the selected districts were purposively selected for the study. The respondents included the District Health Directors and the head of family planning Units in the directorates who supervise the health facilities providing family planning services because of their expertise about family planning service delivery. The heads and staff members of health facilities providing family planning services in the selected communities were chosen purposively for the institutional survey since they are more familiar with the subject matter, hence the need to select them for their opinions. The husbands or partners of women within the reproductive age 15 – 49 years who were present at the time of interviewing their spouses were also interacted with to explore their views about family planning use. Predominant churches in the study areas were also purposively selected and the church leaders were also interviewed.

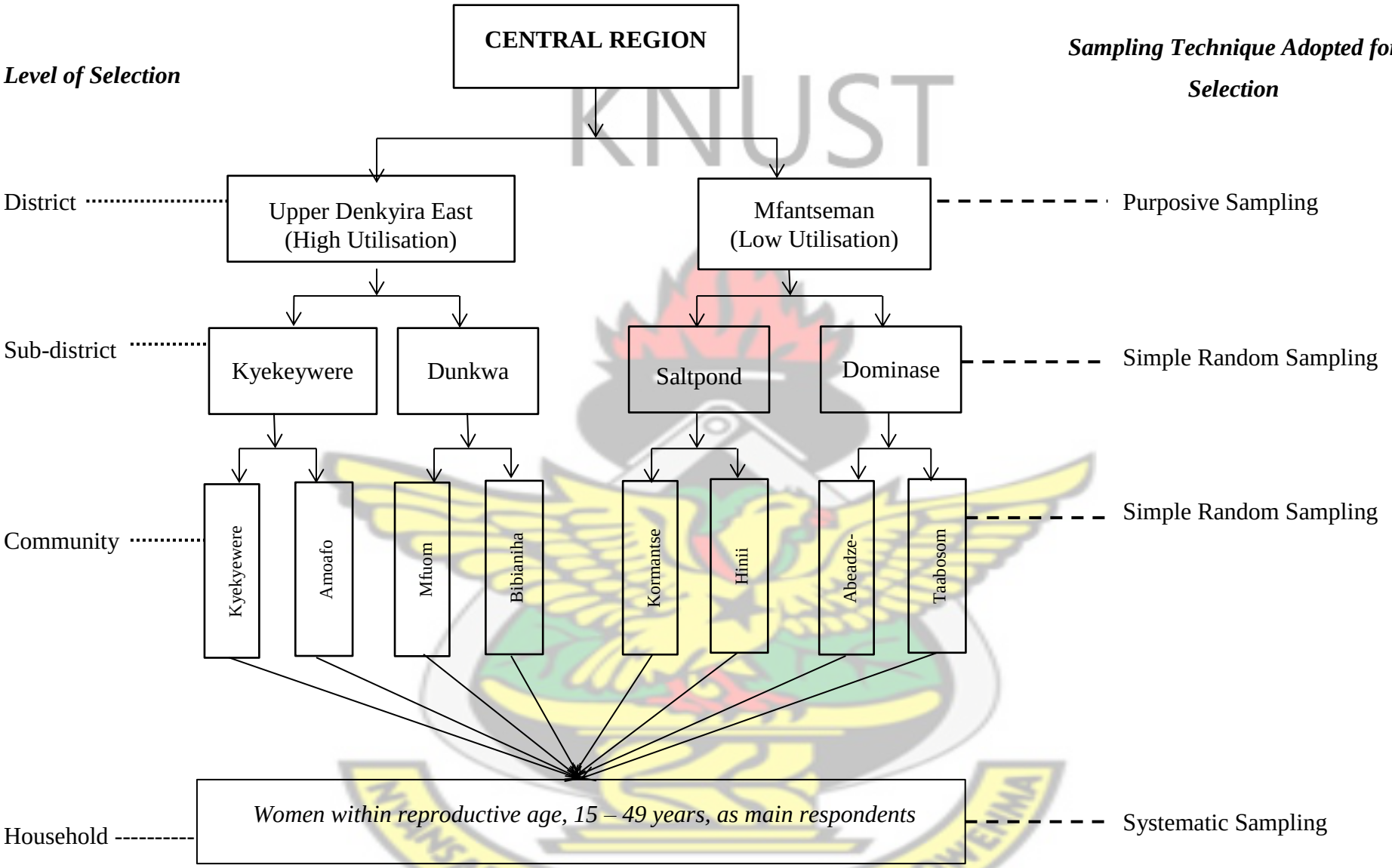

Figure 3.2: Stages in Selecting Respondents

Source: Author's Construct, 2014.

3.6.4 K^{th} Value for Systematic Sampling

The systematic sampling technique was used in selecting respondent households in the study communities. This involved the determination of a sampling interval (Kth value). This was calculated by dividing the number of houses in the respective study (N) by the minimum sample (n) required in the areas.

Table 3.4 K^{th} Value for Systematic Sampling

Study Community	Sampling Frame (N)	Sample Size (n)	K^{th} Value
Kormantse	600	147	4
Hinii	173	36	5
Abeadze-Dominase	299	41	7
Taabosom	78	10	8
Kyekerewere	375	62	6
Amoafo	50	8	6
Mfuom	273	60	5
Babianiha	85	9	9
Total	**1933**	**373**	

Source: Author's Construct, 2014

3.7 Data Processing and Analysis

Data collected from field was processed by editing to eliminate or minimize errors so that data would be reliable. This was followed with inputting and finally analysis was done using Statistical Package for the Social Sciences (SPSS) version 16. Data entered were cleaned and variables were cross-tabulated. Analysed data was presented using tables and statistical model such as measure of central tendency was applied to the data to put better meaning to data and establish relationship between study variables. In addition, qualitative data and quantitative data were triangulated to validate some of the findings.

3.8 Summary of Chapter

The chapter indicated the profile of the study areas, various research design and methods used in conducting the study. Again it outlined the framework of the research methodology including the research design, sampling methods, variables and sources, methods of data collection as well as framework for analysing data collected from field survey. The next chapter focused on information on accessibility and utilization of family planning services in Central region and factors influencing them as well.

CHAPTER FOUR
ACCESSIBILITY AND UTILIZATION OF FAMILY PLANNING SERVICES IN THE CENTRAL REGION

4.1 Introduction

This chapter presents the findings of the research with respect to contraceptives knowledge among women in reproductive age, male partners, contraceptives accessibility and its use as well as perceptions including factors hindering and helping its use. The chapter also presents discussions of results of the study in comparison with findings of others researches or surveys as in the literature to see pattern of family planning accessibility and utilization in the region as a whole. Furthermore, it gives information about capabilities of healthcare providers and health facilities in providing family planning services.

4.2 Knowledge of Contraceptive Methods

Utilization of family planning method is highly influenced by a person having information or knowledge about it. And in this research, the measure for the knowledge about contraceptives is any method the respondent has heard of. Table 4.1 shows the percentage of women within the reproductive age 15-49 years who have heard of any specific family planning method as well as men. The research revealed that about 98 percent of all women and married women have knowledge of at least a method of family planning. With respect to modern method of contraceptives, about 93 percent of all women and 91 percent of currently married women have heard of at least one of them whiles about 7 percent of all women have knowledge about the traditional method. Among all women the pill (76 percent) is the most commonly known method. This is followed by injectable (69 percent), Jadelle (64 percent), female condom (43 percent) and male condom 42 percent among all women. Also modern contraceptive knowledge among the men is very high that is about 88 percent and method commonly known to the men is male condom (56 percent), followed by pills (50 percent) and injectable (41 percent). Regarding the traditional methods only two methods are known to both women and men namely withdrawal and calendar methods as indicated in Table 4.1.

The findings is in conformity with studies that there is high awareness level of modern methods of contraceptives in many developing countries (Stephenson and Hennink 2004;

Akintade et al 2011). In Ghana knowledge about modern methods is 99 percent among men and 98 percent among women (GSS, GHS and ICF Macro, 2009). This implies that family planning education has really been intensified in the country as a whole.

Table 4.1 Knowledge of Contraceptives Methods in Percentage

	Women						Men	
Method	All women n=373		Married women n= 273		Sexually active unmarried women n= 100		All men n= 66	
	Freg	**%**	**Freg**	**%**	**Freg**	**%**	**Freg**	**%**
Any method	366	98.1	268	98.2	98	98	66	100
Any modern method	339	92.6	245	91.4	94	95.9	58	87.9
Female sterilisation	29	8.0	15	6.2	12	13	0	0.0
Male sterilisation	17	4.6	14	5.9	1	1	1	1.5
Pill	280	76.4	188	76.9	71	75	31	50.0
IUD	134	36.5	95	38.8	28	30	10	16.7
Jadelle	235	64.3	156	63.7	62	66	13	21.2
Injectable	254	69.4	168	68.5	68	72	25	40.9
Male condom	154	42.1	92	37.7	50	53	34	56.1
Female condom	159	43.4	95	38.8	53	56	0	0.0
Diaphragm	16	4.3	10	4.0	5	5	3	4.5
Foam/jelly	13	3.8	9	3.7	4	4	2	3.0
Locational amenorrhoea (LAM)	29	7.8	20	8.1	7	7	0	0.0
Emergency contraception	33	9.1	22	8.8	9	10	7	12.1
cyclebeads	29	8.0	19	7.7	8	9	1	1.5
Any traditional method	27	7.4	23	8.6	4	4.1	8	12.1
Withdrawal	11	40.7	10	43.5	1	25	5	62.5
Folk method	0	0.0	0	0.0	0	0.0	0	0.0
Calendar/Rhythm	16	59.3	13	56.5	3	75	3	37.5

Source: Author's Field Survey, February, 2015

Knowledge of any method of modern contraceptives among all women aged 15 – 24 years is about 99 percent and higher than knowledge level (83 percent) by men of the same age bracket. Table 4.2 also shows that knowledge of modern contraceptives decreases with increase in age among women in the study districts particularly with those 45 years and above. This could be explained by the fact that, women aged 45 years and above may be experiencing menopause and sometimes have infrequent sex/ no sex, therefore do not pay

much attention to family planning programs. The 2008 Ghana DHS indicated that knowledge of at least one method of contraceptives is lower in rural areas than in urban areas and again increases with level of education among women aged 15 -49 (GSS,GHS and ICF Macro, 2009). Indeed this research also revealed similar trend where all women who have head of any method is 99 percent in urban areas as against 92 percent in rural areas. Also, with respect to any modern method the difference is very big (about 99 percent in urban and 85 percent in rural) as indicated in Table 4.2.

Knowledge level of at least any modern method increases with level of education from primary level of 78 percent to as high as 96 percent for middle/JSS level and then 94 percent for women of secondary educational level or more. Interestingly the research indicated that knowledge was very high for women of no education, that is, about 97 percent and 89 percent for any method and any modern method respectively. This phenomenon could be explained by the fact that family planning services have been included in home visit package of services rendered by health facilities in the communities. In this home visit program, community nurses move from house –to-house in their catchment areas where health education including family planning counselling and other services are given to women and caregivers at the comfort of their home. Knowledge level of any modern contraceptives was the same in both Mfantseman district (91 percent) and Upper Denkyira East district (91 percent). Among the all men, knowledge of modern method of contraceptives also increases with educational level. For instance, about 73 percent of men of no education have heard of any modern method compare with about 95 percent of those with secondary school education or more as shown in Table 4.2.

Table 4.2 Knowledge of Contraceptive Methods by Background Characteristics in Percentage

	All women			All men		
Background characteristic	Heard of any method	Heard of any modern method	Number of women	Heard of Any method	Heard of any modern method	Number of men
Age						
15-24	107 (99.1%)	107 (99.1%)	108	6 (100%)	5 (83.3%)	6
25-34	139 (97.2%)	131 (91.6%)	143	26 (100%)	23 (88.4%)	26
35-44	82 (97.6%)	72 (85.7%)	84	25 (100%)	22 (88%)	25
45+	38 (100%)	29 (76.3%)	38	9 (100%)	8 (88.9%)	9
Residence						
Urban	146 (99.3%)	145 (98.6%)	147	39 (100%)	37(94.9%)	39
Rural	221 (92%)	193 (85.3%)	226	27 (100%)	21 (77.8%)	27
District						
Upper Denkyira	136 (97.8%)	126 (90.6%)	139	14 (100%)	10(71.4%)	14
Mfantseman	230 (98.2%)	213 (91%)	234	52 (100%)	48 (92.3%)	52
Education						
No education	85 (96.6%)	78 (88.6%)	88	11 (100%)	8(72.7%)	11
Primary	58 (96.7%)	47 (78.3%)	60	13 (100%)	11 (84.6%)	13
Middle/JSS	153 (99.3%)	147 (95.5%)	154	23(100%)	21(91.3)	23
Secondary+	70 (98.6%)	67 (94.4%)	71	19 (100%)	18(94.7)	19

Source: Author's Field Survey, February, 2015

4.3 Ever Use Of Contraceptive

The research also revealed that a lot of the women with knowledge on contraceptives have ever used family planning method sometimes in the past. All women within the reproductive age 15 -49 years were interviewed whether they have ever used a family planning method at a point in time in the past. Table 4.3 shows that about 50 percent and 49 percent of all women have ever used any method and modern method of family planning respectively whiles only one percent have ever used traditional method namely calendar method. Among the married women, 48 percent have used modern method before whiles only 49 percent have ever used any method. Again among the married women the only traditional method they have ever used is calendar method. Ever used of contraceptives particularly for any method was found to be highest among sexually active unmarried women. The most commonly used method is injectable, followed by pills and Jadelle among all category of women interviewed. Interestingly, calendar method is the only traditional method ever used by all category of women interviewed and even that, very few women have used it before. This phenomenon could be explained as, most women see the traditional methods as less effective and unreliable as indicated by WHO (2012). Only 44 percent of the husbands or male partners have ever used contraceptives.

Table 4.3 Ever Use of Contraception by Women in Percentage

	Any method	**Modern Method**													**Traditional Method**						
Age	Modern and Traditional	Any modern method	Female sterilisation	Male sterilisation	Pill	IUD	Injectable	Jadelle	Male condom	Female condom	Diaphragm	Foam/ jelly	LAM	Emergency contraception	Cycle beads	Any Traditional method	Calenda./ Rhythm	With drawal	Folk method	Number of women, Ever used	Number of women, Never used	Total number of women
All Women (n= 373)																						
15-24	43.5	97.8	0.0	0.0	19.1	2.1	23.4	14.9	8.5	0.0	4.3	0.0	2.1	25.5	0.0	2.2	2.2	0.0	0.0	**47**	61	**108**
25-34	51.7	95.9	0.0	0.0	17.4	0.0	59.5	8.1	1.4	0.0	1.4	0.0	0.0	8.1	0.0	4.1	4.1	0.0	0.0	**74**	69	**143**
35-44	56.0	97.9	0.0	0.0	17	0.0	63.8	12.8	4.3	0.0	0.0	0.0	0.0	0.0	0.0	2.1	2.1	0.0	0.0	**47**	37	**84**
45+	47.4	100	0.0	0.0	11	0.0	61.2	27.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**18**	20	**38**
All ages	**49.9**	**48.5**	**0.0**	**0.0**	**8.6**	**0.2**	**25.7**	**6.2**	**1.9**	**0.0**	**0.8**	**0.0**	**0.2**	**4.8**	**0.0**	**1.3**	**1.3**	**0.0**	**0.0**	**186**	187	**373**
Married Women/ in union (n =273)																						
15-24	40.5	96.7	0.0	0.0	16.7	0.0	23.3	10	10	0.0	6.7	0.0	3.3	26.7	0.0	3.3	3.3	0.0	0.0	**30**	44	**74**
25-34	49.6	96.5	0.0	0.0	15.8	0.0	56.1	12.2	1.8	0.0	1.8	0.0	0.0	8.8	0.0	3.5	3.5	0.0	0.0	**57**	58	**115**
35-44	54.0	97.1	0.0	0.0	11.8	0.0	73.5	8.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9	0.0	0.0	**34**	29	**63**
45+	62.0	100	0.0	0.0	15.4	0.0	69.2	15.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**13**	8	**21**
All ages	**49.1**	**47.6**	**0.0**	**0.0**	**9.6**	**0.0**	**26.8**	**3.6**	**1.5**	**0.0**	**1.1**	**0.0**	**0.3**	**4.8**	**0.0**	**1.5**	**1.5**	**0.0**	**0.0**	**134**	139	**273**
Sexually Active unmarried women (n = 100)																						
15-24	50.0	100	0.0	0.0	23.6	0.0	23.5	23.5	5.9	0.0	0.0	0.0	0.0	23.5	0.0	0.0	0.0	0.0	0.0	**17**	17	**34**
25+	53.0	97.1	0.0	0.0	19.9	2.9	54.3	17.1	2.9	0.0	0.0	0.0	0.0	2.9	0.0	2.9	2.9	0.0	0.0	**35**	31	**66**
All ages	**52**	**51.0**	**0.0**	**0.0**	**12.1**	**1.0**	**22.0**	**9.0**	**2.0**	**0.0**	**0.0**	**0.0**	**0.0**	**5.0**	**0.0**	**1.0**	**1.0**	**0.0**	**0.0**	**52**	48	**100**

Source: Author's Field Survey, February, 2015

4.4 Utilization of Contraceptives (Current Use)

The research also revealed information about current level of utilization or use of contraceptives in the study districts in the region. Generally, it is expected that high knowledge about family planning services will translate into its use or family planning uptake in the study communities. The utilization level by all women, married women and sexually active unmarried is normally used as a measure for the performance of any family planning programme (GSS, GHS and ICF Macro, 2009,). As indicated in Table 4.4, the current use of contraceptives in the districts is about 26 percent among all women with injectable (14 percent) being the most widely used method. This is followed by pills (7 percent), Jadelle (3 percent), emergency contraceptive (one percent) and male condom, IUD and cycle beads (0.3 percent) being the least used method. For the men current use of family planning method is 29 percent.

Among the married women, the current use of contraceptives in the districts is 28 percent as compare with 20 percent of sexually active unmarried women. Again, injectable are currently widely used, followed by pills and Jadelle among both married and sexually active unmarried women. The research revealed that none of the category of women is currently using female condoms as contraceptive and this could be attributed to the fact that, they feel uncomfortable using it. Therefore, the need to intensify education on female condoms to clients. It was interesting to note that only modern contraceptives are currently being used by all group of women interviewed. This findings correlate with 2011 Multiple Indicator Cluster Survey (MICS) report which pointed out that, there is significant improvement in the use of modern contraceptives in central region from 17 percent in 2008 to 29 percent in 2011, the highest in Ghana (GSS,GHS and ICF Macro, 2009,GSS 2012). This implies that a lot of women in the region have shifted from traditional methods which is less effective and not reliable to modern methods being the most effective and reliable ones (WHO, 2012). Indeed it has been established that the efficacy of these traditional methods cannot be guaranteed unless certain procedures are followed hence not reliable (WHO, 2012). The phenomenon of only modern contraceptives being currently used by the women could also be attributed to the fact that, family planning service providers mostly place more emphasis on modern methods during family planning counselling. Current use of contraceptives is higher for all women and married women from 15 – 44 years than those 45 years and above as shown in the Table 4.4. This could be due to the fact that, most women at 45 years of age or above might have started experiencing menopause and therefore have infrequent or no sex and do not see the need for family planning.

Table 4.4 Current Use of Contraception among Women by Age in Percentage

	Any method	**Modern Method**														**Traditional Method**							
Age	Modern & Traditional	Any modern method	Female sterilisation	Male sterilisation	Pill	IUD	Injectable	Jadelle	Male condom	Female condom	Diaphragm	Foam/ jelly	LAM	Emergency contraception	Cyclebeads	Any Traditional method	Calenda/Rhythm	With drawal	Folk method	Not Currently using	Total %	Number currently using	Total number of women:
All Women (n= 373)																							
15-24	27.8	100	0.0	0.0	36.7	0.0	26.7	20	3.3	0.0	0.0	0.0	0.0	10	3.3	0.0	0.0	0.0	0.0	72.2	100	30	**108**
25-34	28.7	100	0.0	0.0	21.9	2.4	70.8	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.3	100	41	**143**
35-44	25	100	0.0	0.0	23.8	0.0	57.1	14.3	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0	75.0	100	21	**84**
45+	10.5	100	0.0	0.0	0.0	0.0	100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	89.5	100	4	**38**
Total	**25.7**	**25.7**	**0.0**	**0.0**	**7.0**	**0.3**	**13.9**	**3.0**	**0.3**	**0.0**	**0.0**	**0.0**	**0.0**	**1.1**	**0.3**	**0.0**	**0.0**	**0.0**	**0.0**	74.3	100	96	**373**
Married Women/ in union (n= 273)																							
15-24	25.7	100	0.0	0.0	36.7	0.0	21.1	15.8	5.3	0.0	0.0	0.0	0.0	15.8	5.3	0.0	0.0	0.0	0.0	74.3	100	19	**74**
25-34	31.3	100	0.0	0.0	24.9	2.8	66.7	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	68.7	100	36	**115**
35-44	28.6	100	0.0	0.0	16.6	0.0	61.1	16.7	0.0	0.0	0.0	0.0	0.0	5.6	0.0	0.0	0.0	0.0	0.0	71.4	100	18	**63**
45+	14.3	100	0.0	0.0	0.0	0.0	100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	85.7	100	3	**21**
Total	**27.8**	**27.8**	**0.0**	**0.0**	**7.0**	**0.4**	**15.4**	**2.9**	**0.4**	**0.0**	**0.0**	**0.0**	**0.0**	**1.5**	**0.4**	**0.0**	**0.0**	**0.0**	**0.0**	72.2	100	76	**273**
Sexually Active unmarried women (n= 100)																							
15-24	32.4	100	0.0	0.0	36.3	0.0	36.4	27.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.6	100	11	**34**
25+	13.6	100	0.0	0.0	22.2	0.0	77.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	86.4	100	9	**66**
Total	**20**	**20**	**0.0**	**0.0**	**6**	**0.0**	**11**	**3**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	80	100	20	**100**

Source: Author's Field Survey, February, 2015.

The study also indicated the current use of contraceptives against background characteristics such as residence, educational level, district and number of living children for both sexes shown in Table 4.5.

About 28 percent of the women aged 15 – 49 years in urban area currently use family planning method in comparisons with 24 percent in rural area and this is in conformity with 2008 Ghana Demographic Health Survey (GDHS) report that, women living in urban areas are more likely to use contraceptives than their rural colleagues (GSS, GHS and ICF Macro, 2009). Also, Hailemariam and Haddis (2011) indicated that socio-demographic factors affecting married women who intend to use contraceptives but are not using them are more likely to be residing in rural areas and have lower educational level. With respect to education, current use increases among women with education from primary school level (20 percent) to secondary school level and above (27 percent), implying there is direct linkage between level of education and use of family planning method (GSS,GHS and ICF Macro, 2009). Similarly, in Uganda a study indicated that women with secondary or higher education have lower unmet need for family planning (Khan et al 2008). The finding is also in correlation with Ensor's and Cooper's (2004) assertion that education improves on ones literacy level thereby increasing their desire to use health services. As indicated earlier, high knowledge level of modern contraceptives (89 percent) among non-educated women translated into their high current use level (32 percent) and even higher than educated ones. This implies that the intensified family planning education in communities using various channels such as home visits, Child Welfare Clinics (CWC) or Outreach, FMs station, community information radio among others has gone down well to the extent that non-educated women have understood it, hence accepting the family planning services. This also conforms to second effect of education and information explained by Ensor and Cooper (2004) that information on health care services available to users is key to influence the demand for the service implying that intensified public awareness about health services can increase its demand.

Upper Denkyira East and Mfantsiman districts were purposively selected for the study because there was huge variation in family planning acceptor rate between the two districts in three consecutive years (Ghana Health Service, 2012; 2013; 2014). Contrary, findings from the study revealed that, there is little difference in contraceptive use between the two districts, the Upper Denkyira East district recorded 25.9 percent current use of contraceptives as

against 25.6 percent in Mfanstiman. The implication is that, poor data management could have accounted for very high accepter rate recorded by Upper Denkyira East district during 2011 – 2013. Indeed, Upper Denkyira East family planning Unit cited poor family planning data capturing as one of the major challenges facing the family planning program in the district. According to the family planning in –charge, service providers do double or triple counting of clients thereby resulting in high acceptor rates. This implies that there is the need for data management training for family planning service providers in all health facilities in the district.

Again, the study revealed that, women with 4 or more living children either males or females have low current use of contraceptives (24 percent for males and 21 percent for females) as compare with women who have family size of 1-3 males or females living children (28 percent) as shown in Table 4.5. This phenomenon, could probably be explained by the fact that, women that do not have either male or female child usually have a desire for other sex of children they do not have irrespective of their family size, hence decide not to use contraceptives. Speizer et al (2000) indicated that, gender of children described as situation where mothers have only one sex of children and changed their decision of not using family planning methods again, as they are seeking for sex of children they do not have. The study affirmed that, 37 percent of husbands/partners opposed use of contraceptives because they have same sex of children and want the other sex *(see figure 4.6).*

Table 4.5 Current use of contraception among Women by background characteristics in Percentage

	Any method	Modern Method													Traditional Method							
Background characteristic	Modern & Traditional	Any modern method	Female sterilisation	Male sterilization	Pill	IUD	Injectable	Jadelle	Male condom	Female condom	Diaphragm	Foam/ jelly	LAM	Emergency contraception	cycle beads	Any Tradition method	With drawal	Folk method	Calenda/Rhythm	Not currently using	Total %	Number currently using	Total Number of women;
Number of male living children																							
None	21.4	100	0.0	0.0	40	4	36	12	4	0.0	0.0	0.0	0.0	4	0.0	0.0	0.0	0.0	0.0	78.6	100	25	117
1-3	28.4	100	0.0	0.0	6.3	0.0	56.7	32	0.0	0.0	0.0	0.0	0.0	5	0.0	0.0	0.0	0.0	0.0	71.6	100	60	211
4+	24.4	100	0.0	0.0	9.1	0.0	81.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.1	0.0	0.0	0.0	0.0	75.6	100	11	45
Number of female living children																							
None	23.7	100	0.0	0.0	29.1	3.2	38.7	12.9	3.2	0.0	0.0	0.0	0.0	12.9	0.0	0.0	0.0	0.0	0.0	76.3	100	31	131
1-3	28.1	100	0.0	0.0	24.5	0.0	61.4	12.3	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	71.9	100	57	203
4+	20.5	100	0.0	0.0	37.5	0.0	62.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79.5	100	8	39
Residence																							
Urban	27.9	100	0.0	0.0	28.6	0.0	51.8	12.3	1.2	0.0	0.0	0.0	0.0	4.9	1.2	0.0	0.0	0.0	0.0	72.1	100	41	147
Rural	24.3	100	0.0	0.0	19.9	6.7	66.7	6.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75.7	100	55	226
District																							
Upper Denkyira	25.9	100	0.0	**0.0**	41.5	0.0	36.2	16.7	2.8	0.0	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.0	0.0	74.1	100	36	139
Mfantseman	25.6	100	0.0	**0.0**	18.4	1.7	65	8.3	0.0	0.0	0.0	0.0	0.0	5.0	1.7	0.0	0.0	0.0	0.0	74.4	100	60	234
Communities																							
kormantse	27.9	100	0.0	0.0	12.2	0.0	68.3	9.8	0.0	0.0	0.0	0.0	0.0	7.3	2.4	0.0	0.0	0.0	0.0	72.1	100	41	147
Dorminase	14.6	100	0.0	0.0	50	0.0	33.3	16.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	85.4	100	6	41
Hinii	30.6	100	0.0	0.0	18.2	0.0	81.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	69.4	100	11	36
Taabosom	20	100	0.0	0.0	0.0	0.0	100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80	100	2	10
Mfuom	23.3	100	0.0	0.0	50	0.0	35.7	14.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	76.7	100	14	60
Kyekyewere	29.0	100	0.0	0.0	44.3	0.0	27.8	16.7	5.6	0.0	0.0	0.0	0.0	5.6	0.0	0.0	0.0	0.0	0.0	71.0	100	18	62
Amoafo	37.5	100	0.0	0.0	33.3	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	62.5	100	3	8
Babianiha	11.1	100	0.0	0.0	0.0	0.0	100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	88.9	100	1	9
Education																							
No education	31.8	100	0.0	0.0	17.8	3.6	71.4	3.6	0.0	0.0	0.0	0.0	0.0	0.0	3.6	0.0	0.0	0.0	0.0	68.2	100	28	88
Primary	20	100	0.0	0.0	16.7	16.7	58.3	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80	100	12	60
Middle/JSS	24.0	100	0.0	0.0	2.7	21.6	62.2	10.8	0.0	0.0	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	76	100	37	154
Secondary+	26.8	100	0.0	0.0	10.5	36.8	10.6	26.3	0.0	0.0	0.0	0.0	0.0	15.8	0.0	0.0	0.0	0.0	0.0	73.2	100	19	71

Source: Author's Field Survey, February, 2015

The use of contraceptives is found to be associated with occupation types in the study communities. The use of contraceptives is 34 percent for Traders, followed by food vendors (17 percent). The current use for aforementioned occupation types is higher than those into farming (6 percent) and public servants (seven percent) as shown in Figure 4.1. The low level of current use of contraceptive among farmers could be attributed to the fact that, these people have irregular and unreliable income. For instance, farmers normally have regular income during the harvesting period. Interestingly, Traders and food vendors who have variable income use contraceptives more than public servants with reliable and fixed income in the study communities. This could be explained as these people with unreliable income probably want to protect themselves against unwanted and untimely pregnancy.

Figure 4.1 also indicated that the unemployed (31 percent) also have higher current use of contraceptives than the public servants that have reliable or fixed income and this is more likely to be younger women in their youthful age and mostly these people want to reduce the risk of becoming pregnant coupled with the fact that they have no regular income to support themselves in case of pregnancy, therefore protecting themselves. Indeed the study revealed that about 28 percent of the women currently using contraceptives is between the youthful ages of 15 – 34.

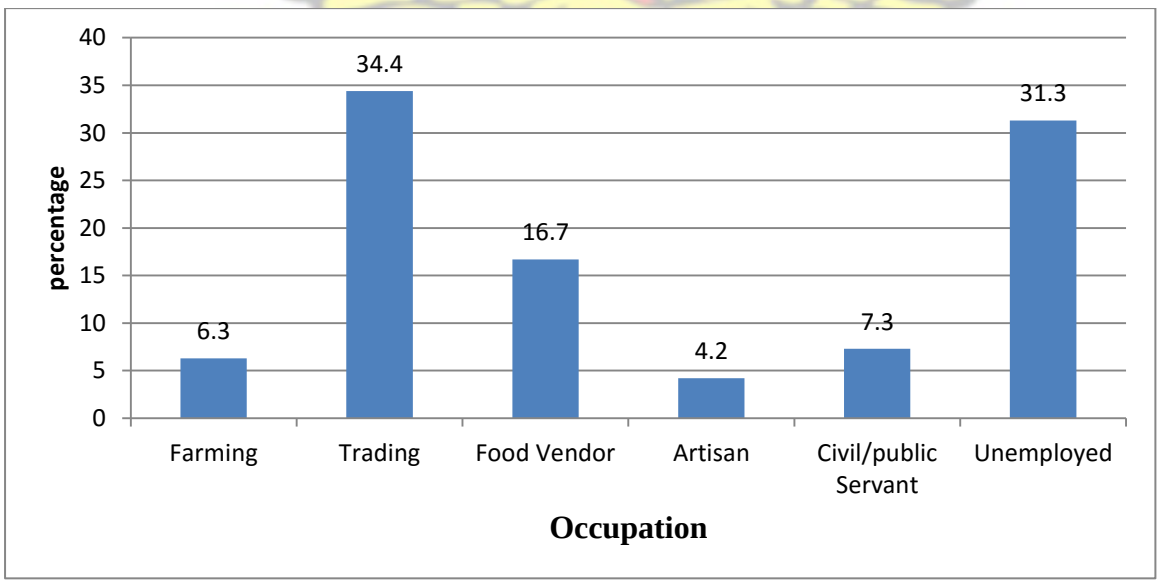

Figure 4.1 Occupation and current use of contraceptives among all Women aged 15 -49 Years in selected Districts.

Source: Author's Field Survey, February, 2015

Figure 4.2 gives information about current use of contraceptives among women of reproductive age as against their average monthly income. Women of average monthly income range of GH₵ 100 -199 and GH₵ 200 – 299 use contraceptives at 44 percent and 29 percent respectively. This is more compared to women with monthly average income of GH₵ 300 and above. This shows that average monthly income is not positively related to use of contraceptives in the study communities. This finding is contrary to assertion by Ghana demographic health survey that use of contraceptives is positively related to wealth status of a person (GSS, GHS and ICF Macro, 2009).

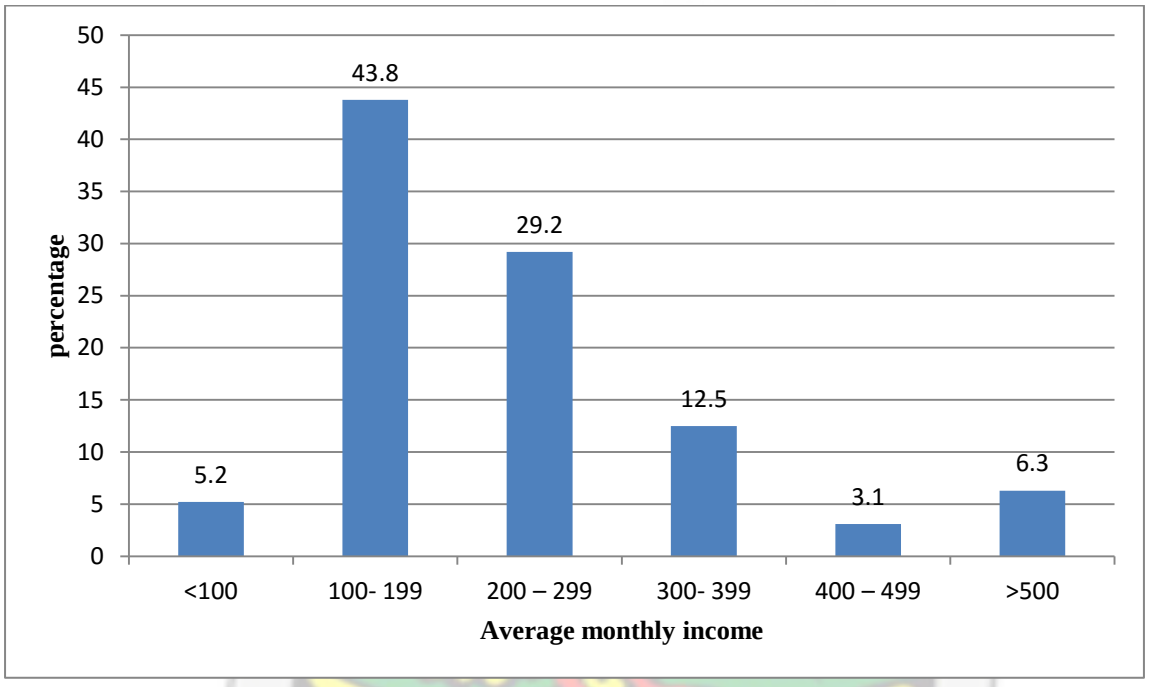

Figure 4.2 Income and current use of contraceptives among all Women aged 15 -49 Years in selected Districts

Source; Author's Field Survey, February, 2015

4.5 Availability and Accessibility to Family Planning Services

Increasing access to family planning services has a lot of benefits such as improving maternal and child health, hence is one of the key targets for achieving MDG 5 (United Nations 2013). Ali *et al* (2008) indicated that availability and accessibility of health services is affected by factors such as geographic distribution, fixed and outreach health care facilities, cost of services in monetary terms and time forms to users and social acceptability of the service. On this basis, the study assessed the physical, financial and social accessibility to family planning services in the study communities.

4.5.1 Physical Accessibility of Family Planning Services

One might say that, physical or geographical distribution of health facilities providing family planning (FP) is very good in the study communities; this is because five of them have family planning (FP) clinics situated right in the communities except Babianiha, Mfoum and Taabosom. In Mfantseman district, study communities namely Kormantse, Hinii, and Abeadze - Dominase have health facilities providing family planning services while Taabosom has no health facility, therefore the clients in Taabosom access family planning services from nearby health facility in Abeadze-Dominase (*see Figure 4.3)*.

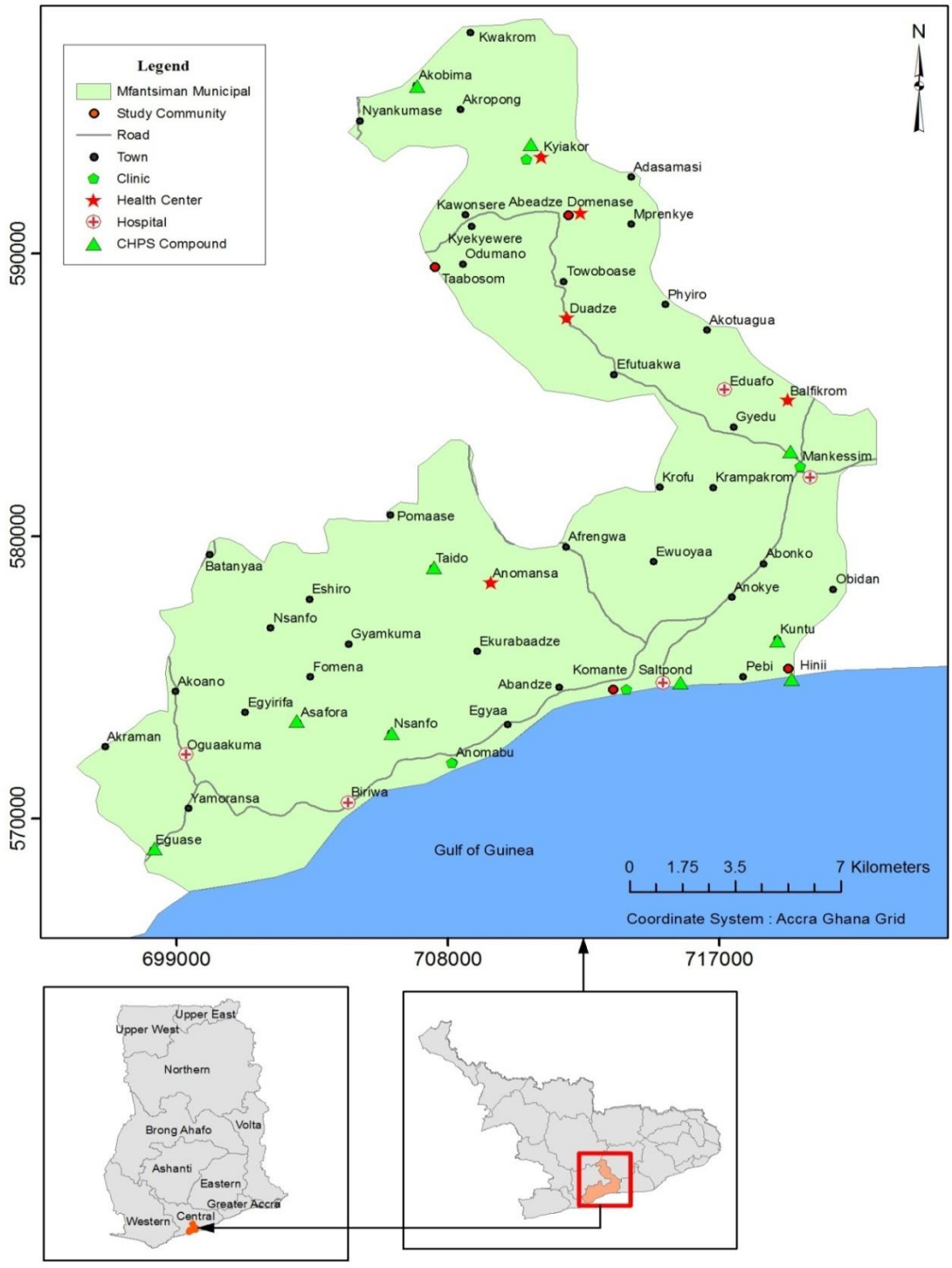

Figure 4.3: Mfantseman Municipality Health Map

Source: Mfantseman District Health Directorate, 2014

Also in Upper Denkyira East district, study communities namely Kyekyewere, Amoafo have healthcare facilities situated in them and all the facilities provide family planning services

among other services. Mfoum and Babianiha communities do not have health facilities and need to access family planning services from nearby facility called Dunkwa Reproductive and Child Health (RCH) clinic which is within a walking distance from the communities *(also see Figure 4.4)*. This section presents information on whether family planning services are accessible to clients in the study area with respect to physical accessibility.

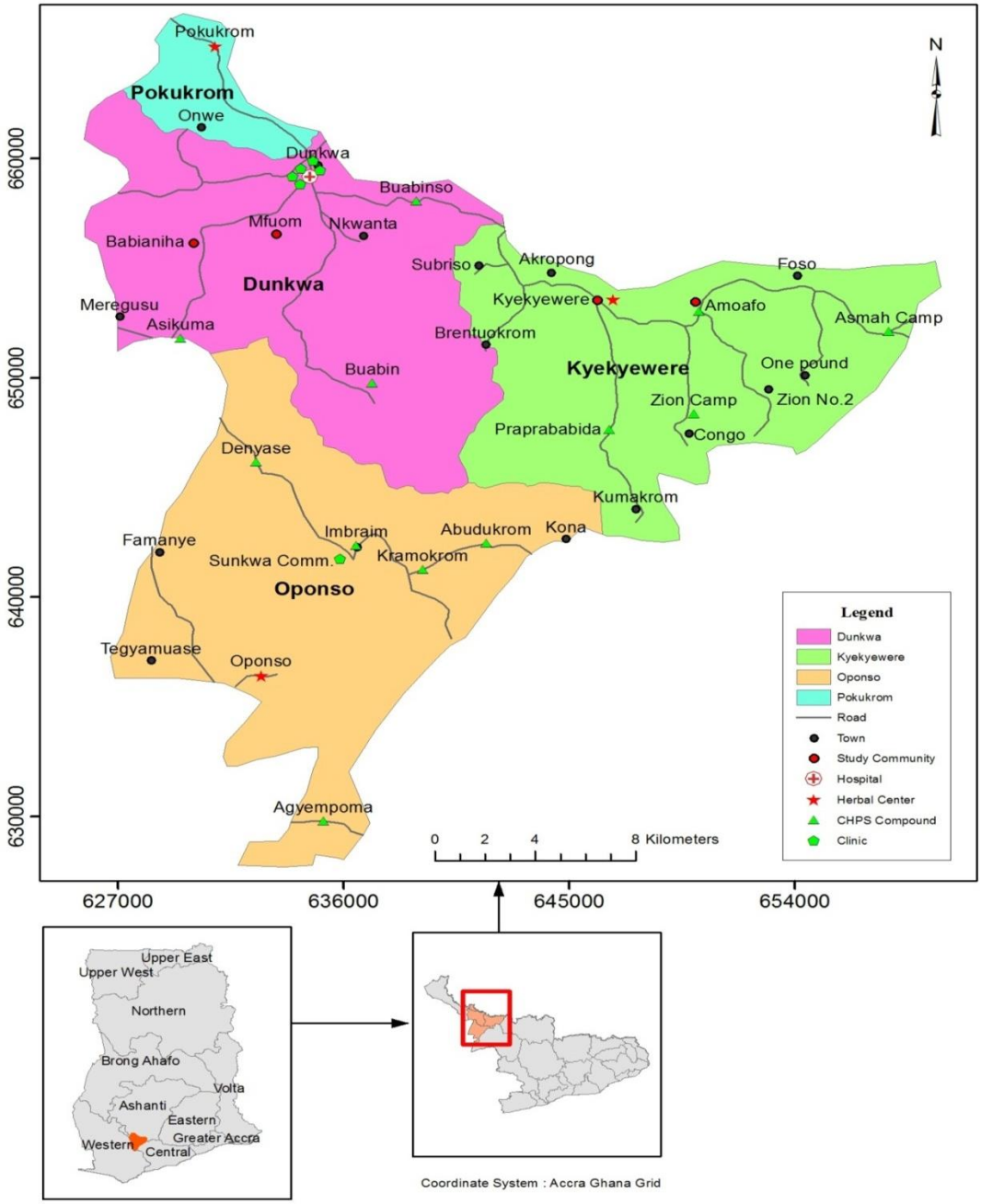

Figure 4.4: Upper Denkyira East District Health Map

Source: Upper Denkyira East District Health Directorate, 2014

Women currently using contraceptives were also asked whether they have physical accessibility to family planning services regarding location of family planning clinic, mode of transport to facilities, average travel time and average waiting time at family planning clinic. With respect to location of family planning clinics where women access services, women using contraceptives cited it, as very good in Mfantsiman and Upper Denkyira East districts. In both districts most clients (53 percent) walk to the family planning clinics for the service. Whiles about 31 percent in Upper Denkyiral East and 40 percent in Mfantsiman use Taxi. Table 4.6 also shows that 17 percent and seven percent of women currently using contraceptives use Trotro as mode of transport to the clinic in Upper Denkyira East and Mfantsiman respectively.

Again, the average travel time (by walking) to family planning clinic is about 35 minutes and 27 minutes in Upper Denkyira East and Mfantsiman respectively whiles the average waiting time at the facility for family planning services is 84 minutes in Upper Denkyira East and 64 minutes in Mfantsiman. Ali *et al* (2008) indicated that a health care facility is physically accessible if population resides within 2 to 5km or 20 to 60 minutes walking distance to facility with requisite staff and equipment. This study also indicated that all family planning facilities are within the walking distance of 20 – 60 minutes and availability of preferred family planning method of choice as well as opening hours is very good in all facilities *(see Table 4.6*). This implies that physical accessibility to family planning services is generally good in all five facilities in the two districts providing health services to the study communities. Despite that physical accessibility is generally good for family planning services in all the districts, some women (three percent) cited lack of access or facility too far. Others (four percent) also could not access their preferred choice of method. They indicated these as reasons for not using contraceptives. The latter reason conforms with Stephenson and Hennink (2004) assertion that challenges of access to family planning or reproductive health services sometimes go beyond the physical access (location of facility). Similarly, a study in Jimma zone of Ethiopia established geographical access (closeness to family planning service delivery point) and awareness do not sufficiently mean that one will use the service, rather it is the side effects and wanting to have more children that match non-use (Tilahun *et al* 2013). The study confirmed that, the most commonly cited reasons for non –use of contraceptives are wanting to have more children (15 percent), fear of side effects(8 percent) and health concerns (10 percent) shown in Table 4.9.

Interestingly, women in Babianiha community indicated that location of the family planning clinic is poor although it is still within walking distance of about 60 minutes to facility. This phenomenon could be explained by the fact that all women currently using contraceptives had to use Taxi as only mode of transport to the Dunkwa Reproductive and Child health (RCH) clinic coupled with the fact that the facility is situated within average walking distance of 60 minutes. The taxi fare also adds to their cost of receiving family planning services shown in Table 4.6. .Again, with long waiting time of about 2 hours receiving family planning was deemed to be time consuming, for most clients. The implication is that the long hours reduce the amount of man-hours for their economic activities. This was frustrating for the users of family planning services in the Babianiha community.

Although Mfoum and Taabosom communities similar to Babianiha do not have health facility in their communities (*see figures 4.3 and 4.4),* women in those communities indicated that location of FP clinic is good as shown in Table 4.6. However, about 63 percent of women in Mfuom and 50 percent in Taabosom indicated that transport affects access to family planning services from the Dunkwa RCH clinic and Abeadze-Dominase health centre respectively. This implies additional cost of taxi or lorry fare affects clients receiving FP services in those communities and can serve as barrier particularly, if the client cannot walk to the facility.

Table 4.6 Social and Physical Access to FP services

Communities	Location of FP Clinic	Mode of Transport to FP Clinics				Average Travel time to FP Clinics	Average waiting time at FP Clinics	Average walking time to FP Clinic	Does transport affect access to FP Serv.		Privacy and confidentiality at FP Clinics	Staff Attitude of FP Clinics	Availability of Preferred FP Method at FP Clinics	Opening Hours of FP Clinics	Number of Women
		Walking %	Taxi %	Trotro %	Others %				Yes %	No %					
kormantse	Very good	61	29.3	9.8	0.0	15 mins	50 mins	27 mins	36.6	63.4	Excellent	Very good	excellent	Very good	41
Dorminase	Good	83.3	16.7	0.0	0.0	15 mins	40mins	30 mins	60	40	Fair	Very good	Very good	Very good	6
Hinii	Very good	100.	0.0	0.0	0.0	3 mins	45mins	10 mins	63.6	36.4	Very good	Very good	excellent	Very good	11
Taabosom	Good	0.0	100	0.0	0.0	25 mins	120mins	40 mins	50	50	Excellent	Very good	excellent	Very good	2
Mfuom	Good	42.9	50.0	7.1	0.0	23 mins	35mins	35 mins	62.5	37.5	Very good	Very good	Very good	Very good	14
Kyekyewere	Very good	61.1	16.7	22.2	0.0	20 mins	90mins	35 mins	30	70	Poor	Very good	Very good	excellent	18
Amoafo	Excellent	100	0.0	0.0	0.0	3 mins	75mins	10 mins	0.0	100	Fair	Very good	Very good	Very good	3
Babianiha	poor	0.0	100	0.0	0.0	25 mins	120mins	60 mins	100	0.0	Very good	Very good	Good	Good	1
District															
Upper Denkyira	Very good	52.8	30.6	16.6	0.0	17.8mins	83.8mins	35 mins	52.8	47.2	Very good	Very good	Very good	Very good	36
Mfantseman	Very good	53.3	40	6.7	0.0	14.3mins	63.8mins	26.8 mins	45	55	Very good	Very good	excellent	Very good	60
Residence															
Urban	Very good	61	29.3	9.8	0.0	15 mins	50 mins	27 mins	36.6	63.4	Excellent	Very good	excellent	Very good	41
Rural	Very good	47.3	41.8	10.9	0.0	25mins	77.1mins	31.4 mins	47.3	52.7	Very good	Very good	Very good	Very good	55

Details of table shown in Appendix 6-10

Source: Author's Field Survey, February, 2015

4.5.2 Assessment of Financial Accessibility to Family Planning Services

The financial accessibility is assessed based on how much a woman paid for the current contraceptive being used and cost of family planning consultation if any. This information from respondents were compared with information on approved prices of contraceptives and other charges from the District Health Directorate and health facilities. Subsequently, family planning service managers were interviewed for information about the program both at District Health Directorate and facility level. Table 4.7 shows the price at which each contraceptive should be sold in each health facility providing family planning services. It ranges from as high as GH₵ 10 for Vasectomy and Tubal ligation to as low as GH₵ 0.1 for male condom in both districts. The prices of the most commonly used methods ranges from GH₵ 2.0 for Jadelle and IUD, injectable (GH₵ 0.5) and pills (GH₵ 0.2). Table 4.7 also shows that, there should be no consultation charges for family planning services offered to clients in both districts.

Table 4.7 Official Charges of Family Planning Services by Districts

Method	Mfantseman				Upper Denkyira East			
	Price of method Gh¢	Price of consultaion/ counselling Gh¢	Other charges Gh¢	Covered by NHIS Gh¢	Price of method Gh¢	Price of consultaion /counselling Gh¢	Other charges Gh¢	Covered by NHIS Gh¢
Jadelle	2.00	0.0	0.0	No	2.00	0.0	0.0	No
IUD	2.00	0.0	0.0	No	2.00	0.0	0.0	No
Tubal ligation	-	-	-	-	10.00	0.0	0.0	No
Vasectomy	-	-	-	-	10.00	0.0	0.0	No
Female condom	0.30	0.0	0.0	No	0.30	0.0	0.0	No
Male condom	0.30	0.0	0.0	No	0.10	0.0	0.0	No
Injectables/Depo	0.50	0.0	0.0	No	0.50	0.0	0.0	No
Cycle beeds	1.00	0.0	0.0	No	-	-	-	-
Micro G	0.20	0.0	0.0	No	0.20	0.0	0.0	No
Micro N	-	0.0	0.0	No	-	-	-	-
Norigynon	0.50	0.0	0.0	No	0.50	0.0	0.0	No
Microlut	0.20	0.0	0.0	No	0.20	0.0	0.0	No
ECP (postinor, Pregon, OPtinor etc)	-	-	-	-	-	-	-	-
Implanon	2.00	-	-	-	-	-	-	-

- *Means commodity or method not available*

Source: District Health Directorate, February, 2015

Contrary, the study revealed that women currently using contraceptives cited GH₵ 11.00 as an average price of receiving Jadelle contraceptive and GH₵ 2 as consultation charges for the Jadelle services. This is followed by pills (microlut, micro G) which sells at average of GH₵ 7 and IUD (GH₵ 5) with consultation charges of GH₵ 3. The injectables (Depo, norigynon) which is very popular and also commonly used by clients sells at average of GH₵ 4 with

consultation fee of GH₵ 4. Male condom and cycle beads have the lowest average price of GH₵ 2 with no consultation charges according to the women currently using contraceptives as shown in Table 4.8.

This implies that, women currently using contraceptives pay very high charges (about 100 percent or more) for the family planning services including consultation fees in study communities. For instance, whiles the approved price of Jadelle is GH₵ 2.0 and injctables (GH₵ 0.5) with no consultation fees, clients pay average of GH₵ 11 and GH₵ 4.0 with consultation fee for Jadelle and injectables respectively *(see table 4.8)*. This is an indication of unofficial charges from service providers with respect to family planning services in all facilities in the study districts and this could serve as barrier for utilization of the service. Ensor and Cooper (2004) indicated that unofficial charges from service providers serve as barrier to utilization of services, hence the need for health managers to monitor that situation and ensure that official prices are charged in the facilities.

Table 4.8 Cost of receiving Family Planning Services at facilities and whether it is affordable or not to users

Method	Average price of method Gh¢	Average price of consulting and other charges Gh¢	NHIS coverage	Affordability	No. of Women	%
Jadelle	11	2	No	Affordable	11	11.5
IUD	5	3	No	Very Affordable	1	1.0
Pills	7	-	No	Affordable	26	27.1
Injectables	4	4	No	Affordable	52	54.2
Male condom	2	-	No	Very Affordable	1	1.0
Emergency contraceptives	4.3	1	No	Affordable	4	4.2
Cycle Beads	2	-	No	Affordable	1	1.0
Total					**96**	**100**

Details of table shown in Appendix 11

Source: Author's Field Survey, February, 2015

Although prices of contraceptives at which women received the services are higher than the stipulated prices and the fact that there should be no consultation charges for family planning services (*see Table 4.7*), almost all the women (about 98 percent) currently using contraceptives found both cost of contraceptives and consultation charges as affordable. This implies that prices of contraceptives do not really impact negatively on its use and the study pointed out that only three percent of the women cited high cost of family planning services as reason for not using contraceptives. This correlates with findings by Levin *et al* (2000) also cited by Campbell *et a*l (2006) that there is little effect of cash prices of method of

choice and its use in Bangladesh. Again, in Ghana, cost of contraceptives is cited less often by women (0.7 percent) as a reason for non-use. (GSS, GHS and ICF Macro, 2009). Despite that, the unapproved charges appear affordable to clients, it is important for health managers to monitor the facilities to ensure that approved prices of contraceptives are charged for the family planning services. Further, Health managers should include prices of family planning contraceptives in their public awareness program so that clients or public will be aware of it.

4.5.3 Social Accessibility of Family Planning Services

Social or psychological accessibility represents the degree to which expected clients for family planning services are not hindered by attitudinal and social issues such as stigma of use, husbands' opposition and religious opposition among other (Brair and Eltayeb, 2013). Table 4.6 indicates that women currently using family planning methods rated service providers' attitude to be very good. With respect to privacy and confidentiality at the family planning clinics, women indicated that it is generally good in all districts. However, privacy and confidentiality for clients in Kyekyewere health facility in Upper Denkyira East district is poor. This could be explained by the fact that the Kyekyewere facility has the family planning (FP) consulting room just by the general OPD consulting room and clients for both family planning and general OPD services are in the same waiting place, so clients entering FP consulting room are seen by OPD clients. Hence there is the need for the District Health Management Team (DHMT) to relocate the family planning consulting room to a place where FP clients can have adequate privacy.

The study generally revealed that social accessibility related to service provision such as staff attitude as well as privacy and confidentiality in most of the facilities in both district is generally good. Rather, it is the social factors such as stigma of use of family planning method, religious prohibition, husband opposition among others that mostly hinders access or use of family planning services in the region. Indeed the study pointed out that staff attitude, privacy and confidentiality at facility were the main factors motivating use of contraceptives *(see Figure 4.5)* whiles husbands/partners opposition, religious opposition, stigma of use were cited as reasons for non – use *(see Table. 4.9)*. Similarly in Ghana social accessibility to family planning services is constrained by respondents opposed, husband/partner opposition and religious opposition (GSS, GHS and ICF Macro, 2009). Further, a study in squatter settlement in Karachi, Pakistan revealed that mother in – laws were in opposition for women to accept family planning method and this is psychosocial barrier (Pasha *et al*, 2001). This

implies that family planning managers need to develop strategies to remove some of these social or psychosocial barriers to family planning use in communities to improve on utilization of the services.

4.6 Factors Motivating Utilization of Family Planning Services

Utilization of health services could be influenced by a lot of factors and understanding these factors that encourage people to use family planning services would help family planning programmes to develop strategies and interventions to improve on contraceptives uptake in the Central region.

The study solicited for opinion of all women in reproductive age 15 - 49 years who are currently using contraceptives about what motivates their use of contraceptives. Figure 4.5 presents main factors motivating the use of contraceptive among women within the reproductive age 15 -49 years. Women wanting to delay or avoid pregnancy was the most common reason cited representing 49 percent. This is an indication that people have really understood the family planning concept of delaying or spacing birth for better health outcomes and family management. This is followed by service provider- related factors such as confidentiality and privacy at facility (20 percent), proximity of family planning clinic (13 percent) and convenience of opening hours of family planning clinic (3 percent). Similarly, Kanthiti (2007) identified factors that motivate adolescents to use family services to include confidentiality and privacy, convenience of opening hours and location of clinic among others. This implies that clients always wants to have private conversation with service providers during family planning services to avoid being stigmatized by their colleagues and indeed stigmatization is one of the reasons women do not use contraceptives as revealed by the study.

The Ghana Health Services National Family Planning Protocol also suggest that client should have right to information, privacy, and confidentiality among others when providing family planning services (GHS, 2007). . This shows that some health facilities are adhering to the protocol by ensuring privacy and confidentiality during service provision. Trend analysis of family planning services in Ghana by Hong et al (2005) also indicated that there is improvement in availability of private rooms for family planning examination and clients are quite satisfied with level of privacy. Again, the Ghana Health Service CHPS concept which brings health services closer to people particularly in hard to reach areas as well as inclusion

of family planning services in the package of Child Welfare Clinic(CWC) and home visits have motivated use of contraceptives by women.

Regarding facility type or service provider where respondents received family planning services, CHO/CHNS constitute 27 percent, followed by staff nurses (26 percent), medical officers 15 percent, midwifes (14 percent) and enrolled nurses being the least (1 percent). The facility types also include family planning clinics (29 percent), followed by mobile clinic (20 percent), health post/CHPS (17 percent) and hospital/polyclinics is 10 percent (see Appendix 4 and Appendix 5) The health centres (9 percent) were the least places they receive family planning services followed by pharmacy/drug store (4 percent). This is consistent with the policy that, in Ghana family planning should be provided through Ministry of health/GHS which is public, PPAG and GSMF(non –governmental and private sector) using midwives, nurses, medical practitioners, pharmacists and chemical sellers (GHS, 2007). This is also in line with the fact that, in Ghana, family planning has been made to be one of the main services and integral part of reproductive health services and it is the primary responsibility of all service providers at all health service delivery points to render it particularly those producing reproductive health services. The cadres such as CHO/CHNs, staff nurses providing most of family planning services at the lower level facilities as revealed by the study is also in conformity with government strategy in reviewing policies and standards of operations so that family planning service providers could be expanded to other cadres at the lower level of health service delivery (Health policy project, 2012)

Good staff attitude was cited by only two percent as a factor motivating the use of contraceptive and this is an indication that family planning service providers need to show good attitude towards client by being friendly and treating clients well. Other factors such as availability of services and knowledge about it encourage the use and cited by three percent of respondents.

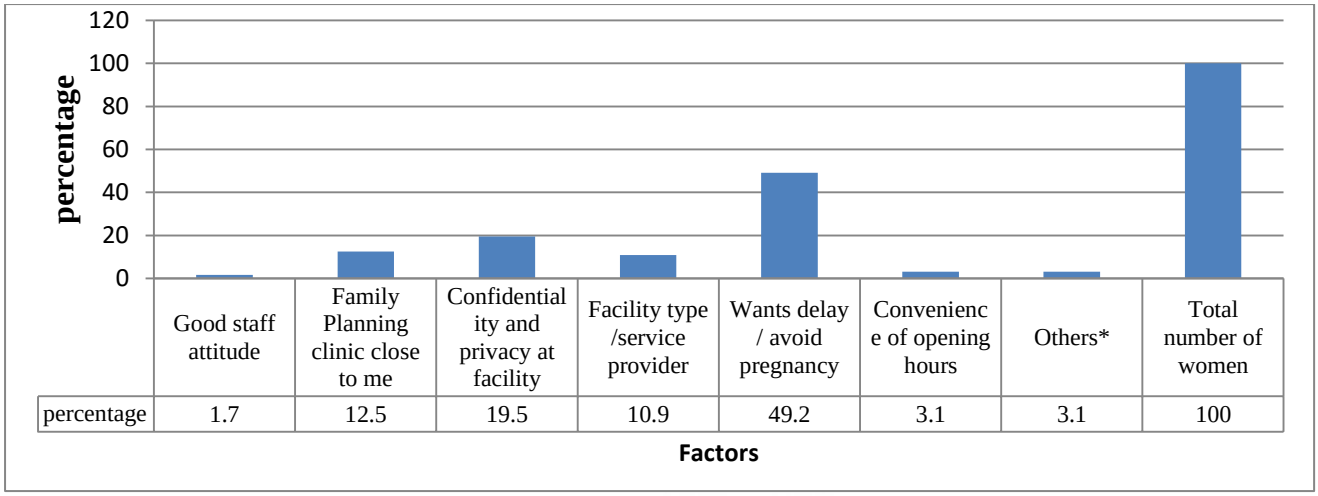

Figure 4.5 Reasons / Factors motivating use of contraceptives among Women aged 15 - 49 Years in selected Districts.

Other- Availability of FP services and knowledge about FP services*

Source: Author's Field Survey, February, 2015

4.7 Reasons for Not Using Contraceptives

It is also advisable enough for every family planning programme Manager to know barriers to use of contraceptives in order to map up strategies to remove them. Research has revealed a lot of barriers to family planning method use such as fertility related reasons, opposition from family, method related reasons among others (GSS, GHS and ICF Macro, 2009).This study also asked women within the reproductive age 15 -49 years their reasons for not using contraceptives and Table 4.9 shows the responses.

The desire for a woman to have more children was the most common reason cited representing 15 percent and majority of the women were within 15 – 34 years. Menopausal/had hysterectomy was cited by 11 percent and this is followed by method related reasons such as health concerns (10 percent) and fear of side effects (8 percent). Health concern and fear of side effects such as dizziness, weight gain, vaginal bleeding, menstrual disorders such as delayed or cessation for a while and infertility continuous to be reason for non –use of contraceptive and this could be due to weak counselling process in the facilities. Indeed the study revealed that 74 percent of the women currently using contraceptive were not told of side effects during service delivery likewise about 65 percent were not told of what to do if they experience any side effect. Similarly a study in Kwabre district of Ashanti region, Ghana indicated that fear of side effects, fear of infertility, wanting more children

serve as barrier to family planning use (Akyeah, 2007). Again Castle (2003) indicated that in Mali, some women are of the view that oral contraceptives and injectables cause infertility. Hence the need for service providers to place more emphasis on counselling as well as education of family planning clients on health concerns and side effects of contraceptives in order to build their confidence in the use of the methods. The health Management at both regional and district should improve on counselling skills of family planning service providers through training.

Table 4.9 indicated that four percent of respondents mentioned husband/partner opposition for non-use. Regarding this husband/partner opposition, 37 percent of them indicated that they have same sex of children and want the other sex whiles 28 percent want more children and finally about 20 percent cited that family planning will make the woman becomes promiscuous as shown in Figure 4.6. Sixteen percent of the women indicated that they do not know their husbands reasons for the opposition to contraceptives use. This is a clear indication of men's dominance in our traditional or marriage system where women usually cannot question position of men during decision making.

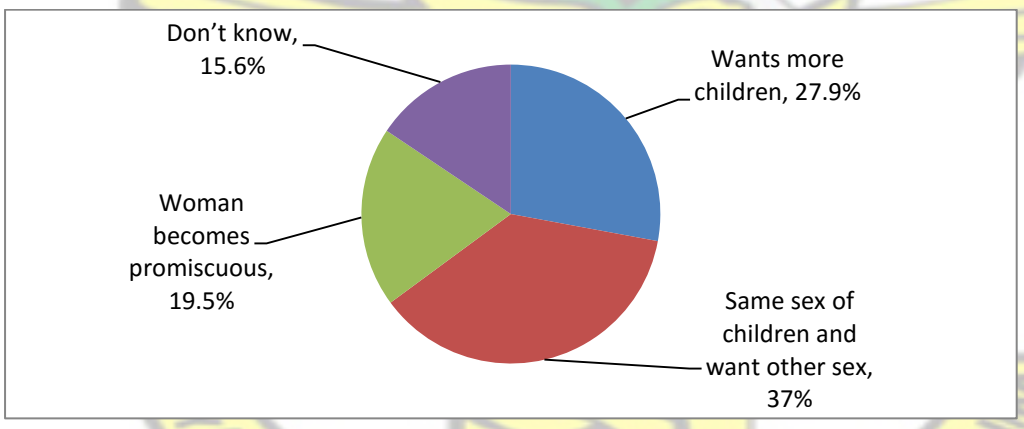

Figure 4.6: Reasons for Husband/Partner opposition to contraceptives use in selected Districts.

Source: Author's Field Survey, February, 2015

Similarly, men who are not using contraceptives in the study communities also cited wants many children, same sex of children and want other sex, fear of side effects, religion opposition and inconvenience to use as reasons for non-use. This corroborate with the women's reasons for not using contraceptives as indicated in figure 4.6 and table 4.9.

Also Ashford (2003) observes that opposition by husbands or others accounted for about 30 percent of women studied in Sub-Sahara Africa not patronising family planning services.

This implies that male involvement in family planning services is key and service providers should improve on their education for men. The Ghana Health Services National Family Planning Protocol pointed out that it is good to counsel both partners if practically possible although the consent of the partner is not a requirement for one to use contraceptives (GHS, 2007). Religious opposition is also one of the reasons for non-use of contraceptives among women in Ghana (GSS, GHS and ICF Macro, 2009). The study pointed that religious opposition was mentioned by two percent as a reason for non-use of contraceptives. And indeed interview with religious institutions indicated that, the Islamic religion emphatically indicated that they are not supportive of the family planning likewise the Catholic Church. Also in Ilorin, Nigeria, a research revealed that men who are Christians really support contraception practice while those who are Muslims are not very supportive of it (Olawepo and Okedare, 2006). Again, four percent of respondents mentioned lack of preferred choice of method, and stigma as reasons for not using contraceptives whiles three percent cited cost too much, lack of access or facility too far and breastfeeding.

Table 4.9 Reasons for not using contraceptives by Women in Percentage

Reason	Age group (%)		Total (%)
	15-34 (n=398)	35-45+ (n =210)	(n= 608)
Fertility-related reasons (A)	**44.5**	**45.7**	**44.9**
Infrequent sex/no sex	7.0	10.5	8.2
Menopausal/had hysterectomy	9.3	13.8	10.9
Subfecund/infecund	4.3	2.9	3.8
Wants as many children as possible	16.1	12.4	14.8
Postpartum amenorrhea	6.0	3.3	5.1
Fatalistic	1.8	2.9	2.1
Opposition to use (B)	**9.3**	**10.5**	**9.7**
Respondent opposed	1.3	2.9	1.8
Husband/partner opposed	3.5	5.7	4.3
Others opposed	2.3	1.4	2.0
Religious prohibition	2.3	0.5	1.6
Lack of knowledge (C)	**3.5**	**3.8**	**3.6**
Knows no method	1.3	0.5	1.0
Knows no source	2.3	3.3	2.6
Method-related reasons (D)	**42.7**	**40**	**41.8**
Health concerns	11.3	6.7	9.7
Fear of side effects	8.3	6.2	7.6
Lack of access/too far	3.0	2.9	3.0
Cost too much	3.5	2.9	3.3
Inconvenient to use	1.0	6.2	2.8
Interfere with body's normal Process	4.8	4.8	4.8
Lack of preferred choice of method	4.3	4.8	4.3
Stigma	4.0	2.4	3.5
Other	1.3	0.5	1.0
Don't know	1.3	3.3	2.0
Total (A+B+C+D)	**100**	**100**	**100**

Source: Author's Field Survey, February, 2015

4.8 Institutional Capacity to provide Family Planning Services

Accessibility and utilization of health services have been found to be influenced by a lot of factors which include service provider- related ones. Family planning service managers were interacted with to solicit for information about the program both at District health directorate and facility level. This section provides information with regards to staff availability and their capacity to provide family planning services in facilities, availability of essential equipment and educational materials for family planning services and prices of family planning commodities in health facilities among others.

4.8.1 Staff Assessment for Family Planning Services

In order for service providers to sufficiently support clients who wants to delay birth for three years or more and those who want to permanently stop giving birth, the health facilities should have trained staff in providing long term methods such as Jadelle, IUD and permanent method such as vasectomy and Tubal ligation. The vasectomy and tubal ligation are surgical procedures provided by only Medical Officers and at the hospital level only. Figure 4.7 shows that both districts have trained personnel in long term and permanent family planning methods. However, Mfantsiman has no trained staff for provision of vasectomy method.

Again Table 4.10 shows that both districts have different categories of staff trained to provide family planning services in the facilities. This is in conformity with Ghana Health Services policy that it is the primary responsibility of all service providers particularly those producing reproductive health services to render family planning services (GHS, 2007). Majority of staff providing the family planning services in both districts are CHOs/CHNs, followed by midwives. Upper Denkyira East district has Enrolled nurses who have received on the job training to support family planning services. Mfantsiman district has only one Medical Assistant trained to provide family planning services in comparison to Upper Denkyira East district which has no Medical Assistants providing the service. This could be due to the fact that, Medical Assistants also known as Physician Assistants are mostly limited to management of OPD cases.

For the district to improve on family planning services as well as expanding its coverage, it is important for the health facilities to have full complement of staff to provide the service. Table 4.10 shows that both districts have deficit in terms of number of key staff required in providing family planning services with the exception of Medical Officers. Category of staff with the highest deficit is CHOs/CHNs in both districts, that is Mfantsiman 58 and Upper

Denkyira East is 14. This high deficit for the CHOs/CHNs could be explained by the fact that most of these CHOs/CHNs are manning the lower level facilities like CHPS compounds and in most cases it is one – man station facility where the CHOs/CHNs double up as main prescribers for OPD cases, family planning services, outreach services such as CWC and home visits as well. This implies that once the CHO/CHN is out for outreach or home visits, any client who visits the facility for family planning services during that period will not have access to it. Again, when the CHO/CHN is attending to OPD cases, it will be difficult for them to attend to family planning clients who equally need more attention because of counselling processes, hence the family planning client need to wait for long hours for the service. It is therefore important for the Health Mangers to have adequate staff or required number of trained staff to provide the family planning services particularly in the CHPS compounds so that services can always and readily be available to clients.

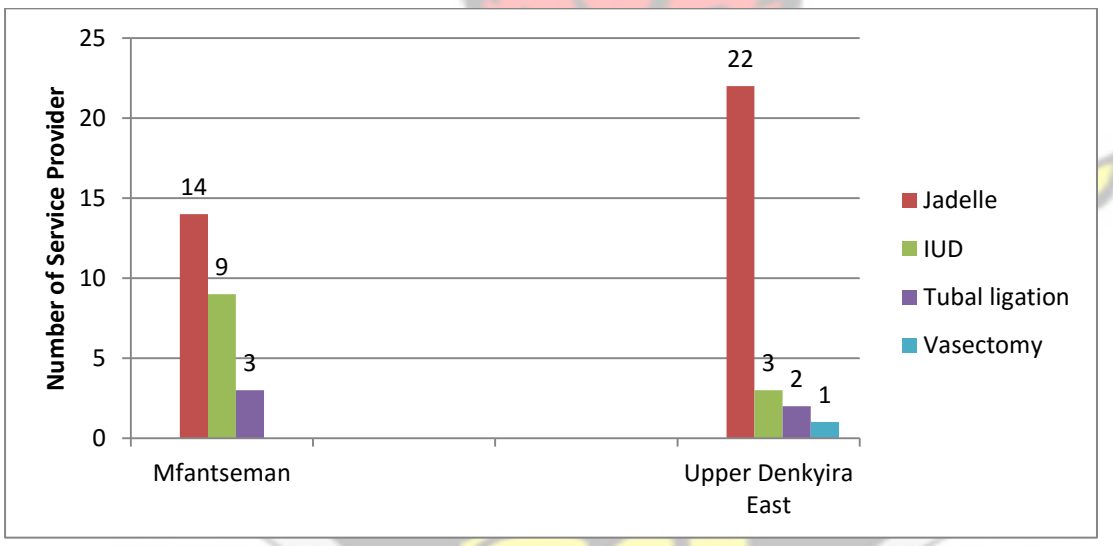

Figure 4.7 Number of Service Providers Trained in the Long Term and Permanent Methods by Districts

Source: Author's Field Survey, February, 2015

Table 4.10 Family Planning Staffs available to provide services by Districts

Staff Category	**Mfantseman**			**Upper Denkyira East**		
	Number Available	Number required	Deficit/ surplus	Number Available	Number required	Deficit/ surplus
CHNs/CHOs	34	92	-58	14	28	-14
Midwives	8	16	-8	3	10	-7
Medical Assistants	1	5	-4	0	0	0
Medical Officers	3	0	+3	2	1	+1
Enroll Nurses	0	10	-10	36	36	0
PHN	2	3	-1	1	4	-4

Source: Author's Field Survey, February, 2015

The study also assessed availability of trained staff to provide family planning services in various health facilities serving the study areas. All the health facilities have CHOs/CHNs to provide required family planning services with only Amoafo CHPS compound having a deficit of one for such category of staff. Dominase health center, Kormantsi clinic, kyekyewere health centre and Dunkwa RCH have at least one midwife providing family planning services. Hinii and Amoafo CHPS have no midwife providing family planning services and this can restrict these facilities from providing IUD services since IUD is provided by either midwives, Medical Assitant or Medical officer. This implies that family planning clients that prefer IUD from these facilities will be denied of the service. Similarly Hong et al (2005) indicated that IUD is not provided by a lot of facilities in Ghana particularly in the lower level ones due to lack of midwives. Although the districts indicated high deficit levels for CHOs/CHNs needed to provide family planning services, the facilities providing family planning services in the study areas have adequate CHOs/CHNs for the family planning services except Amoafo CHPS as shown in Table 4.11. Table 4.12 also shows that all facilities have trained providers in Jadelle insertion, a long term method of contraception. Tubal ligation and vasectomy is not provided by any of the facilities since it requires surgical procedures and is performed by medical officers.

Table 4.11.Family Planning Staffs Available by Facilities

Staff category	Mfantseman									Upper Denkyira East								
	Dominase HC			Hinii CHPS			Kormantse clinic			Kyekyewere HC			Dunkwa RCH			Amoafo CHPS		
	Number Available	Number required	Deficit/ surplus	Number Available	Number required	Deficit/ surplus	Number Available	Number required	Deficit/ surplus	Number Available	Number require	Deficit/ surplus	Number Available	Number required	Deficit/ surplus	Number Available	Number required	Deficit/ surplus
CHNs/CHOs	12	12	-	2	2	-	8	8	-	5	5	-	4	4	-	1	2	-1
Midwives	1	2	-1	0	1	-1	1	1	-	1	2	-1	1	2	-1	0	1	-1
Medical Assistants	1	1	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Medical Officers	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Enroll Nurses	NA	NA	NA	0	1	-1	1	2	-1	NA	NA	NA	3	3	-	2	2	-
PHN	1	1	-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NA – not available

Source: Author's Field Survey, February, 2015

Table 4.12 Trained Providers in the Long Term and Permanent Methods by Facilities

Method	Mfantseman												Upper Denkyira East											
	Dominase HC				Hinii CHPS				Kormantse clinic				Kyekyewere HC				Dunkwa RCH				Amoafo CHPS			
	Yes	No	Numb-er available	Not Applicable	Yes	No	Number available	Not applicable	Yes	No	Number available	Not applicable	Yes	No	Number available	Not applicable	Yes	No	Number available	Not applicable	Yes	No	Number available	Not applicable
Jadelle	✓		3		✓		1		✓		1		✓		1		✓		2		✓		1	
IUD	✓		1			✓			✓		1		✓		1		✓		1			✓		
Tubal ligation				✓				✓		✓				✓						✓				✓
Vasectomy				✓				✓		✓				✓						✓				✓

Source: Author's Field Survey, February, 2015

4.8.2 Availability of Family Planning Commodities for Service Delivery

Accessibility and utilization of family planning services are largely influenced by availability of contraceptives particularly one preferred by clients in health facilities. District health directorates are responsible for supervising all health activities in the districts including monitoring and ensuring that all facilities have commodities for family planning services. In most districts, the district health directorates stock the family planning commodities and ensure equitable distribution to facilities as in the case of Mfantsiman. The study pointed out that Mfantsiman district have not had stock of most commonly used method (eg pills, injectables, Jadelle, condoms) at the time of the study except IUD as shown in Table 4.13. Contraceptives such as IUD, foam/jelly, diaphragm, micro N and emergency contraceptives were found to have been short in Mfantsiman district. The reason cited for the shortage was that, those contraceptives are not available at the regional medical stores which is their main source of contraceptives.

In Upper Denkyira East, health facilities request for their contraceptives directly from the regional medical store as part of bulk request for medicines every quarter, hence the district health directorate does not stock contraceptives at that level *(see Table 4.13)*. The directorate then monitor availability of contraceptive in the facilities through monthly reports from facilities which shows contraceptives issued and balances in the report. This strategy also requires strong monitoring system to ensure facilities make requisition for contraceptives regularly and timely to avoid shortage or stock out in facilities particularly the CHPS compounds.

Table 4.13 Commodities Available at District Medical Stores by Districts.

Method	Mfantseman		Upper Denkyira East	
	Available	Not available	Available	Not available
IUD		✓		✓
Jadelle	✓			✓
Injectables/Depo	✓			✓
Male condom	✓			✓
Female condom	✓			✓
Cycle beeds	✓			✓
Foam/jelly		✓		✓
Diaphragm		✓		✓
Micro G (Pills)	✓			✓
Micro N (Pills)		✓		✓
Norigynon	✓			✓
Microlut (Pills)	✓			✓
Emergency contraceptives		✓		✓

Source: Author's Field Survey, February, 2015

From table 4.14, availability of most commonly used contraceptives is good in the facilities in both Mfantsiman and Upper Denkyira East districts. Table 4.14 shows that contraceptives commonly used by clients (injctables, pills, jadelle, male condom) have been available in Dominase H/C, kormantse clinic and Hinii at the time of visit. This is a true reflection of availability of contraceptives at the district stores *(see Table 4.13)*. Foam/jelly, diaphragm and micro N which is not available at the district stores are also not available in the facilities in Mfanstiman district. This shows that there is good monitoring system in place by DHMT to ensure that all facilities in the mfantsiman district have required contraceptives for service delivery. Similarly, in Upper Denkyira East district, the trend of contraceptives availability in Kyekyewere H/C, Dunkwa RCH and Amoafo CHPS for commonly used ones such as pills, injectables, Jadelle, male condoms is good, whiles the facilities have stock out of foam/jelly and diaphragm *(see Table 4.14)*. Cycle beads are provided in only facilities in Mfantsiman district. The Upper Denkyira East district has not started offering cycle beads methods, hence the facilities does not provide the service as shown in table 4.14. Again, Hinii and Amoafo CHPS have no trained midwife for IUD services and they do not stock IUD kits.

Table 4.14 Contraceptives Available at facility Stores by facilities

Environment	Mfantseman						Upper Denkyira East					
	Dominase HC		Hinii CHPS		Kormantse clinic		Kyekyewere HC		Dunkwa RCH		Amoafo CHPS	
	Available	**Not available**	**Available**	**Not available**	**Available**	**Not available**	**Available**	**Not available**	**Available**	**Not available**	**Available**	**Not available**
IUD	✓			✓	✓		✓		✓			✓
Jadelle	✓		✓		✓		✓		✓		✓	
Injectables/Depo	✓		✓		✓		✓		✓		✓	
Male condom	✓		✓		✓		✓		✓		✓	
Female condom	✓			✓		✓		✓		✓	✓	
Cycle beeds	✓		✓		✓			✓		✓		✓
Foam/jelly		✓		✓		✓		✓		✓		✓
Diaphragm		✓		✓		✓		✓		✓		✓
Micro G (Pills)	✓		✓		✓		✓		✓		✓	
Micro N (Pills)		✓		✓		✓		✓		✓		✓
Microlut (Pills)	✓			✓	✓		✓		✓		✓	
Norigynon	✓		✓		✓		✓		✓		✓	
Emergency contraceptives		✓		✓		✓		✓		✓		✓

Source: Author's Field Survey, February, 2015

4.8.3 Availability of Essential Equipment and Educational Materials for Family Planning Services.

Availability of functioning equipment in facilities for providing family planning services is very important since one can be denied access to service if the equipment are not in the facilities. This study assessed health facilities on essential equipment needed for family planning services. Table 4.15 shows that Dominase health centre has at least one of all the essential equipment needed to provide family planning services. Dunkwa RCH clinic has all basic equipment except working spotlight source. Basic equipment such as functioning BP apparatus, stethoscope and hand washing facilities (veronica bucket with running water, soap, single use towel) are not available in family planning clinics in Hinii and Amoafo CHPS compounds. The family planning service providers in these facilities (Hinii and Amoafo CHPS) need to rely on the equipment in the consulting rooms which sometimes lead to delay in service delivery. Hinni CHPS compound and Kormantsi family planning clinic have no decontamination solution (with concentration written on it) for service delivery and uses one in consulting room.

Educational materials for family planning services are very important and serve as reference tools for both service providers and clients. Table 4.16 shows that family protocol is available in all facilities except Hinii CHPS compound. The family planning flip chart which is needed for counselling is available in all facilities. Visual aids for family planning services are available in all facilities except Hinii CHPS compound. Family planning posters which help in educating clients are available in only Dunkwa RCH, thereby the need for DHMT and RHMT to ensure that facilities have adequate family planning posters in facilities to increase awareness and attraction for the service.

Table 4.15 Availability of Essential Equipment needed in Providing Family Planning Services by Facilities

Equipment	Mfantseman											
	Dominase HC				Hinii CHPS				Kormantse clinic			
	Number required	Available& functioning	Deficit / surplus	Not applicable	Number require	Available& functioning	Deficit/ surplus	Not applicable (na)	Number require	Available& functioning	Deficit/ surplus	Not applicable (na)
Working BP apparatus	1	1	-		1	0	-1		1	1	-	
Working stethoscope	1	1	-		1	0	-1		1	0	-1	
Working adult weighing scale	1	1	-		1	0	-1		1	1	-	
IUD kit (Tenaculum, speculum, uterine sound)	1	1	-		na	na	na	na	na	na	na	na
Jadelle insertion kit (trocar, canula, forceps)	1	1	-		1	0	-1		1	1	-	
Working spotlight source	1	1	-		1	0	-1		1	1	-	
Gynaecological examination table/couch and stool	1	1	-		1	0	-1		1	1	-	
Autoclave/ sterilizer/ Boiler	1	1	-		1	0	-1		1	1	-	
Infection prevention items for FP												
Hand washing facilities (veronica/ running water, soap, single use towel)	1	1	-		1	0	-1		1	1	-	
Sharps container	1	1	-		1	1	-		4	4	-	
Waste bin (with pedal operated lid)	1	1	-		1	1	-		1	1	-	
Decontamination solution for clinical equipment (not mixed with concentration written on it)	1 gallon	1 gallon	-		1 gallon	0	-1 gallon		1 gallon	0	-1 gallon	

Source: Author's Field Survey, February, 2015.

Con't Table 4.15 Availability of Essential Equipment needed in Providing Family Planning Services by Facilities

Equipment	**Upper Denkyira East**											
	Kyekyewere HC				Dunkwa RCH				Amoafo CHPS			
	Number required	Available& functioning	Deficit/ surplus	Not applicable	Number required	Available& functioning	Deficit / surplus	Not applicable (na)	Number required	Available& functioning	Deficit/ surplus	Not applicable (na)
Working BP apparatus	1	0	-1		2	1	-1		2	0	-2	
Working stethoscope	1	1	-		2	1	-1		2	0	-2	
Working adult weighing scale	1	1	-		2	1	-1		2	1	-1	
IUD kit (Tenaculum, speculum, uterine sound)	1	1	-		2	1	-1		na	na	na	na
Jadelle insertion kit (trocar, canula, forceps)	1	1	-		10	1	-9		3	1	-2	
Working spotlight source	1	0	-1		2	0	-2		1	0	-1	
Gynaecological examination table/couch and stool	1	1	-		2	1	-1		1	0	-1	
Autoclave/ sterilizer/ Boiler	1	1	-		1	1	-		1	0	-1	
Infection prevention items for FP												
Hand washing facilities (veronica/running water, soap, single use towel)	1	1	-		2	1	-1		2	0	-2	
Sharps container	1	1	-		1	1	-		5	5	0	
Waste bin (with pedal operated lid)	1	1	-		1	1	-		1	0	-1	
Decontamination solution for clinical equipment (not mixed with concentration written on it)	1 gallon	1 gallon	-		1 gallon	1 gallon	-		1 gallon	1 gallon	-	

Source: Author's Field Survey, February, 2015

Table 4.16 Educational materials for Family Planning services available by facilities

Environment	Mfantseman									Upper Denkyira East								
	Dominase HC			Hinii CHPS			Kormantse clinic			Kyekyewere HC			Dunkwa RCH			Amoafo CHPS		
	Yes Seen	Yes not Seen	no	Yes seen	Yes not Seen	no	Yes seen	Yes not seen	no	Yes seen	Yes not seen	no	Yes seen	Yes not seen	no	Yes seen	Yes not seen	no
FP Protocol	✓					✓	✓			✓			✓			✓		
FP flipchart (either small or big size)	✓			✓			✓			✓			✓			✓		
Visual Aids	✓					✓	✓			✓			✓			✓		
Other (posters)			✓			✓			✓			✓	✓					✓

Source: Author's Field Survey, February, 2015

Health facilities providing family planning services indicated some challenges facing facilities in rendering the services as follows:

- ✓ Lack of waiting and separate rooms for family planning services in some facilities leading to delay in service delivery and less level of privacy.
- ✓ Inadequate equipment to deliver family planning services in some facilities
- ✓ Inadequate space for family planning services in some facilities leading to poor level of privacy
- ✓ Inadequate trained personnel in the districts for family planning services
- ✓ Poor data capturing or management in facilities

4.9 Religious Institutions Opinion about Family Planning Services

Predominant religious institutions in the study communities were also interacted with to find out about their position on use of contraceptives. All churches and the prayer camps with the exception of Catholic and Muslims indicated that they are not against family planning and have no doctrine against it. The Muslims emphatically indicated that the religion prohibit the use of the family planning service. Again, the Catholic Church indicated that the church prohibit the use of any artificial means or method to prevent a child from coming into this world hence does not support artificial contraception, however they support natural family planning method.

4.10 Summary of Chapter

The chapter presented findings of the study with respect to service provider- related factors, community- related ones, socio-demographic and family planning commodity factor that influence accessibility and utilization of family planning services. The chapter indicated that knowledge level of modern contraceptives is very high among both men and women and it increases with the level of education. Again, it emphasized that there is significant improvement in the use of modern contraceptives in the study districts in Central region, since all women currently using contraceptives in both districts use modern ones *(see Table 4.4)*. The chapter clearly revealed that there is little difference in utilization of contraceptives between Upper Denkyira East and Mfantsiman districts. Physical and financial accessibility did not negatively impact on use of contraceptives in study areas despite unapproved charges of family planning services in facilities, rather it is social issues such as stigma of use,

husbands and religious prohibition among others that hinder the use of contraceptives among women.

The chapter also revealed that factors such as proximity to facility or clinic, privacy and confidentiality at clinic, wanting to delay pregnancy among others motivate use of contraceptives, whiles fertility and method – related factors such as wants many children, fear of side effects were cited as reasons for non-use.

CHAPTER FIVE
SUMMARY OF FINDINGS, RECOMMENDATIONS AND CONCLUSION

5.1 Introduction

The principal concerns of the study is to assess the level of accessibility and utilization of family planning services in the study districts as well as identifying helping factors for utilization and challenges associated with family planning services. This chapter therefore presents summary of findings, recommendations and conclusions that will be useful for policymakers and all managers who work in the areas of population and family planning.

5.2 Summary of Findings

The summary of key findings of the study in accordance with the research questions are as follows:

5.2.1 Utilization of Family Planning Services.

The knowledge of contraceptives is very high among all women and men in the region and it was found to be higher for modern methods than traditional ones. Modern family planning methods such as pills, injectable, Jadelle, male and female condoms are the most commonly known ones.

Generally, one will expect that high knowledge level of contraceptives will translate into its utilization in the region. The utilization level of contraceptives among women of reproductive age 15 -49 years in the districts is 26 percent and the most widely used method is injectable, followed by pills and Jadelle. It is worthy to note that, there is significant improvement in the use of modern contraceptives, which is more effective and reliable in the study districts. As revealed by the study, only modern contraceptives are currently being used by all the 26 percent of women in reproductive age. The use of family planning method among educated women increases with education and this is attributable to the fact that, education improves on once literacy level, therefore enhancing their desire to use health services for better health outcomes.

However, current use of contraceptives is also high among non-educated women and is a reflection of their high knowledge level of family planning services. This is due to the fact that, healthcare providers have intensified family planning education using multiple channels

such as CWC, radio and television stations, home visits, community FM stations among others so that these women have understood family planning concept and accepted the services.

Contrary to the report that, there is huge variation in family planning acceptor rate between Upper Denkyira East and Mfantsiman districts, the study revealed that there is little difference. The huge variation is due to poor family planning data management in facilities in Upper Denkyira East district.

5.2.2 Accessibility of Family Planning Services

Financial accessibility to family planning for women within the reproductive age with respect to price of contraceptives and consultation charges if any is generally good. Despite the fact, that financial accessibility is good, women currently pay far higher than approved prices for contraceptives they use. Again women currently using contraceptives are charged consultations charges for family planning services which should not be the case. This could be attributed to low level of public awareness on charges for family planning services including prices of contraceptives.

Physical accessibility regarding geographical location of clinic, means of transport and travel time is very good for women currently using contraceptives in the region. However, women in Babianiha community in the Upper Denkyira East district indicated that location of family planning clinic thus Dunkwa RCH Clinic is poor, as some of the women are of the view that, they can access the facility by only Taxi which adds on to service charges or walk long distance before reaching the facility as well as long waiting time of receiving services at the facility.

Social or psychological accessibility with respect to health staff attitude and privacy and confidentiality for family planning service provision is generally very good in facilities in the region as revealed by the study. Kyekyewere health centre has poor privacy and confidentiality for family planning clients due to the fact that, family planning consulting room is adjacent to OPD consulting room and all clients for both services have common waiting place. Although service provider -related factors such as staff attitude as well as privacy and confidentiality in most facilities is very good, social factors such as

stigmatization, husbands/partners opposition, religious opposition among others and also called psychosocial barriers, impede access or use of family planning services.

5.2.3 Factors Motivating Utilization of Family Planning Services

A spouse desire to delay or avoid pregnancy is one of the major reasons for using contraceptives. This is an indication that people have really understood the family planning concept for better health outcomes and family management.

Service provider-related factors such as confidentiality and privacy at family planning (FP) clinic, followed by proximity to FP clinic and convenience of opening hours are also factors motivating clients to use family planning methods.

In addition, factors contributing to utilization of contraceptives in the region include facility types such as FP clinic, mobile clinic or outreach and CHPS compounds. This implies that women make good use of facilities closer to them for family planning than hospitals. Hence the need to establish more FP delivery sites or CHPS compounds in our communities.

5.2.4 Reasons for Not Using Contraceptives

Fertility-related-reasons such as wanting to have more children and menopausal or hysterectomy contribute largely to non-use of contraceptives in the region. Again health concerns and fear of side effects serve as barriers to use of family planning services. This could be attributed to weak counselling process during family planning service delivery, hence the need for Service providers to intensify counselling.

Opposition to use family planning method either by husband or partner, respondent, religion and others is still a challenge to contraceptives use in communities. It is therefore necessary for Ghana Health Service to adopt strategies to deal with it.

Also, factors such as lack of preferred choice of method, stigma of use and high prices are reasons for women not using contraceptives in communities.

5.2.5 Challenges Facing Family Planning Accessibility and Utilizations

The major challenge affecting accessibility and utilization of contraceptives are attitudinal and social issues such as desire to have many children as possible, stigmatization and

opposition from partners and religions. Again health concerns such as fear of side effects of contraceptives impedes its use in the study districts. This implies that, there is the need for family planning service providers to strengthen counselling with emphasis on health concerns and side effects of the contraceptives. Despite the fact that, there is high knowledge of family planning in the study districts, there is the need for service providers to adopt strategies targeting the attitudinal and social factors impeding contraceptives use.

With respect to the capacity of health facilities to provide family planning services, there is lack of separate rooms as well as inadequate space for the services in some facilities, resulting in delays and less level of privacy for clients. Poor family planning data capturing and management, particularly among primary data collectors in facilities affect quality of family planning data in some facilities, hence the need to provide support supervision in family planning clinics. In addition, there is inadequate essential equipment needed for family planning services in some health facilities resulting in delays coupled with inadequate staff for providing family planning services especially at the primary level facilities such as CHPS compounds.

5.3 Recommendations

Based on the key findings of this study, the following recommendations are being made;

1. District Health Management Team should conduct training on family planning (FP) data collection tools more especially for primary data collectors such as CHNs/CHOs to improve on family planning data management. These FP primary data collectors at CHPS compounds level and family planning clinics are the main staff providing the FP services and training them will go a long way to improve FP data quality at all levels of service delivery. Again, the District Health Management Team in conjunction with Regional FP Unit need to train service providers on counseling skills to improve on FP counseling for clients.

2. There should be intensified education or public awareness on family planning services with much emphasis on health concerns or side effects of each contraceptives using multiple channels including the social media. This also includes intensified awareness on prices of contraceptives as well as other charges for family planning services. This will help to minimize the unapproved charges for the FP services, the service

providers are charging. The Regional and District FP Units should collaborate with identified groups (eg; Women's Associations) or NGOs in communities in line with capacity building, resourcing the groups with FP educational materials and design programs of action with them to intensify awareness creation on family planning concepts.

3. The Ghana Health Services should also improve on their communication strategies and information to educate the public on family planning services targeting the social or psychosocial barriers to contraceptives utilization in the communities.

4. There is the need for service providers to continue to improve on privacy and confidentiality for clients during service delivery as well as attitude as it motivates clients to use contraceptives. Again, family planning clients want to be assured of privacy and confidentiality of information they share with service providers to avoid stigma associated with the use of contraceptives in the communities.

5. Ghana Health Services should establish more CHPS compounds, FP delivery sites or post and more outreach points to extend family planning services to clients particularly those in rural communities. Also FP services should be integrated into community level activities such as health durbars and health fairs. Ghana Health Services should also work closely with Community Based Agents (CBAs) to extend FP services to clients particularly with respect to education. This will further improve on physical accessibility to family planning services and increase awareness creation thereby increasing utilization.

6. There is also the need for Regional Health Management Team/Regional FP Unit to put in place mechanism by constantly monitoring the supply chain system, to ensure adequate and sufficient supply of FP commodities to districts and facilities as well. Also, the Regional FP Unit should frequently send update on contraceptives availability to districts and facilities, this will help avoid shortages of contraceptives in the facilities. Again all facilities should have requisite staff more especially Community health nurses and midwives who are the frontline FP service providers and basic FP equipment so that clients can have access to all methods of choice at all levels.

5.4. Conclusion

The study found a high knowledge level of contraceptives among both men and women in the study districts. There was significant use of modern contraceptives in the study districts in Central region, as all women currently using contraceptives use modern ones. The study however revealed little difference in utilization of contraceptives between Upper Denkyira East and Mfantsiman districts. Also, women pay more than approved charges for family planning services in both districts, though they indicated that it is affordable. This implies that cost of contraceptives has little effects on its use in the study districts. In addition, physical accessibility to family planning services is very good in all study districts. However, social issues such as stigma of use, husbands and religious prohibition among others hinder the use of contraceptives among women.

The study also revealed that factors such as proximity to facility or clinic, privacy and confidentiality at clinic, wanting to delay pregnancy among others motivate use of contraceptives. The study also found that the architecture of health facilities also affect utilization of FP services as observed from Kyekyewere H/C where FP consulting room is adjacent to general OPD consulting room and both FP and OPD clients are in the same waiting place for services, hence poor privacy and confidentiality as cited by FP clients. This should inform policy makers particularly when allocating rooms for various services in facilities.

The study concludes by supporting the assertion that, the desire for many children, fear of side effects from use of contraceptives hinders access and utilization of contraceptives. This coupled with high deficit of CHOs/CHNs and midwives who are frontline family planning service providers undermine efforts to achieve optimum access and utilization of family planning services within the study districts. The need for adequate staff to be posted to CHPS compounds and intensive education on population or fertility control through family planning are important. Making known the perceived side effects (if there are) and more importantly, how they could be avoided are not just relevant but a necessity.

REFERENCES

Aboagye, P.K. (2012). Implementation of the MDG acceleration Framework Strategy. Retrieved from www.ghanahealthservice.org (Accessed on 02/04/14).

Adamchak, S.E., Bair, W.D., Barry, S. and Olson, C. (1995). *Final evaluation of the Ghana Family Planning and Health Project (FPHP).* POPTECH Report No. 95-045-031. Arlington, Virginia: Population Technical Assistance Project.

Agha, S. (2000). The determinants of infant mortality in Pakistan. *Social Science and Medicine* 51: 199–208.

Ahmed, S., Li, Q., Liu, L. and Tsui, A. O., (2012). Maternal deaths averted by contraceptive use: An analysis of 172 countries. *The Lancet* 380 (9837): 111–125.

Akintade, O.L., Pengpid S. and Peltzer K. (2011). Awareness and use of and barriers to family planning services among female university students in Lesotho**,** *SAJOG*, 17(3): 72 – 78.

Akyeah, F. (2007). *Factors Influencing the Utilisation of Family Planning Services in Kwabre District, Ghana* (Unpublished MSc. Thesis). Community Health Department, KNUST: Kumasi.

Ali, M., Bhatti, M. A. and Kuroiwa, C. (2008). Challenges in Access to and Utilization of Reproductive Health Care in Pakistan, *J Ayub Med Coll. Abbottabad*, 20(4):3 – 7.

Andrew, J. (2005). *Maryland family planning and reproductive health program.* Centre for Maternal and Child Health: Maryland

Ashford, L**. (**2003). *Unmet Need for Family Planning: Recent Trends and Their Implications for Programs***.** Population Reference Bureau, Policy Brief. MEASURE Communication: Washington DC.

Bangladesh Bureau of Statistics (2009), *Statistical pocket Book of Bangladesh 2008*, Bangladesh Bureau of Statistics: Dhaka.

Baxter, P. and Jack, S. (2008). Qualitative Case Study Methodology: Study Design and Implementation for Novice Researchers. *The Qualitative Report* 13 (4):544-559

Becker, G.S. (1960). An Economic Analysis of Fertility in Universities, *Demographic and Economic Change in Developing Countries.* National Bureau Committee for Economic Research. NJ, USA: Princeton University Press. 209–240

Bekele, D., Fantahun, M., Gutema K., Getachew, H., Lambiyo, T. and Yitayal, M. (2003). *Family Planning: For the Ethiopian Health Center Team: Ethiopia Public Health Training Initiative, The Carter Center, the Ethiopia* Ministry of Health, and the Ethiopia Ministry of Education: Hawassa University, Ethiopia.

Bertrand, J. T., Hardee K., Magnani, R. J. and Angle, M. A. (1995). Access, quality of care and medical barriers in family planning programs. *International Family Planning Perspectives*, 21(2): 64-69.

Bertrand, J.T., Seiber E. and Escudero, G. (2001). Contraceptive dynamics in Guatemala: 1978–1998. *International Family Planning Perspectives:* 27(3):112–136.

Bhattacherjee, A. (2012). Social Science Research: Principles, Methods, and Practices, USF Tampa Bay Open Access Textbooks Collection, Book 3. Retrieved from http://scholarcommons.usf.edu/oa_textbooks/3 (Accessed on 12/01/14).

Biney, A.A.E. (2011). Exploring Contraceptive Knowledge and Use among Women Experiencing Induced Abortion in the Greater Accra Region, Ghana *African Journal of Reproductive Health,* 15(1):37 – 46.

Birdsall N, Kelley A.C. and Sinding S, (2001). *Population Matters: Demographic Change, Economic Growth, and Poverty in the Developing World*, Oxford University Press: Oxford.

Bongaarts, J and Sinding, S. W. (2009). A Response to Critics of Family Planning Programs. *International Perspectives on Sexual and Reproductive Health* 35(1):39 - 44

Bongaarts, J. (1997). The role of family planning programmes in contemporary fertility transitions, in: Jones GW et al., (eds)., *The Continuing Demographic Transition*, Oxford: Clarendon Press. 422–444.

Bongaarts, J. (2008). Has the AIDS epidemic peaked? *Population and Development Review*, 14(2):199–224.

Bongaarts, J. and Sinding, S.W. (2009). A Response to Critics of Family Planning Programs. *International Perspectives on Sexual Reproductive Health*, 35(1): 39 – 44.

Bosu, W.K., Ahelegbe, D., Edum-Fotwe, E., Bainson, K.A. and Turkson, P.K. (1997). Factors influencing attendance to immunization sessions for children in a rural district of Ghana. *Acta Tropica* 68: 259–267.

Brair, S. L. and Eltayeb, L.B. (2013). Barriers to family planning service utilization among Sudanese women in Khartoum locality, 2012. *Al Neelain Medical Journal*, 3 (9): 16 – 28.

Brockman, S. (2003). *The Public Health Impact of Optimal Birth Spacing: New Research from Latin America and the Caribbean*, Toppan Printing Inc: New York.

Calhoun, L.M., Speizer, I.S., Rimal, R., Sripad, P., Chatterjee, N., Achyut, P. and Nanda, P. (2013). Provider imposed restrictions to clients' access to family planning in urban Uttar Pradesh, India: a mixed methods study. *BMC Health Services Research*, 13(532):1 – 13.

Campbell M., Sahin-Hodoglugil N.N., and Potts M., (2006). Barriers to Fertility Regulation: A Review of the Literature. *Studies in Family Planning*, 37(2):87 – 98.

Carr, B., Gates, M. F., Mitchell, A. and Shah, R. (2012). "Giving women the power to plan their families". *The Lancet* 380 (9837): 80–82.

Casterline, J. B., Sathar, Z.A. and Minhaj ul Haque (2001). Obstacles to contraceptive use in Pakistan: A study in Punjab. *Studies in Family Planning* 32(2): 95–110.

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): 691–723.

Casterline, J.B., Perez, A.E. and Biddlecom, A.E. (1997). Factors underlying unmet need for family planning in the Philippines. *Studies in Family Planning* 28(3): 173-191.

Castle S. (2003). Factors influencing young Malians' reluctance to use hormonal contraceptives. *Studies in Family Planning* 34(3): 186–199.

Chamratrithirong, A. and Kamnuasilpa, P. (1984). How family planning availability affects contraceptive use: The case of Thailand. In Ross J. and McNamara R. (Eds.) *Survey Analysis for the Guidance of Family Planning Programs*. Liège, Belgium: Ordina Editions. 219–235.

CIET Canada, (2000). Service Delivery Survey: second cycle, 2000 preliminary findings. Dhaka: *Health and Population Sector Programme Health Policy Research in South Asia*. Washington DC: The World Bank. 101 - 127

Cincotta, R, Engelman, R. and Anastasion, D. (2003). *The Security Demographic: Population and Civil Conflict After the Cold War*. Population Action International: Washington DC.

Cincotta, R. (2008). How democracies grow up, *Foreign Policy, Routledge Handbook of Peace building.* USA: Routledge. 80–82.

Ciszewski, R.L. and Harvey, P.D. (1994). The effect of price increases on contraceptive sales in Bangladesh. *Journal of Biosocial Science,* 26(1):25–35.

Cleland J., Conde-Agudelo, A., Peterson, H., Ross, J. and Tsui, A. (2012). Contraception and health. *The Lancet* 380 (9837): 149–156.

Cleland, J. (1994). Fertility levels and trends in Bangladesh, in J. Cleland et al. (Ed.), *Bangladesh Fertility Survey, 1989, Secondary Analysis*, National Institute of Population Research and Training (NIPORT): Dhaka.

Cleland, J., Bernstein, S., Ezeh, A., Faundes, A., Glasier, A. and Innis, J. (2006). Family planning: the unfinished agenda. *The Lancet Sexual and Reproductive Health Series*, 3: 2- 14

Cleland, J., Conde-Agudelo, A., Peterson, H., Ross, J. and Tsui, A. (2012). Contraception and health. *The Lancet* 380 (9837):149–156.

Cleland, J., Kamal, N. and Sloggett, A. (1996). *Links between fertility regulation and the schooling of and autonomy of women in Bangladesh.* New Delhi, India: Sage Publications. 205–217.

Cleland, J., Phillips, J.F. and Amin, S. (1994). *The determinants of reproductive change in Bangladesh: success in a challenging environment.* Washington, DC: The World Bank.

Cutrer, W.R. and Glahn, S.L. (2005). *The Contraception Guidebook: Options, Risks, and Answers for Christian Couples.* Christian Medical Association Resources: Zondervan Grand Rapids, Michigan.

Czarniawska, B. (2004). Narratives in Social Science Research, *The Central Asia Business Journal.* 2 (1): 29-36.

Darroch, J.E., Sedgh, G. and Ball, H. (2011) *Contraceptive Technologies*: *Responding to Women's Needs,* New York: Guttmacher Institute.

DeClerque, J., Tsui, A.O., Abul-Ata, M.F. and Barcelona, D. (1986). Rumor, misinformation and oral contraceptive use in Egypt. *Social Science and Medicine* 23: 83–92.

Degu, G. and Yigzaw, T. (2006). *Research Methodology*. Lecture notes. Ethiopia: Ethiopia Public Health Initiative.

Demery, L. (2000). *Benefits Incidence: A practitioner's guide*. Washington: World Bank Poverty and Social Development Group, Africa Region.

Deschner, A. and Cohen, S.A. (2003). Contraceptive Use is Key to Reducing Abortion Worldwide. *The Guttmacher Report on Public Policy*, 6(4): 7-10.

Donati, S., Hamam, R. and Medda, E. (2000). Family planning KAP survey in Gaza. *Social Science and Medicine* 50(6): 841–849.

Eberstadt, N. (2006), Doom and demography, *Reading The Future*. *The Wilson Quarterly*, Winter, Pennsylvania Avenue, N.W., Washington D.C: Woodrow Wilson International Center for Scholars. 27–31

Eliason, S., Awoonor-Williams, J. K., Eliason C., Novignon J., Nonvignon, J. and Aikins, M. (2014). Determinants of modern family planning use among women of reproductive age in the Nkwanta district of Ghana: a case–control study. Retrieved from www.reproductive-health-journal.com. (Accessed on 27/10/14).

Eltomy, E.M., Saboula N.E. and Hussein, A.A. (2013). Barriers affecting utilization of family planning services among rural Egyptian women. *Eastern Mediterranean Health Journal*, 19 (5) :400 – 408.

Ensor, T. and Cooper, S. (2004). *Overcoming Barriers to Health Services Access: Influencing the Demand Side. International Programme,* Centre for Health Economics, University of York, York, UK.

Family Planning Association (FPA) (2014). Your guide to family planning: Helping you choose the method of contraception that is best for you. Retrieved from www. fpa.org.uk (Accessed on 24/08/14).

Food and Agriculture Organization (FAO) (2005). Population Aspects in the Reduction of Hunger.Retrievedhttp://huwu.org/esa/population/publications/PopAspectsMDG/04_FAO.pdf . (Accessed on 19/06/13).

Foreit, J.R., Gorosh, M.E, Gillespie D.G. and Merritt, C.G. (1978). Community-Based and Commercial Contraceptive Distribution: An Inventory and Appraisal. *Population Reports*, Series J, 19: 346 -374

Gelberg L., Leake B., Lu M.C., Andersen R, Nyamathi A.M., Morgenstern, H. and Browner, C. (2002) "Chronically homeless women's perceived deterrents to contraception" *Perspectives on Sexual and Reproductive Health* 34(6): 278–285.

Ghana Health Service (2006). *A Road Map for Repositioning Family Planning in Ghana*. Accra: Ghana Health Service.

Ghana Health Service, (2007). *National Family Planning Protocols.* Adenta –Accra: Ghana Health Service

Ghana Health Services (2012). *Central Regional Annual Report 2011*. Cape Coast: Ghana Health Service

Ghana Health Services (2013). *Central Regional Annual Report 2012*. Cape Coast: Ghana Health Service

Ghana Health Services (2014). *Central Regional Annual Report 2013*. Cape Coast: Ghana Health Service

Ghana Health Services (2014). *District Health Annual Report 2013.* Dunkwa – Offin: Ghana Health Service

Ghana Health Services (2014). *District Health Annual Report 2013.* Saltpond: Ghana Health Service

Ghana Health Services and USAID/Strengthening Health Outcomes through Private Sector (SHOPS) Ghana project (2013). *Handbook for Community Based Family Planning Providers*; Cantonments, Accra: Ghana Health Services Family Health Division.

Ghana Statistical Service (2012). Ghana Multiple Indicator Cluster Survey with an enhanced Malaria Module and Biomarker 2011: Monitoring the Situation of Children and Women in Ghana. Accra, Ghana. Ghana Statistical Service.

Ghana Statistical Service (GSS) (2012). Population & Housing Census 2010. Summary Report of Final Results. Accra: GSS.

Ghana Statistical Service (GSS), Ghana Health Service (GHS), and ICF Macro (2009). Ghana Demographic and Health Survey 2008. Accra, Ghana: GSS, GHS, and ICF Macro.

Ghana Statistical Service and Macro International (1999). Ghana Demographic and Health Survey 1998, Calverton, MD, USA: Ghana Statistical Service and Macro International.

Government of Ghana (2004). *Meeting the Commodity Challenge: Ghana National Contraceptive Security Strategy 2004 – 2010*. Accra, Ghana: The Ministry of Health Agencies and Partners.

Green, A., Rana M., Ross, D. and Thunhurst, C. (1997). Health planning in Pakistan: a case study. *Int J Health Plann Manage*, 12(3):187–205.

Green, R.A. (2002). *Empty pockets: Estimating the ability to pay for family planning.* Paper presented at the annual meeting of the Population Association of America, Atlanta, 9–11 May.

Gribble, J. and Voss, M. (2009). *Family Planning and Economic Well-Being: New Evidence from Bangladesh,* Policy Brief. Connecticut Ave. Washington: Population Reference Bureau,

Grossman, M. and Kaestner, R. (1997). Effects of education on health. In: Behrman J.R, Stacey N. (Eds). *The social benefits of education*. Ann Arbor, Michigan: University of Michigan Press.

Guttmacher Institute (1999). *Recent Trends in Abortion Rates Worldwide*, Washington, DC: Guttmacher Institute.

Hailemariam, A. and Haddis, F. (2011). Factors Affecting Unmet Need for Family Planning in Southern Nations, Nationalities and Peoples Region, Ethiopia, *Ethiop J Health Sci*. 21(2):77 – 89.

Health Policy Project (2012). Resource Requirements for Family Planning in Ghana. Retrieved from www.healthpolicyinitiative.com (Accessed on 25/03/14).

Hogan, P.D., Betemariam, B. and Assefa, H. (1999). Household Organization, Women's Autonomy and Contraceptive Behavior in Southern Ethiopia. *Studies in Family Planning*. 30 (4):302-314.

Hong, R., Fronczak, N., Chinbuah A. and Miller, R. (2005). *Ghana Trend Analysis for Family Planning Services, 1993, 1996, and 2002.* Calverton, Maryland, USA: ORC Macro.

Kanthiti, F. J. (2007). *Factors that facilitate adolescent use of family planning services. Review studies.* (Unpublished MPH Thesis), University of Malawi: Malawi.

Karavus, M., Cali, S., Kalaca S. and Cebeci, D. (2004). Attitudes of married individuals toward oral contraceptives: A qualitative study in Istanbul, Turkey. *Journal of Family Planning and Reproductive Health Care,* 30(2):95–98.

Khan, A.R. and Khan, M. (2010). Population Programs in Bangladesh: Problems, Prospects and Policy Issues. Retrieved from www.populationcommunication.com (Accessed on 12/09/14).

Khan, S., Bradley, S.E.K., Fishel, J. and Mishra, V. (2008). *Unmet Need and the Demand for Family Planning in Uganda. Further Analysis of the Uganda Demographic and Health Surveys, 1995- 2006.* Claverton, Maryland: USA: ICF Macro.

Krakowiak-Redd, D., Ansong, D., Otupiri E., Tran, S., Klanderud, D., Boakye, I., Dickerson, T. and Crookston, B. (2011) Family Planning in a Sub-district near Kumasi, Ghana: Side Effect Fears, Unintended Pregnancies and Misuse of a Medication as Emergency Contraception. *African Journal of Reproductive Health*, 15(3):135 – 148.

Levin, A., Caldwell, B. and Barkat-e-Khuda, (2000). *Demand for family planning services in rural Bangladesh: Effect of cash prices and access.* Paper presented at the International Union for the Scientific Study of Population Seminar on Family Planning Programmes in the 21st Century, Dhaka, Bangladesh.

Lewin, B. (1984). *Sex and Family Planning: How we Teach the Young,* Report on Study. Public Health 23. Regional Office for Europe, Copenhagen: World Health Organisation.

Makinen, M., Waters, H., Rauch, M., Almagambetova N., Bitran R., Gilson L., Mclntyre D., Pannarunothai S., Prieto A.L., Ubilla, G. and Ram, S. (2000). Inequalities in health

care use and expenditures: empirical data from eight developing countries and countries in transition. *Bulletin of the World Health Organization* 78: 55–65.

Marries Stopes International (2011). Increasing family planning access and choice: Key lessons from Marie Stopes International's clinical outreach programmes. Retrieved from www.mariestopes.org (Accessed on 15/03/14).

Matheny, G. (2004). Family planning programs: Getting the most for the money. *International Family Planning Perspectives*, 30(3):134–138.

Mehrotra, S. (2000). *Integrating Economic and Social Policy: Good Practices from High-Achieving Countries*. Innocenti Working Paper No. 80. Florence, Italy: UNICEF Innocenti Research Centre.

Miller, K., Miller, R., Askew, I., Horn, C., Marjorie, C. and Ndhlovu, L. (1998). *Clinic-based family planning and reproductive health services in Africa: Findings from situation analysis studies.* New York: Population Council.

Ministry of Health, (2011). *Meeting the Commodity Challenge: The Ghana National Reproductive Health Commodity Security Strategy 2011–2016.* Accra: Ministry of Health.

Moazzam, A., Mohammad, A. B. and Chushi, K. (2008). Challenges in Access to and Utilization of Reproductive Health Care in Pakistan, *J Ayub Med Coll Abbottabad*, 20: 3 – 7.

Molyneaux, J. (2000). *The Evolution of Contraceptive Pricing in Indonesia.* Final report to the POLICY Project. Jakarta, Indonesia: Rand Corporation.

Mosher, S. (2000). AIDS and population control in Africa, *Population Research Institute Weekly Briefing,* 2(16):.1–3.

Mumtaz, K. and Salway, S. (2005). "I never go anywhere": Extricating the links between women's mobility and uptake of reproductive health services in Pakistan. *Social Sci Med*, 60(8):1751–1765.

Nakiboneka C and Maniple E (2008). Factors related to the uptake of natural family Planning by clients of Catholic health units in Masaka Diocese, Uganda, *Health Policy and Development* 6(3): 126-141

National Commission on Terrorist Attacks (2004). *The 9/11 Commission Report: Final Report of the National Commission on Terrorist Attacks upon the United States,* New York. W. W. Norton & Company.

National Development Planning Commission (NDPC) (2010). Medium-Term National Development Policy Framework: Ghana Shared Growth and Development Agenda (GSGDA), 2010-2013. (Vol I). Accra, Ghana: Government of Ghana.

National Institute of Population Research and Training (NIPORT),(2005). *Bangladesh Demographic and Health Survey 2004,* Dhaka, Bangladesh: National Institute of Population Research and Training and Mitra and Associates; and Calverton, MD, USA: ORC Macro.

National Population Council (2006). Ghana's Development Agenda and Population Growth: The Unmet Need for Family Planning, Retrieved from *www.policyproject. com/pubs/country reports/RAPID_booklet_final.pdf* (Accessed on 27/02/14).

Ngethe, P.N. (2014). Family Planning in Kenya: *A Review of National and District Policies and Budget.* Lavington, Nairobi, Kenya: Deutsche Stiftung Weltbevoelkerung (DSW).

Ojakaa, D. (2008). *Trends and Determinants of Unmet Need for Family Planning in Kenya. Demographic and Health Research (DHR),* Working Papers No. 56. Kenya: Macro International Inc.

Okech, T., Wawire, N.W. and Mburu, T.K. (2011). Contraceptive Use among Women of Reproductive Age in Kenya's City Slums. *International Journal of Business and Social Science*. 2 (1): 22 – 43.

Okech, T.C. (2012). Kenya's Programmatic Response to the Utilization of Family Planning services: Which Way to Go? *IOSR Journal of Pharmacy (IOSRPHR)*, 2(4): 97-107

Okletey M. (2012). *Family planning method choice among married women in the Gomoa West district*, (Unpublished MPH Thesis). University of Ghana: Accra

Okumura, J, Wakai S, and Umenai T. (2002). Drug utilisation and self-medication in rural communities in Vietnam. *Social Science and Medicine* 54(12): 1875–1886.

Olawepo, R.A. and Okedare E.A. (2006). Men's Attitudes Towards Family Planning in a Traditional Urban Centre: An Example from Ilorin, Nigeria. *J. Soc. Sci.* 13(2):83 – 90.

Pallone, S.R. and Bergus, G.R. (2009). Fertility Awareness-Based Methods: Another Option for Family Planning, *J Am Board Fam Med* , 22(2):147 – 157

Pasha, O., Fikree, F. F. and Vermund, S. (2001). Determinants of Unmet Need for Family Planning in Squatter Settlements in Karachi, Pakistan. *Asia-Pacific Population Journal*, 16(2):93-108.

Patient Education Institute Inc. (2012). Natural Family Planning. Retrieved from www.X-Plain.com (Accessed 24/08/14).

Piet-Pelon, N.J., Rob U. and Khan M.E. (2000). *Men in Bangladesh, India and Pakistan, Reproductive Health Issues*. Dhaka: Karshaf Publishers.

Planning Commission (1974). *The First Five Year Plan*, Ministry of Planning, Government of Peoples Republic of Bangladesh: Dhaka.

Potts, M. (2003). Two pills, two paths: A tale of gender bias. *Endeavour* 27(3):127–130.

Potts, M. (2005). Why can't a man be more like a woman?: Sex, power, and politics. *Obstetrics & Gynecology* 106(5): 1,065–1,070.

Pritchett, L.H. (1994). Desired fertility and the impact of population policies, *Population and Development Review*, 20(1):1–55.

Rankin, S. L., Hughes-Anderson, W., House, A. K., Heath, D. I., Aitken, R. J., and House, J. (2001). Costs of accessing surgical specialists by rural and remote residents. *ANZ Journal of Surgery*, 71:544-547.

Rodríguez, G. (1978). Family planning availability and contraceptive practice. *International Family Planning Perspectives* 4(3):100–115.

Rosegrant, M W, Cline, S. A., Li, W. Sulser, T. B., and Valmonte-Santos, R. A. (2005). *Looking Ahead: Long-Term Prospects for Africa's Agricultural Development and Food Security.* Washington, DC: International Food Policy Research Institute.

Ross, J.A. and Winfrey, W.L. (2002). Unmet Need for Contraception in the Developing World and the Former Soviet Union: An Updated Estimate, *International Family Planning Perspectives*, 28(3): 138-143

Ross, J.A., Marjorie R. and Molzan, J.P. (1989). *Management Strategies for Family Planning Programs*. New York: Center for Population and Family Health, Columbia University School of Public Health.

Roudi-Fahimi, F. (2002). *Iran's Family Planning Program: Responding to a Nation's Needs*, MENA Policy Brief, Washington, DC: Population Reference Bureau.

Roudi-Fahimi, F., Monem, A.A., Ashford, L. and El-Adawy, M. (2012). *Women's Need for Family Planning in Arab Countries.* Washington DC: .Population Reference Bureau: UNFPA.

Sachs, J. (2001). Macroeconomics and health: investing in health for economic development. *Report of the Commission on Macroeconomics and Health.* Geneva: World Health Organization.

Schuler, S. R., Hashemi, S.M. and Jenkins, A.H. (1995). Bangladesh's Family Planning Success Story: A Gender Perspective. *International Family Planning Perspectives*. 21(4): 132 – 137

Schultz, T.W. (1973). The value of children: an economic perspective. The *Journal of Political Economy*, 81,Part II:S2–S13.

Segall, M., Tipping, G., Lucas H., Dung, T.V., Tam, N.T., Vinh D.X. and Huong, D.L. (2000). *Health Care Seeking by the Poor in Transitional Economies: the Case of Vietnam*. IDS Research Report 43. Brighton: Institute of Development Studies, University of Sussex.

Shengelia, B., Murray, C.J.L. and Adams, O.B. (2003). Beyond Access and Utilisation: Defining and Measuring Health System Coverage. In Murray C.J.L. and Evans D.B. (Eds.) *Health Systems Performance Assessment: Debates, Methods and Empiricism*. Geneva, Switzerland: World Health Organisation.

Singh, S. and Darroch, J.E. (2012) *Adding It Up: Costs and Benefits of Contraceptive Services—Estimates for 2012,* New York: Guttmacher Institute and United Nations Population Fund.

Singh, S., Darroch, J.E., Ashford, L.S. and Vlassoff, M. (2009). *Adding It Up: The Costs and Benefits of Investing in Family Planning and Maternal and Newborn Health.* New York: Guttmacher Institute and United Nations Population Fund.

Singh, S., Darroch, J.E., Vlassoff, M. and Nadeau, J. (2003). *Adding It Up: The Benefits of Investing in Sexual and Reproductive Health Care*, New York: Alan Guttmacher Institute.

Smit, J., McFadyen, L., Zuma, K. and Preston–Whyte, E. (2002). Vaginal wetness: An underestimated problem experienced by progestogen injectable contraceptive users in South Africa. *Social Science & Medicine* 55(9): 1,511–1,522.

Speidel, J. J., Sinding, S., Gillespie, D., Maguire, E. and Neuse, M. (2009). *Making the Case for U.S, International Family Planning Assistance.* Baltimore, MD: The Bill and Melinda Gates Institute for Population and Reproductive Health.

Speizer, I., Hotchkiss, D., Magnani, R., Hubbard, B. and Nelson, K. (2000). Do service providers in Tanzania unnecessarily restrict clients', access to contraceptive methods? *International Family Planning Perspectives*, 26 (1):13-20

Stanback, J. and Twum-Baah, K.A. (2001). Why Do Family Planning Providers Restrict Access to Services? An Examination in Ghana, *International Family Planning Perspectives*, 2001, 27(1):37–41

Stephenson, R. and Hennink, M. (2004). *Barriers to Family Planning Service Use among the Urban Poor in Pakistan,* Opportunities and Choices Working Paper No. 2 February 2004.

Tejada, J. J. and. Punzalan, J.R.B. (2012). On the Misuse of Slovin's Formula. *The Philippine Statistician,* 61(1):129-136

The Joint United Nations Programme on HIV/AIDS (UNAIDS), (2007) *AIDS Epidemic Update: December 2007,* Geneva: UNAIDS.

Tilahun, T., Coene G., Luchters S., Kassahun, W., Leye E., Temmerman, M. and Degomme, O. (2013). Family Planning Knowledge, Attitude and Practice among Married Couples in Jimma Zone, Ethiopia. Open Access Retrieved from www.plosone.org (Accessed on 12/02/14).

Tomeczuk, B. (2000). Summary from a reproductive health survey among Afghan refugees in Palestine. Unpublished Technical Report. Palestine.

UNAIDS and WHO, (2007).*The Joint United Nations Programme on HIV/AIDS, AIDS Epidemic Update:* Geneva: UNAIDS

UN-HABITAT (2003). *Slums of the World: The face of urban poverty in the new millennium?* Nairobi, Kenya: UN-HABITAT.

United Nations (2013). *The Millennium Development Goals Report 2013.* New York: United Nations.

United Nations (UN), (2007). *World Population Policies 2007,* New York: United Nations,

United Nations Millennium Project, (2004). *Millennium Development Goals Needs Assessment: Country Case Studies of Bangladesh, Cambodia, Ghana, Tanzania and Uganda.* New York: United Nations.

United Nations Population Fund (UNFPA) (2009). *State of the World Population 2009. Facing a changing world: women, population and climate.* UNFPA: New York.

United States Agency for International Development (USAID) (2010). The Cost of Family Planning in Kenya. Health Policy Initiative. Retrieved from www.healthpolicy initiative.com (Accessed on 11/09/14).

USAID and Ghana Sustainable Change Project. (2009). Endline Survey of Current Knowledge, Attitudes and Practice Related to Key Health Behaviors in the Seven Southern Regions of Ghana (Final report). Asylum Down, Accra.

USAID and JSI Research and Training Institute, (2012). *Ghana Health Service Improves Health Care in Partnership with USAID through the USAID Focus Region Health Project* (Project Report). Cantonments, Accra.

USAID, (2005). *Perspectives on unmet need for family planning in West Africa, Benin. Policy Project Briefing* Paper presented at a Conference on Repositioning Family Planning in West Africa, February 15–18, 2005, *Accra, Ghana*

Virtala, A. (2007). *Family planning among University Students in Finland.* Tampere: Acta Electronica Universitatis Tamperensis 604.

Wafula, S. and Ikamari, L. (2007). *Patterns, levels and trends in unmet need for contraception: a case study of Kenya.* Paper presented at the Fifth African Population Conference, Arusha, Tanzania: 10-14 December 2007.

Wattenberg, B.J. (1997). The population explosion is over, *New York Times Magazine,* Nov. 23. 60–63

Westoff, C.F. and Bankole, A. (1995). Unmet need: 1990-1994. *Demographic and Health Survey Comparative Studies* (No.16). Macro International, Calverton, Maryland.

World Health Organisation (WHO) (1975). *Evaluation of Family Planning in Health Services*. Technical Report Series No. 569. Geneva: World Health Organisation.

World Health Organisation (WHO) (2012). *A guide to family planning for community health workers and their clients*, Geneva: WHO Press.

Zieman, M. and Hatcher, RA. (2012). *Managing Contraception*. Tiger, Georgia; Bridging the Gap Foundation.

APPENDICES

Appendix 1: Questionnaire

Questionnaire *(Household – Women in Cohabitation, Married women and sexually active unmarried women aged 15 – 49yrs)*

Introduction and Consent

Hello. My name is _____ and I am working on behalf of KNUST and we are conducting a survey about family planning issues. We would be very grateful if you could participate in this survey. The survey usually takes between 15 to 20 minutes to complete. As part of the survey we would first like to ask some questions about your household and yourself. All answers you give will be confidential and will not be seen by anyone other than members of our survey team. However, your participation in the survey is completely voluntary. If there is any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

At this time, do you want to ask me anything about the survey?

May I begin the interview now?

Date of Visit ------- ------/------- ------/2015

District Upper Denkyira East [ ] Mfantseman [ ]

Subdistrict Kyekyewere [ ] Dunkwa [ ] Saltpond [ ] Dominase [ ]

Community ----------

House number ----------

Name of interviewer ----------

Respondent Telephone No ----------

Demography

1. Area of resident in community City [ ], Small Town [ ] Village [ ]
2. Age of respondent 15yr – 24yr [ ] 25yr -34yr [ ] 35yr – 44yr [ ] 45yr and above [ ]
3. What is your marital status? Married [ ] Divorced [ ] Widow [ ] Separated [ ]
4. Are you currently living with your husband or partner? Yes [ ] No [ ]
5. How many household members do you have? 2-4 [ ] 5-7 [ ] 8-10 [ ] 11 and above [ ]

6. How many male living biological children do you have? None [ ] 1-3[ ] 4-6 [ ] 7-9 [ ] 10 and above [ ]
7. How many female living biological children do you have? None [ ] 1-3[ ] 4-6 [ ] 7-9 [ ] 10 and above [ ]
8. Do you intend to have more children? Yes [ ] No [ ]
9. If Yes, how many? …….
10. If No why?.....
11. Have you ever attended school? Yes[ ] No [ ] ***If no, skip to 13***
12. If Yes, what is your highest level of education? *Preschool [ ] Primary [ ] Middle/JSS/JHS [ ] Secondary/SSS/SHS [ ] Tech/Vocational [ ] Tertiary [ ]*
13. What is your occupation? *Farming [ ] Trading [ ] Teaching [ ] Food Vendor[ ], Artisan[ ] Civil/public Servant [ ] Other (specify)* ----------
14. What is your religious affiliation? *Catholic [ ] Anglican [ ] Methodist [ ] Presbyterian [ ] Pentecostal/Charismatic [ ] other Christian [ ] Moslem [ ] Traditional/Spiritualist [ ] No religion [ ] Others (specify)* ----------
15. What is your ethnic group? *Akan [ ] Ga/Dangme [ ] Ewe [ ] Guan [ ] Mole – Dagbani [ ] Grussi [ ] Gruma [ ] Mande [ ] Other (specify)* ----------
16. Are you a native of this community? Yes [ ] No [ ]
17. If No where do you come from? …….
18. What is your average monthly income? <100 [ ] 100- 199[ ] 200 – 299[ ] 300- 399 [ ] 400 – 499[ ] >500 [ ]
19. How much do you spend on the average on the following in a month?
    a.Food …….b. Clothing ……c Shelter ……d Energy (electricity, kerosene, candle, gas, charcoal etc) …….e Health …… f. Other *(specify)*……..
20. Do you play any leadership role in the community? Yes [ ] No [ ] ***if No Skip to 22***
21. If Yes what role do you play? ……..

Respondent Knowledge about FP

22. Have you heard of family planning? Yes[ ] No [ ] ***if No, skip 24***
23. If Yes, what is it/how do you understand it?

    ……

Which method have you ever heard of? ***(Tick all mentioned)***: *female sterilization [ ] male sterilization [ ], pills [ ], IUD [ ], Jadelle [ ], injectables/Depo [ ], male condom [ ], female condom [ ], calender method [ ], cyclebeads [ ], withdrawal [ ], lactation ammenorhear [ ], Foam/Jelly [ ], Diaphragm [ ],Microlut [ ]Micro G[ ] Micro N [ ] emergency contraceptives(Postinor) [ ].*

Other (specify) ----------

24. Have you ever used a method? never [ ] ever used [ ]
25. If yes, which method……..

    ……..
26. If No why.....

    ……

Utilization and Accessibility

27. Are you currently using any FP method to avoid or delay pregnancy: Yes [ ] No [ ] ***if No skip to 54***

28. If Yes, which method are you currently using ***(Tick as mentioned and fill columns against it)***

Method	**Current Method (Tick)**	**Price of Method (GHC)**	**Price of FP consultation/ counseling (GHC)**	**Other charge(s) (GHC)**	**Covered by NHIS**	**Affordability** ***[5= not very affordable 4= not affordable 3=neutral 2= affordable 1= very affordable]***
Jadelle						
IUD						
Tubal ligation						
Vasectomy						
Female condom						
Male condom						
Injectables/Depo						
Cycle beads						
Micro G						
Micro N						
Norigynon						
Microlut						
ECP (Postinor, Pregnon, Optinor etc.)						
Other(***specify***)						

29. Since what month or year have you been using this current method? Month ……. Year……..

30. What influenced the choice of this current method you are using?

……

32. How much does it cost you in terms of transportation in accessing this current family planning method you are using? ***(fill table)***

	Item	**Price(GHC)**	**Affordability** ***[5= not very affordable 4= not affordable 3=neutral 2= affordable 1= very affordable]***	**Covered by NHIS**
a	Transportation			
b	Other *(specify)*			

33. How long does it take you to access family planning services in the health facility?

Fill Table

	Item	**Time**
a	Traveling Time	
b	Waiting Time at clinic	
c	Other *(specify)*	

34. What means of transport do you use to access FP services?

a. Walking [ ] b. Taxi [ ] c. Trotro [ ] d. Private Vehicle [ ] e.Other (specify)……

35. In your opinion, does travelling distance affect access to FP services in this community?

Yes [ ] No [ ]. Give reasons for your response……

……..

36. In the health facility, what was your impression about FP services regarding the following? ***(fill table)***

[5 = Excellent, 4 = Very good, 3 = Good, 2 = Fair, 1 = Poor] *(NB: Ask them explain each choice and write it as footnote)*

	Environment	**Excellent**	**Very Good**	**Good**	**Fair**	**Poor**
A	Privacy/confidentiality					
B	Staff attitude					
C	Availability of preferred FP method					
D	Opening hours					
E	Location of FP clinic					

37. Have you had any pregnancy or birth since you started using this current method?: Yes [ ] No [ ]
38. Where did you obtain the current method from*? Govt. Hospital/Polyclinic [ ],Govt. Health center [ ], Govt. Health post/CHPS[ ], Family planning clinic [ ], Mobile clinic [ ], Fieldworker/Outreach/Peer Educator [ ] Pharmacy/Drug store [ ] Other (specify)…….*
39. Who provided the FP services to you? CHO/CHN [ ] Staff Nurse [ ] Midwife [ ] Medical Doctor [ ] Medical Assistant [ ] Enroll Nurse [ ] Other *(specify)* ……..
40. What other services were provided to you by the provider? **Tick all mentioned**
    Counseling [ ] FP consultation [ ] Pelvic examination [ ]
    other (specify) ……
41. Were you told about side effects of the current method you are using?: Yes [ ] No [ ]
42. Were you told about what to do if you experience any side effect: Yes [ ] No [ ]
43. Were you told about other methods you could use to avoid pregnancy: Yes [ ] No [ ]
44. If yes what method(s) …….
45. Where did you get your family planning information from? *Private medical sector [ ], private hospital/clinic [ ].Private doctor [ ], Hospital, health center [ ], Pharmacy [ ], Chemical/drug store [ ], FP/PPAG clinic [ ], Maternity home [ ],*

Shop/market. [ ], Church [ ], Community volunteer [ ], Friend/relative [ ], other (specify) ……Don't know . . . . . .

46. In the last 6 months have you been visited by any health worker/fieldworker who talked to you about family planning: Yes [ ], No [ ]
47. In the last 6 months, have you visited any health facility for family planning care; Yes [ ] No [ ]
48. Who made the decision regarding the use of FP? Myself [ ] Husband/partner [ ] Friend [ ] Extended family members [ ] Other (specify)…….
49. Is your husband/partner aware that you are using family planning method: Yes [ ], No [ ] Don't know [ ]
50. Do you discuss general family planning matters with your husband/spouse? Yes [ ] No [ ]
51. Is the use of contraceptive your own decision, husband/partner or both of you decision; *Respondent main decision [ ], Husband/partner decision [ ], Joint decision [ ], Other (specify)……..*

Motivating factors

52. What motivates you to use this family planning method? **(Tick all mentioned);** *Good staff attitude [ ] Convenience of opening hours [ ], FP clinic close to me [ ], Confidentiality and privacy at facility [ ], Wants delay/avoid pregnancy [ ] Facility type/service provider [ ], Other (specify)……*
53. Do you intend using family planning services in the future? Yes [ ] No [ ].

Give reasons for your response……..

……

……

Challenges

54. Why are you **not** currently using any FP method **(Tick all mentioned)**: *Fertility-related reasons[ ], Want A/another child [ ], Not having sex [ ], Infrequent sex [ ], Menopausal/hysterectomy [ ], Subfecund/infecund [ ], Postpartum amenorrhea [ ] breastfeeding [ ], Fatalistic [ ], Respondent opposed [ ], Husband/partner opposed [ ], Others opposed [ ], Religious prohibition [ ], Lack of knowledge [ ], Knows no method [ ], Knows no source [ ], Method-related reasons [ ] health concerns [ ], fear of side effects [ ], Lack of access/Facility too far [ ], Costs too much [ ], inconvenient to use [ ], Interferes with body's normal processes [ ], Have one sex*

of children and want other [ ],Lack of preferred choice of method [ ] Stigma [ ] Other (specify)……Don't know[ ]

55. **If husband/partner opposition**, what is his reason? *Wants more children [ ], Same sex of children and want other sex[ ], Woman becomes promiscuous [ ] Other(specify),---------- Don't know [ ]*
56. Do you have plans of using contraceptives in future; Yes [ ], No [ ], Don't know [ ]
57. If yes what method do you intend to use in future; *Female sterilization [ ], Male sterilization [ ], Pills [ ], IUD [ ], Jadelle [ ], Injectables/Depo [ ], Male condom [ ], Female condom [ ], Calender method [ ], Cyclebeads [ ], Withdrawal [ ], Lactation amenorrhea [ ], Foam/Jelly [ ], Diaphragm [ ], Microlut [ ], Micro G[ ],Micro N[ ] Emergency contraceptives [ ]. Other (specify)……*
58. What is your husband's occupation ----------
59. What is your husband's educational level; *Preschool [ ]Primary [ ] Middle/JSS/JHS [ ] Secondary/SSS/SHS [ ] TECH/VOC [ ] Tertiary [ ] No Education [ ]*
60. In your opinion what are the challenges people face in accessing family planning services in this community?

    ……

    ……

Prospects/Recommendations

61. In your view, what can we do to improve on family planning use among people in this community?

    ……

    ……

62. What are your future expectations/benefits of family planning services in your community?

    ……

    ……

THANK YOU

Questionnaire (Husbands/ Male Partners)

Introduction and Consent

Hello. My name is _____ and I am working on behalf of KNUST and we are conducting a survey about family planning issues. We would be very grateful if you could participate in this survey. The survey usually takes between 15 and 20 minutes to complete. All answers you give will be confidential and will not be seen by anyone other than members of our survey team. However, your participation in the survey is completely voluntary. If there is any question you don't want to answer, just let me know and I will go on to the next question; or you can stop the interview at any time.

At this time, do you want to ask me anything about the survey?

May I begin the interview now?

Date of Visit ------- ------/------- ------/2015

District Upper Denkyira East [ ] Mfantseman [ ]

Subdistrict Kyekyewere [ ] Dunkwa [ ] Saltpond [ ] Dominase [ ]

Community ----------

House number ----------

Name of interviewer ----------

Respondent Telephone No ----------

Demography

1 Area of resident in community City [ ], Small Town [ ] Village [ ]

2 Age of respondent 15yr – 24yr [ ] 25yr -34yr [ ] 35yr – 44yr [ ] 45yr and above [ ]

3 Have you ever attended school? Yes[ ] No [ ] ***If no, skip to 5***

4 If Yes, what is your highest level of education? *Preschool [ ] Primary [ ] Middle/JSS/JHS [ ] Secondary/SSS/SHS [ ] Tech/Vocational [ ] Tertiary [ ]*

5 What is your occupation? *Farming [ ] Trading [ ] Teaching [ ] Food Vendor[ ], Artisan[ ] Civil/public Servant [ ] Other (specify)* ----------

6 What is your religious affiliation? *Catholic [ ] Anglican [ ] Methodist [ ] Presbyterian [ ] Pentecostal/Charismatic [ ] other Christian [ ] Moslem [ ] Traditional/Spiritualist [ ] No religion [ ] Others (specify)* ----------

7 What is your ethnic group? *Akan [ ] Ga/Dangme [ ] Ewe [ ] Guan [ ] Mole – Dagbani [ ] Grussi [ ] Gruma [ ] Mande [ ] Other (specify)* ----------

8 Are you a native of this community? Yes [ ] No [ ]

9 If No where do you come from? …….

10 What is your average monthly income? <100 [ ] 100- 199[ ] 200 – 299[ ] 300- 399 [ ] 400 – 499[ ] >500 [ ]

11 How much do you spend on the average on the following in a month?
Food ……. Clothing …… Shelter ……. Energy (electricity, kerosene, candle, gas, charcoal etc) ……. Health …… Other *(specify)*……

Knowledge

12 Have you ever heard of family planning?.....

13. How do you understand family planning?.....
……

14. What family planning methods are you aware of ? ……..
……

15. Have you ever used a family planning method before? Yes [ ] No [ ]

16. If yes why? ……..
……..

17. If No why? ……
……

Utilization

18. Are you currently using a family planning method? Yes [ ] No [ ]

19. If yes why?.....
……....

20. If No why? …….
……
……

Motivating factors

21. What motivates you to use family planning methods?.....
    ……
    ……..
    ……..

Challenges

22. What are the challenges that males face in using family planning services in this community?.....
    ……

Prospects and Recommendations

23. In your view, what can we do to improve on the use family planning methods in this community?
    ……
24. What are your future expectations/benefits of family planning services in this community?
    ……

THANK YOU

Questionnaire for Health Institution *(Health Facility level)*

Introduction and Consent

Hello. My name is _____ and I am working on behalf of KNUST and we are conducting a survey about family planning issues. We would be very grateful if you could participate in this survey. The survey usually takes between 15 to 20 minutes to complete. All answers you give will be confidential and will not be seen by anyone other than members of our survey team. However, your participation in the survey is completely voluntary. If there is any question you don't want to answer, just let me know and I will go on to the next question; or you can stop the interview at any time.

At this time, do you want to ask me anything about the survey?

May I begin the interview now?

Date of Visit ------- ------/------- ------/2015

District Upper Denkyira East [ ] Mfantseman [ ]

Subdistrict Kyekyewere [ ] Dunkwa [ ] Saltpond [ ] Dominase [ ]

Community ----------

Name of interviewer ----------

Name of facility…….

Facility type [ ] Hospital [ ] Health Centre [ ] CHPS compound [ ] FP clinic/RCH [ ], Other (specify)……..

Facility ownership; Government [ ], Private [ ] CHAG [ ]

Respondent's Telephone No ……..

Cadre of respondent ……

Accessibility

1. Does your facility provide family planning services? Yes [ ] No[ ]
2. If yes which of the following methods does the facility provide; *Female sterilization [ ], Male sterilization [ ], Pills [ ], IUD [ ], Jadelle[ ], Injectables/Depo [ ], Male condom [ ], Female condom [ ], Calender method [ ], Cyclebeads [ ], Withdrawal [ ], Lactation ammenorhear[ ], Foam/Jelly [ ], Diaphragm [ ], Micro G [ ], Micro N [ ], Microlut [ ] Emergency contraceptives [ ]. Other (specify)……*

3. Do you provide FP services to both males and females? Yes [ ] No [ ]

Give reasons for your response…….

……

……

4. How many FP service providers are available in this facility? ***Fill table***

Staff Category	**Number Available**	**Number required**
CHNs/CHOs		
Midwives		
Medical Assistants		
Medical Officers		
Enroll Nurses		
Other(specify)		

5. .Does the facility have trained providers in the following methods? ***Fill table***

	Method	**Yes, indicate number available**	**No**	**Not applicable**
1	Jadelle			
2	IUD			
3	Bilateral tubal ligation			
4	Vasectomy			

6. In the last 6 months have any of your staff had FP refresher course or FP supportive supervision from the district or region; Yes [ ],No [ ]
7. How much does it cost a client to access family planning services with respect to the following? ***(fill table) (Indicate by methods)***

	Method	**Price of Method (GHC)**	**Price of FP consultation /counseling (GHC)**	**Other charge(s) (GHC)**	**Covered by NHIS**
a	Jadelle				
b	IUD				
c	Tubal ligation				
d	Vasectomy				
e	Female condom				
f	Male condom				
g	Injectables/Depo				
h	Cycle beads				
i	Micro G				
j	Micro N				
k	Norigynon				
l	Microlut				
m	ECP (Postinor, Pregnon, Optinor etc.)				
n	Other(specify)				

8. In this facility, is the FP service provision environment suitable for you regarding the following? ***(Fill table)*** ***[5 = Excellent, 4 = Very good, 3 = Good, 2 = Fair, 1 = Poor]***

(NB: Ask them explain each choice and write it as footnote)

	Environment	**Excellent**	**Very Good**	**Good**	**Fair**	**Poor**
a	Privacy/confidentiality					
b	Staff attitude					
c	Availability of FP methods					
d	Opening hours					
e	Location of FP clinic					

9. Does the facility have the following educational materials for FP service delivery? (***Fill table***

	Environment	**Yes seen**	**Yes not seen**	**No**
A	FP Protocol			
B	FP flipchart *(either small or big size)*			
C	Visual Aids			
D	Other (specify)			

10. Does the facility have the following FP service delivery equipment/items? ***Fill table***

	Equipment	**Number required**	**Available & Functioning**	**Not applicable**
A	Working BP apparatus			
B	Working Stethoscope			
C	Working adult weighing scale			
D	IUD kit (Tenaculum, speculum, uterine sound)			
E	Jadelle insertion kit (trocar, canula, forceps)			
F	Working spotlight source			
G	Gynaecological examination table/couch and stool			
H	Autoclave/sterilizer/Boiler			
	Infection Prevention Items for FP			
I	Hand washing facilities (veronica/running water, soap, single use towel)			
J	Sharps container			
K	Waste bin (with pedal operated lid)			
L	Decontamination solution for clinical equipment (not mixed with concentration written on it)			

Utilization

11. How many days in a week do you provide FP services? …….

12. How many clients do you attend to? In A day……., Week……

Month…… ***(Verify from FP register)***

13 How many male and female clients in a month from FP register? Males ……..Females……

14 How do you create awareness on FP services in your catchment area?

……1

5. Is FP activities incorporated into your plan of work ? Yes [ ] No [ ] ***if No skip to 17***

16. If yes, where is the plan? Yes seen [ ] Yes not seen [ ]

17. Where do you get funding for your FP activities in the catchment area? **(Tick all mentioned)**

DHD [ ] RHD [ ] NGOs [ ] Community Leaders [ ] District Assemblies [ ] Other (specify)…

18. What was your budget support for FP services in the facility? ***Fill table***

Year	**Target**	**Actual**	**Source**
2011			
2012			
2013			
2014			

19. Does your facility get any political support for family planning activities? Yes [ ] No [ ] **if no skip to 21**

20. If Yes what support?.....

Accessibility

21. In your facility, do you have the following commodities available today? ***(Tick all available)***, *Pills [ ], IUD [ ], Jadelle[ ], Injectables/Depo [ ], Male condom [ ], Female condom [ ], Calender method [ ], Cyclebeads [ ], Foam/Jelly [ ], Diaphragm [ ], Micro G [ ], Micro N [ ], Microlut [ ] Emergency contraceptives(Postinor) [ ]. Other (specify)……*

22 Have you had stock out of any FP commodity within the last three months*; Yes [ ], No [ ]* ***If no, skip to 24***

23 *If yes, why? ……*

……

……

24 Does the facility have the following infrastructural facilities for service provision? ***Tick all mentioned) Electricity*** [ ] Piped water [ ] Dug- well water [ ] Toilet facility [ ] Private waiting room [ ] other (specify)……..

Motivating factors

25 What do you think is motivating clients to come for contraceptives or FP services?.....

……

Challenges

26 What are the barriers to FP use in your catchment area? ……

……

27 What challenges does your facility face in rendering FP services to clients?

……

Prospects and recommendations

28 What can we do to improve on FP use in your catchment area? ……

……

29 What are your future expectations/benefits of family planning services in this community?

……

THANK YOU

Questionnaire (District Health Directorate)

Introduction and Consent

Hello. My name is _____ and I am working on behalf of KNUST and we are conducting a survey about family planning issues. We would be very grateful if you could participate in this survey. The survey usually takes 15 to 20 minutes to complete. All answers you give will be confidential and will not be seen by anyone other than members of our survey team. However, your participation in the survey is completely voluntary. If there is any question you don't want to answer, just let me know and I will go on to the next question; or you can stop the interview at any time.

At this time, do you want to ask me anything about the survey?

May I begin the interview now?

Date of Visit ------- ------/------- ------/2015

District Upper Denkyira East [ ] Mfantseman [ ]

Subdistrict Kyekyewere [ ] Dunkwa [ ] Saltpond [ ] Dominase [ ]

Community ----------

Name of interviewer ----------

Respondent's Telephone No. ……

Cadre of respondent …….

Accessibility

1. How many service providing facilities do you have in the district? ……
2. How many of your facilities provide family planning services? ……
3. Which method of contraceptives do your facilities provide in the district **(Tick all mentioned)**; *Female sterilization [ ], Male sterilization [ ], Pills [ ], IUD [ ],Jadelle[ ], Injectables/Depo[ ], Male condom [ ], Female condom [ ], Calender method[ ], cyclebeads[ ], Withdrawal [ ], Lactation ammenorhear [ ], Foam/Jelly [ ], Diaphragm [ ], Microlut [ ], Micro G [ ], Micro N[ ], Emergency contraceptives [ ]. Other (specify)……*
4. How many of your staff provide family planning services in your district?

Staff Category	Number Available	Number required
CHNs/CHOs		
Midwives		
Medical Assistants		
Medical Officers		
Enroll Nurses		
Others (specify)		

5. What is the source of funding for FP activities in your district? **(Tick all mentioned)**

   RHD [ ] NGOs [ ] District Assemblies [ ] Community Leaders [ ] Other (specify) …….....

6. What was your budget support for FP services in the district?

Year	Target	Actual	Source
2011			
2012			
2013			
2014			

7. Do you have FP activities incorporated into district health plans? Yes[ ] No [ ] ***if No skip to 9***
8. If Yes where is the district health plan? Yes seen [ ] Yes not seen [ ]
9. Does your district get any political support for FP activities? Yes [ ] No [ ]
10. If Yes, what kind of political support? ……

    ……

    ……..

11. What is the cost of family planning services in the district? ***(Indicate by methods)***

	Method	**Price of Method (GHC)**	**Price of FP consultation/counseling (GHC)**	**Other charge(s) (GHC)**	**Covered by NHIS**
1	Jadelle				
2	IUD				
3	Tubal ligation				
4	Vasectomy				
5	Female condom				
6	Male condom				
7	Injectables/Depo				
8	Cycle beads				
9	Micro G				
10	Micro N				
11	Norigynon				
12	Microlut				
13	ECP (Postinor, Pregnon, Optinor etc.)				
14	Other(specify)				

12. Does your district have trained providers in the following methods?

	Method	**Yes & indicate Number available**	**No**	**Not applicable**
1	Jadelle			
2	IUD			
3	B. Tubal ligation			
4	Vasectomy			

13. At the district stores, do you have the following commodities available today? ***(Tick all available)***, *Pills [ ], IUD [ ], Jadelle[ ], Injectables/Depo [ ], Male condom [ ], Female condom [ ], Calender method [ ], Cyclebeads [ ], Foam/Jelly [ ], Diaphragm [ ], Micro G [ ], Micro N [ ], Microlut [ ] Emergency contraceptives(Postinor) [ ]. Other (specify)……*

14. Have you had stock out of any commodity within the last three months*; Yes [ ], No [ ]* ***If no, skip to 16***

15. *If yes, why?* ……

……

……

16. What is the official opening hours for family planning services in facilities in the district? **Record all mentioned** ……..

……

How does the district give information or educate the public on family planning services?

……

17. In the last 6 months, have you had FP refresher training/supportive supervision visit for your staff in your districts; Yes [ ] No[ ]

Motivating factors

18. What do you think is motivating clients to use family planning in the district?

……

Challenges

19. What are the barriers to family planning use in your district? ……

……

Prospects and Recommendations

20. What can be done to improve on family planning use in your district?.....

……

21. What are your future expectations/benefits of FP services or its use in your district?

……

THANK YOU

Questionnaire for Religious Institutions

Introduction and Consent

Hello. My name is _____ and I am working on behalf of KNUST and we are conducting a survey about family planning issues. We would be very grateful if you could participate in this survey. The survey usually takes between 15 to 20 minutes to complete. All answers you give will be confidential and will not be seen by anyone other than members of our survey team. However, your participation in the survey is completely voluntary. If there is any question you don't want to answer, just let me know and I will go on to the next question; or you can stop the interview at any time.

Date of Visit ------- ------/------- ------/2015

District Upper Denkyira East [ ] Mfantseman [ ]

Subdistrict Kyekyewere [ ] Dunkwa [ ] Saltpond [ ] Dominase [ ]

Community ----------

Name of interviewer ----------

Name of Church……

Respondent's Telephone No ……..

Cadre of respondent …….

Knowledge about FP

1. Have you heard of family planning?.....
2. How do you understand family planning? ……
   ……
3. What family planning methods are you aware of? **Record all mentioned**
   ……
4. What is your view about family planning use?
   ……
5. Do your church doctrines support the use of family planning services?
   Yes [ ] No [ ]
6. Give reasons for your response
   ……

Utilization and Accessibility

7. Are your church members allowed to use family planning? *Give reasons for your response*

   ……

8. Which FP methods are your members allowed to use? ***List all mentioned***

   ……

9. Give reasons for your response?

   ……

   Challenges

10. If members are not allowed to use FP, is there any punishment for those who use it?

    Yes [ ] No [ ]

11. If Yes, what kind of punishments is meted out to those clients? ……..

    ……

    .

12. Does the church sometimes organize health programmes for members? Yes [ ] No [ ]
13. If Yes does it include family planning? Yes [ ] No [ ] if No, skip to 10
14. If Yes, what family planning programme do you sometimes organize for members?

    ……

15. In your opinion, what are the challenges to family planning use in this community?

    ……

Prospects and Recommendations

16. What can we do to improve on family planning use in this community?

    ……

17. In your view, what are your future expectations/benefits of FP services in this community?

    ……

THANK YOU

Appendix 2: Family Planning Acceptor Rates by Districts in Central Region, 2011 – 2013.

DISTRICT	2011		2012		2013		
	ACCEPTORS	% COV	ACCEPTORS	% COV	DISTRICT	ACCEPTORS	% COV
AAK	11927	42.7	17559	61.15	AAK	13536	45.83
AGONA EAST	5948	29.9	5911	28.86	AGONA EAST	4739	21.88
AGONA WEST	9702	32.8	8346	27.46	AGONA WEST	8580	29.51
AEE	6281	22.0	10150	34.63	AEE	7474	21.48
AOB	5466	19.7	6284	22.06	AOB	2404	8.46
ASSIN NORTH	6819	24.1	6591	22.67	ASSIN NORTH	8586	21.11
ASSIN SOUTH	4775	20.3	3410	14.13	ASSIN SOUTH	3426	13.04
AWUTU SENYA	10630	27.3	9610	23.98	AWUTU SENYA	4202	17.80
CAPE CAOST	15259	41.7	10082	26.78	AWUTU SENYA EAST	5347	20.87
EFFUTU	3594	26.2	3574	25.35	CAPE COAST	9299	21.71
GOMOA EAST	5638	17.2	8858	26.23	EFFUTU	3648	21.10
GOMOA WEST	12916	46.9	12219	43.17	EKUMFI	3845	25.53
KEEA	11306	32.4	12476	34.81	GOMOA EAST	11456	21.95
MFAN	7814	16.5	8234	16.90	GOMOA WEST	8829	25.91
THLD	7781	22.7	10215	29.04	KEEA	15022	41.19
UDE	9531	47.5	13117	63.60	MFAN	7011	20.33
UDW	3936	29.3	5067	36.65	TWIFO-ATI MOKWA	2666	15.88
REGION	139323	28.7	151703	30.42	THLD	2232	17.62
					UDE	16457	89.67
					UDW	3890	25.70
					REGION	142649	25.70

Source: Reproductive and Child Health Unit, Central Regional Health Directorate, 2014

Appendix 3: Sample Size Determination

Sample size formula:

$$n=\frac{N}{1+N(\propto)^{2}}$$

where; n is the sample size

N is the sample frame

α is the margin of error defined at 95 percent confidence level (α =0.05).

The sample size was defined from the total number of the eight study areas.

$$n=\frac{5547}{1+5547(0.05)^{2}}$$

$$n=\frac{5547}{1+5547(0.0025)}$$

$$n=\frac{5547}{1+13.8675}$$

$$n=\frac{5547}{14.8675}$$

n = 373

Hence, the minimum sample selected for the study was 373 households.

Appendix 4: Healthcare Provider who provided the FP services to Women currently using Contraceptives

Healthcare Provider	Frequency	Percentage
CHO/CHN	26	27.1
Staff Nurse	25	26.0
Midwife	13	13.5
Medical Doctor	14	14.6
Medical Assistant	4	4.2
Enroll Nurse	1	1.0
Other (specify)	13	13.5
Total	96	100.0

Other- Peer educators, Volunteers, CBAs
Source: Author's Field Survey, February, 2015

Appendix 5: Facility types where women using Contraceptives obtained their current FP method from

Facility types	Frequency	Percentage
Govt. Hospital/Polyclinic	10	10.4
Govt. Health center	9	9.4
Govt. Health post/CHPS	16	16.7
Family planning clinic	28	29.2
Mobile clinic	19	19.8
Pharmacy/Drug store	4	4.2
Other (specify)	10	10.4
Total	96	100.0

Other- Maternity homes, PPAG centre

Source: Author's Field Survey, February, 2015

Appendix 6: Responses by women currently using contraceptives per Location of FP Clinic

Community	Excellent	Very good	Good	fair	poor	Total women
kormantse	2	32	5	2		41
Hinii		9	2			11
Abeadze - Dominase		2	4			6
Taabosom			2			2
Mfantsiman	**2**	**43**	**13**	**2**		**60**
Kyekyewere		17	1			18
Amoafo	2	1				3
Mfoum		6	8			14
Babianiha					1	1
Upper Denkyira East	**2**	**24**	**9**		**1**	**36**
Total	**4 (4.2%)**	**67 (70.8%)**	**22 (21.9 %)**	**2 (2.1 %)**	**1 (1.0%)**	**96**

Source: Author's Field Survey, February, 2015

Appendix 7: Responses by women currently using contraceptives per Staff Attitude

Community	Excellent	Very good	Good	fair	poor	Total women
kormantse	1	31	9			41
Hinii		9	2			11
Abeadze - Dominase		5	1			6
Taabosom		2				2
Mfantsiman	**1**	**47**	**12**			**60**
Kyekyewere		12	4	2		18
Amoafo		2		1		3
Mfoum		9	4	1		14
Babianiha		1				1
Upper Denkyira East		**24**	**8**	**4**		**36**
Total	**1 (1.0%)**	**71 (74.0%)**	**20 (20.8%)**	**4 (4.2%)**		**96**

Source: Author's Field Survey, February, 2015

Appendix 8: Responses by women currently using contraceptives Per Privacy and Confidentiality

Community	Excellent	Very good	Good	fair	poor	Total women
kormantse	19	15	7			41
Hinii		9	2			11
Abeadze - Dominase			2	4		6
Taabosom	2					2
Mfantsiman	**21**	**24**	**11**	**4**		**60**
Kyekyewere			1	2	15	18
Amoafo		1		2		3
Mfoum		14				14
Babianiha		1				1
Upper Denkyira East		**16**	**1**	**4**	**15**	**36**
Total	**21 (21.9%)**	**40 (41.7%)**	**12 (12.5%)**	**8 (8.3%)**	**15 (15.6%)**	**96**

Source: Author's Field Survey, February, 2015

Appendix 9: Responses by women currently using contraceptives Per Opening Hours of FP clinic

Community	Excellent	Very good	Good	fair	poor	Total women
kormantse		38	3			41
Hinii		11				11
Abeadze - Dominase		6				6
Taabosom		2				2
Mfantsiman		**57**	**3**			**60**
Kyekyewere	10	8				18
Amoafo		3				3
Mfoum		14				14
Babianiha			1			1
Upper Denkyira East	**10**	**25**	**1**			**36**
Total	**10 (10.4%)**	**82 (85.4%)**	**4 (4.2%)**			**96**

Source: Author's Field Survey, February, 2015

Appendix 10: Responses by women currently using contraceptives per Availability of Preferred method

Community	Excellent	Very good	Good	fair	poor	Total women
kormantse	22	19				41
Hinii	8	3				11
Abeadze - Dominase		5	1			6
Taabosom	2					2
Mfantsiman	**32**	**27**	**1**			**60**
Kyekyewere		15	2	1		18
Amoafo		2	1			3
Mfoum	1	11	2			14
Babianiha			1			1
Upper Denkyira East	**1**	**28**	**6**	**1**		**36**
Total	**33 (34.4%)**	**55 (57.3%)**	**7 (7.3%)**	**1 (1.1%)**		**96**

Source: Author's Field Survey, February, 2015

Appendix 11: Responses by women currently using contraceptives per Affordability

Method/ Affordability	Very Affordable	affordable	Neutral/ Indifferent	Not affordable	Not very affordable	No. of Women
Jadelle	1	10				11
IUD	1					1
Pills		24	2			26
Injectables	6	46				52
Male condom	1					1
Emergency contraceptives		4				4
Cycle Beeds		1				1
Total	**9 (9.4%)**	**85 (88.5%)**	**2 (2.1%)**			**96**

Source: Author's Field Survey, February, 2015