KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY,

KUMASI, GHANA

COLLEGE OF HEALTH SCIENCES

SCHOOL OF PUBLIC HEALTH

DEPARTMENT OF POPULATION AND REPRODUCTION HEALTH

UPTAKE OF FAMILY PLANNING BY PUBLIC HEALTH WORKERS IN KUMASI METROPOLIS-GHANA

BY

FREMA OSEI-TUTU

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY KUMASI, GHANA

UPTAKE OF FAMILY PLANNING BY PUBLIC HEALTH WORKERS IN KUMASI METROPOLIS-GHANA

BY

FREMA OSEI-TUTU (BSC NURSING)

A THESIS SUBMITTED TO THE DEPARTMENT OF POPULATION AND REPRODUCTIVE HEALTH, COLLEGE OF HEALTH SCIENCES, SCHOOL OF PUBLIC HEALTH, IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF PUBLIC HEALTH IN POPULATION AND



DECLARATION

I, the undersigned student do hereby declare that, the findings of this study compiled in this script are genuine information which has not been presented to any person or group of persons elsewhere for another Masters in Public Health, however due recognition has been given to authors whose works have been cited.

Submitted by	NUST
OSEI- TUTU FREMA	
(Index number-PG2392114)	DATE
PROF HENRY SAKYI OPARE- AD	DATE
(Supervisor)	
THE STATE OF THE S	3
MR EMMANUEL NAKUA	DATE
(Head of Department)	SANE NO

DEDICATION

This work is dedicated to the Almighty God for His enormous mercy and unmerited favors towards me throughout the course of the study and to my family for their immense support and investment in my life.



ACKNOWLEDGMENT

What shall I render unto God for all His benefits? But my heartfelt gratitude for His strength, knowledge and direction with which He endowed me to carry out this study.

I am highly indebted to Prof Henry Sakyi Opare- Addo, my supervisor, for his time, commitment and guidance that went a long way to make this work a success.

Furthermore I am grateful to all lecturers and students of the School of Public Health for their encouragement and support during this study.

I cannot in any way ignore the wonderful co-operation from my study participants in the Kumasi Metropolis. Your participation is much appreciated. To the authors, publishers and website whose works were cited, I say a big thank you.

To Mr. Evans Osei-Annor thank you for keeping me focused and motivated. I would not have done this without you.

Finally, my sincerest gratitude goes to my family especially Mr. Ernest Osei-Tutu and all others who contributed to make this study a success. I say God richly bless you.



DEFINITION OF TERMS

Family Planning Method: Spacing or limiting child birth by using traditional or modern methods

Public health workers: Both male and female health workers who work under Ghana health service in Kumasi Metropolis.

Adopter: Married either by ordinance, customary or cohabitating woman or man who is using any form of contraception at the time of data collection irrespective of the duration of use and switching between methods

Non-adopter: Married either by ordinance, customary or cohabitating woman or man who is not using any form of contraception at the time of data collection.



ACRONYMS

ABS - Abstinence

AIDS - Acquired Immune Deficiency Syndrome

BRF - Breastfeeding

CHEW - Community Health Extension Workers

CHPRE - Committee on Health Research Publications and Ethics

CAM - Calendar Methods

COM - Condom

DHS - Demographic and Health Survey

FP - Family Planning

GDHS - Ghana Demography Health Survey

GHS - Ghana Health Service

GSS - Ghana Statistical Service

HIV - Human Immunodeficiency Virus

LAM - Lactational Amenorrhoea Method

MBCM - Modern Birth Control Methods

MDG - Millennium Development Goals

PHW - Public Health Workers

PHU - Public Health Unit

IUCD - Intra Uterine Contraceptive Device

WIM - Withdrawal Method

STI - Sexually Transmitted Infection

TFR - Total Fertility Rate

UN - United Nations

UNFPA - United Nation Population Fund

USAID - United States Agency for International Development

WHO - World Health Organization





ABSTRACT

Introduction: Family planning is essential to reducing the total fertility rate and ultimately maternal morbidity and mortality as well as contributing positively in infant wellbeing. It is speculated that even the highly knowledgeable Ghanaian in the area of family planning still has low level of family planning patronage. Public health workers are the first link of a chain, the most peripheral element of the health system and it is through them that family planning services are expected to get to the people of Ghana. Research information on the uptake of family planning among the health workers in the Kumasi Metropolis will help provide specific questions and answers relating to the usage, the impact on health care delivery and invariably the way forward. It was upon these grounds therefore that the current study seeks to investigate the socio economic and demographic factors influencing public health workers adoption of family planning methods.

Methods: A cross sectional design was used for the study. The study adopted descriptive and explanatory methods in the analysis of the study. The sample size for the study was 331 health workers from all the five public hospitals in Kumasi Metropolis. The respondents of the study were selected using a multistage sampling technique. This study adopted the binary probit regression to assess the socio-economic and socio-demographic factors influencing public health workers adoption of family planning methods.

Results: The study found a significant association between the usage of FP and the age, marital status, and parity of public health workers in Kumasi Metropolis. About 41.1% and 13.1% of the health workers were currently using the condoms and withdrawal respectively as their main family planning methods. The majority (63.8%) was not satisfied with the family methods. Currently 72% of the public health workers in the Kumasi metropolis are using various methods of family planning. Some of the public health workers who failed to adopt the family planning methods were as a result of the absence of their preferred method.

Conclusion: The majority of the non-adopters of the family planning methods were dissatisfied with the methods for a number of reasons including fear of side effects, discomfort of the methods and fear of sterility; they need more education and the introduction of alternative family planning methods with minimal side effects and discomfort. The study therefore proposes that the public health units should make available all the types of family planning methods with minimal side effects in order to attract more patronage, and public education of the male on the need for FP methods.



TABLE OF CONTENTS

DECLARATION	ii
DEDICATION	iii
ACRONYMS	vi
ABSTRACT	viii
TABLE OF CONTENTS	
LIST OF TABLES	
LIST OF FIGURES	xiii
CHAPTER ONE	1
INTRODUCTION	
	•••••
1.1 Background of the study	1
1.2 Problem Statement	
1.3 Rationale of the study	
1.4 Hypothesis/Conceptual framework 1.4.1 Research Hypotheses	5
1.5 Research Questions	7
1.6 Objectives of the Study	7
1.6.1 General Objective	
1.6.2 Specific Objectives	
1.7 Scope of the Study	
1.8 Organisation of the Report	8
Z = 3	
CHAPTER TWO	9
2.0 LITERATURE REVIEW9	•••••
2.1 Family Planning Overview	Q
2.2 Family Planning Methods	11
2.3 Decision Making	
2.4 Importance of Family Planning	
2.5 The Proportion/Rate of Health Workers That Use Family Planning	
2.6 Health Workers' Choice of Family Planning Methods	
2.7 Socio-Economic Factors Influencing the Use of Family Planning Methods	18

2.8 Demographic Characteristics That Influence the Utilisation of Family Planning 2.8.1 Partner Involvement/Support	
2.8.2 Financial cost of family planning method	20
2.8.3 Birth restriction and spousal consent	20
2.8.4 Age and Family Planning use	21
2.8.5 Parity and Family Planning use	21
2.8.6 Education level and Family Planning use	22
CHAPTER THREE	
3.0 METHODOLOGY23	•••••
3.1 Study Design	
3.2 Study Area	•••••
3.3 Sample size calculation for the quantitative component	
3.4 Study Population	25
3.5 Data Collection Techniques/Methods and Tools	26
3.5 <mark>.1 Inclusion/</mark> Exclusion Criteria	
3.6 Study Variables	
3.6.1 Dependent Variables	
3.6.2 Independent Variables	•••••
3.7 Pre-testing/Pilot Study	29
3.8 Data Handling	29
3.9 Data Processing and Analysis	29
3.9.1 Empirical Analysis	
3.10 Ethical Consideration	
3.10.1 Quality Control	31
3.10.2 Limitations	
3.11 Assumptions of the study	32
CHAPTER FOUR	
4.1 Socio Demographic Characteristics of Respondents	33
4.1.1 Marital and Pasidantial Information	35

4.1.2 Socio Economic Characteristics	38
4.1.3 Usage of FP, household size and cost of FP	41
4.2 Proportion of usage of family planning methods among public health workers 4.2.1 Family planning discussion with partner	
4.2.2 Usage of planning methods	43
4.2.3 Initiator of contraceptive methods	44
4.2.4 Family planning methods used	
4.2.5 Reasons for non-usage of family planning methods	46
4.2.6 Availability and FP service points	46
4.3 Patronized methods of family planning among public health workers	48
4.3.1 Satisfaction with the family planning methods	51
4.3.2 Reasons for non-satisfaction of family planning methods	52
CHAPTER FIVE	
5.1 Proportion of Health Workers using Family Planning	57
5.2 Patronized Methods of Family Planning Among Public Health Workers	
5.3 Socio-economic characteristics influencing the usage of family planning methods.	
5.4 Demographic characteristics influencing the utilization of family planning	
CHAPTER SIX	
6.1 Conclusions	•••••
6.2 Recommendations	
REFERNCES	65
APPENDICES	•••••
72 ZANE SANE	
LIST OF TABLES	
Table 3.1: Distribution of sample size of the public hospitals in the Kumasi metropolis	25
Table 3.2: Sample Size Distribution by Staff Category in the Kumasi Metropolis	27

Table 4.1: Socio Demographic Information of Respondents	4
Table 4.2: Marital and residential information of the respondent	6
Table 4.3: Socio economic Characteristics of Respondents	9
Table 4.4: Usage of FP, household size and cost of FP	.1
Table 4.5: Wish to give birth and reasons	2
Table 4.6: Family planning methods adopted4	5
Table 4.7: Availability and FP service points	7
Table 4.8: Usage of Family Panning Methods by Staff Category and Gender 4	9
Table 4.9: Binary Probit Regression of the Factors Influencing FP Adoption 5	4
LIST OF FIGURES	
Figure 1.1: Conceptual Framework	6
Figure 4.1: Discussion of planning methods with partner	3
Figure 4.2: Usage of planning methods by households4	.3
Figure 4.3: Initiators of contraceptive methods in the household4	4
Figure 4.4: Reasons for non-usage of family planning methods	6

KNUST



CHAPTER ONE

INTRODUCTION

1.1 Background of the study

UNFPA (2011) estimated that about two hundred and fifty million people worldwide do not have the knowledge and means to control their birth rate. Family planning methods are crucial to eradicate worldwide poverty and improvement in socio-economic development in the country. Family planning success is essential in mitigating worldwide poverty by absolutely contributing to socio-economic development. Controlling the timing and number of births through the use of family planning methods have led to the improvement of maternal and neonatal health outcomes hence contributing to the attainment of Millennium Development Goals (MDGs) (Cleland J et al., 2010, UNFPA, 2010). Reports worldwide had revealed that several women suffer from diseases and disability resulting from preventable pregnancy and child birth related complications (Hogan et al., 2010, UNFPA 2010). Family planning (FP) is linked with positive health effects on children, mothers and the family as a whole. Spacing and limiting of birth can decrease child's mortality by ten per cent (10%) and among pregnant mothers by thirty two per cent (32%) (Darroch et al., 2008., UNFPA, 2013). Family planning services empowers and enables women to reduce their birth and competition for available resources at the household levels (UNFPA 2010). Further benefits of FP services include prevention of sexually transmitted diseases (STDs) and human immunodeficiency virus (HIV) through the promotion of condoms use. Eventually leading to the prevention of unwanted pregnancies among HIV-positive women and averting mother-to-child transmission.

World Health Organization (1992) estimated that five hundred and fifteen thousand (515,000) women yearly die from complications arising from pregnancy and childbirth.

Hence the need for significant intervention towards attainment of family planning usage among women in Sub-Saharan Africa (SSA) which is considered as one of the poverty zones in the world. Patronage of family planning methods remains low in Sub-Saharan Africa leading to high incidence of unplanned and unwanted pregnancies, unsafe abortions, high delivery rates and maternal mortalities (WHO 2011).

The main aim of family planning services is to enable couples take responsible choices about pregnancy which will help them achieve their wishes regarding: securing desired pregnancy, limiting the size of their family, preventing unwanted pregnancy, controlling the population and eventually improving the quality of life of the people (Ikechebelu et al., 2005). Lots of women wish to reduce their number of children but cannot access family planning services (UNFPA, 2012). Despite high Total Fertility Rate (TFR) the uptake of modern family planning services remain low in majority of African countries but many of the women wish to have fewer children (Westoff, 2011). The notion of informed choice in family planning can be applicable in the area of sexual and reproductive health decisions which emphases on the reproductive and sexual right of the individual as to the desired number of children, time, space, need to patronized family planning and when to continue or switch methods (Olaitan, 2011).

The significance of informed choice centers on the individual and mostly women; family planning choices are influenced by factors such as economic, environmental, gender roles and female autonomy, social networks, partner support and religious beliefs. To some degree these factors influence the individual's decision on when to have children, contraceptive preferences, sexual and reproductive behaviour (Oladeji, 2008). Reports from the International Conference on Population and Development gave directives that; countries

are to recognize the appropriate family planning methods for individuals and couples who differ by their parity, age, family size preference and other factors. The same report emphasized that, countries are to make sure that men and women have access to information on contraceptives and family planning methods services. (UNFPA, 1996).

The slow pace of family planning uptake in Ghana poses a challenge to the country's goal of reducing maternal mortality with the use of family planning. The objective of Ghana Health Service (GHS) on family planning is to provide for couples and individuals of all ages the opportunity to achieve their reproductive goals and improve their general reproductive health (GHS 2007). Family planning (FP) services are vital, cost effective and guarantee a healthy and productive population. It is speculated that even the highly knowledgeable Ghanaians in the area of family planning still have low level of family planning patronage. Hence the current study seeks to investigate the socio economic and demographic factors influencing public health workers adoption of family planning methods.

1.2 Problem Statement

Family planning is essential to reduce the total fertility rate and ultimately maternal morbidity and mortality as well as contributing positively to infant wellbeing. The uptake of family planning among health workers in general is essential in promoting the reproductive health of health professionals and in curbing infant mortality and maternal mortality among female health professionals (WHO, 2011). The Kumasi Metropolis like all others in Ghana has a deficit in the number of healthcare providers required (GHS, 2010) and thus ensuring the good health of the few available is of great essence. The contraceptive prevalence rate increased from twenty two percent (22%) among currently married women

in 1998 to twenty five per cent (25%) in 2003, and has declined in the past five years to twenty four (24%) in 2008 indicating a reversal in the trend (Ghana Statistical Service, 2009). The slow pace of family planning uptake in Ghana poses a challenge to the country's goal of reducing maternal mortality through the use of family planning. Several questions have to be asked concerning the recent decline in contraceptive use rates in the country as shown by the (GDHS, 2008)report. Is it as a result of lack of interest with the usage of family planning methods among women? Or other factors yet to be understood? Reliable and well researched information on the uptake of family planning among the health workers in the Kumasi Metropolis will help provide specific questions and answers relating to the uptake, the impact on health care delivery and invariably the way forward. Very little information is available on this subject in the Kumasi Metropolis, the second largest metropolis in Ghana, and hence the need for such a research.

1.3 Rationale of the study

The findings of this study could be of immense significance to a number of stakeholders including public health providers, the general public and the policy makers in the country. The result of the current study with regard to the proportion of usage of family planning, demographic, socioeconomic and service delivery factors associated with family planning method choice among public health workers in Kumasi Metropolis could help service providers to make informed decisions. The service providers could put measures in place to educate the general public on the least patronized family planning methods and also make available all the other preferred methods of family planning to the general public to enhance patronage. Any form of informed education given to the general public could aid them to also make the right choices in terms of their family planning decisions. The findings could also stimulate public health workers and the general public to patronize family planning

methods eventually reducing unwanted pregnancies, unsafe abortion, unplanned deliveries and maternal mortalities. The policy makers could also rely on the findings of the current study to make informed decisions that could enhance the uptake of family planning methods in Ghana.

1.4 Hypothesis/Conceptual framework

Figure 1.1 shows a conceptual framework that explains the pathways through which the independent variables (socioeconomic factors, demographic factors, proportion of utilization and most patronized methods) affect the dependent variable (utilization of family planning). Parity, educational level, occupation and female autonomy of women's age were significantly associated with current use and method choice (Khan and Rahman (1996); Stephenson, Beke and Tshibangu (2008). Joesoef, et al., (1988) also found that, the association between husband's approval and support has a bearing on contraceptive use and method choice. Moreover, women who communicate and discuss reproductive issues with their partners are more likely to adopt and use contraception which will eventually affect method choice (Bawah, 2002).

WY SANE

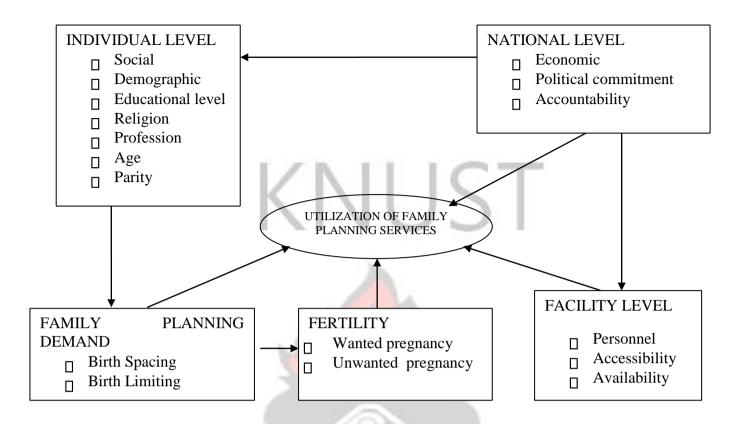


Figure 1.1 Conceptual Framework

1.4.1 Research Hypotheses

Based on the developed conceptual framework, a number of hypotheses were developed.

- 1. The proportion of utilization of family planning is low among the public health workers in the Kumasi Metropolis.
- 2. The socio-economic characteristics have a significant influence on the uptake of family planning among public health worker.
- 3. The demographic characteristics have a significant influence on the uptake of various family planning methods among public health workers

1.5 Research Questions

 What is the proportion of usage of family planning methods among public health workers?

SANE NO

- What are the commonly patronized methods of family planning among public health workers?
- What are the socio-economic characteristics influencing the usage of family planning methods among public health workers?
- What are the demographic characteristics influencing the utilization of family planning by public health workers?

1.6 Objectives of the Study

This section of the chapter precisely states the general and the specific objectives of the current study.

1.6.1 General Objective

The general objective of the study is on the utilization of family planning among public health workers in the Kumasi Metropolis

1.6.2 Specific Objectives

The current study specifically sought:

- To determine the rate of utilization of family planning among public health workers
- To identify the types of family planning methods frequently used among the public health workers
- To determine the socio-economic factors influencing the usage of family planning methods among public health workers
- To determine the demographic characteristics influencing the utilization of family planning among public health workers

1.7 Scope of the Study

The study was thematically limited to the proportion of family planning methods usage, the most patronized family planning methods, and the demographic and socio-economic factors influencing family planning methods adoption among public health workers in the Kumasi metropolis. The study was further limited to 331 sampled public health workers from five major government/public hospitals the Kumasi Metropolis which are Manhyia Government Hospital, Tafo Government Hospital, Suntreso Government Hospital, Maternal and Child Health Hospital and Kumasi South Government Hospital. The key public health workers surveyed included doctors, nurses, pharmacist, medical laboratory technicians, physiotherapist and administrative staff.

1.8 Organisation of the Report

This research is presented in six chapters. Chapter one highlights major issues relating to family planning worldwide and Ghana in particular. The rationale for the study, the research questions, the objectives and the scope of the study are all described. The Chapter two reviews literature relating to family planning usage. In addition, the chapter three of the study covers and summarizes the methodological issues of the study. Chapter four presents the result and analysis on key study variables. The chapter five links the research questions, objectives, key variables, literature review and discussing the results while citing appropriate references. The final chapter, summarizes key findings with figures and make appropriate recommendations.

CHAPTER TWO

2.0 LITERATURE REVIEW

This chapter reviews literature relating to family planning. The literature reviewed includes overview of family planning, health workers choice of family planning, family planning

methods, contraceptive decision making, importance of family planning, the proportion of usage of family planning, demographic and socio-economic factors affecting the usage of family planning.

2.1 Family Planning Overview

Family planning usually helps women to prevent unwanted pregnancies and limit the number of children leading to healthy reproductive life. Family planning which involves two concepts; contraceptive use and family planning services, is used by couples to bring about healthy sexual relationships among themselves without fears of unwanted pregnancies and sexually transmitted infections (STIs) (Osakinle, 2003).

Each year, an estimated 500,000 women die of complications due to pregnancy, (Herz and

Measham, (1987), but about 6,000 of these deaths occur in developing countries, World Health Organization (WHO, 1991). Where poor health, frequent childbearing and little access to good medical care are a way of life, an early death is too often a women's fate. Contraceptive use can help protect women's lives and health by avoiding pregnancies. It is one of three crucial measures to improve maternal health: reducing the number of pregnancies, reducing the likelihood of complication during pregnancy and improving outcomes for pregnant women with complications (McCarthy and Maine, 1992). However, reducing complications and improving outcomes require access to better obstetric care, more health care for poor and rural women and improvement in women's living standards, (Herz and Measham, (1987). Therefore, women who do not want to become pregnant can reduce their exposure to the risks of pregnancy and childbirth by using effective contraception (Herz and Measam, 1987; Maine et al., 1987). To this end, using

family planning is a strategy that women themselves can adopt to protect their health (Osakinle, 2003).

Pregnancy is the main reason that women of reproductive age die at higher rates than men, (Maine et al., (1987). In Matlab, Bangladesh, the mortality rate for women ages 15 to 44 years was 26% greater than men in the same age range. One of the few long-term, detailed examinations of maternal mortality rates and causes carried out between 1976 and 1985 by (Fauveau et al., 1989) showed that 30% of all women's deaths occurred between the ages of 15 and 44 years were related to childbearing.

The World Health Organization (WHO) defines a maternal death as "the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes, (WHO, (1986).

Health risks related to age and parity have been summarized as "the four too's - too young, too old, too many and too close together. First births and births after the fourth are more dangerous than the second through fourth births. Women under age 18 years and more dramatically, those over age 35 years face greater risk than women between these ages. Of course, age and parity are not risks in themselves, they stand in for the higher likelihood of specific risks associated with age and parity (Osakinle, 2003).

Numerous women resort to unsafe abortion to prevent unintended births but because abortions are illegal in most of the developing countries. Annually 10 to 20 million illegal abortions are performed worldwide and almost 100,000 to 200,000 women die as a result of abortion. These deaths represent 20 to 40% of all maternal deaths (Osakinle, 2003).

Majority of these deaths can be prevented with the availability of family planning services. Abortion can be safe if the practitioner uses safe abortion techniques. In conclusion, the researcher would like to investigate the factors influencing public health workers adoption of family planning methods.

2.2 Family Planning Methods

Medical technology advances over the last 35 years have made it possible for all women and men to plan their childbirth. Family planning services includes the following: subdermal implants; intrauterine devices (IUDs); oral contraceptives (the "Pill"); and barrier methods such as male and female condoms, hormonal injectables; male and female sterilization; diaphragms, and spermicides. Some modern methods include the Lactational Amenorrhea Method (LAM); fertility awareness methods that involve monitoring the fertile time of the menstrual cycle from the beginning to the end (the Standard Days Method); and symptoms-based methods, depend on observing signs of fertility (cervical secretions, basal body temperature).

Emergency contraception can keep a woman from getting pregnant after she has had unprotected sex. Emergency contraceptive pills contain the same hormones used in oral contraceptives. They are not expected to be utilized as a regular family planning method, but can help a woman avoid a pregnancy if used during five days of unprotected sex.

Though there is no "ideal method" of family planning, there is a safe and effective method for every woman. Family planning methods vary according to the cost, risks, effectiveness, side effects, convenience and benefits for the individual. Family planning consumers are able to evaluate the importance of these factors based on their preferences; relationship

status, spacing or limiting future pregnancies, health status, their desired family size, stage of life, goals of delaying and living conditions.

2.3 Decision Making

Two issues have remained prominent since the early days of family planning programmes. The first is that the decisions of individuals, particularly women, to limit or space births are subject to social influence from partners, families, friends, and communities (Cleland, 2001). Information-sharing within social networks about the notion of contraception, what particular method is preferred, and how to deal with side effects is largely socially determined. While programs place great emphasis on counseling and on clients making an informed choice, the decision is actually made within a much larger context than the clinic, pharmacy, or health post. For family planning programmes to have an influence in this process, they need the support of key opinion leaders and social networks, including satisfied users, to ensure that potential clients feel secure in their behaviour.

Although investments in formal communication have waned in recent years, the use of more commercially viable television and radio programmes as well as other social media like the internet have become much more important vehicles for sharing perspectives on use. Communication in the future must continue to use these and other strategies as contraception becomes more of a lifestyle choice in both public and private markets.

The second issue is that of method discontinuation, even in the face of the desire to avoid pregnancy. In an analysis of 18 DHS surveys, a UN report (2006) estimated the median one-year discontinuation probability at 34 percent for oral contraceptives and 46 percent for injectables, in contrast to only 12 percent for long-acting IUDs. The majority of these

discontinuations were for health concerns and side effects. In addition, about 10 percent of users became pregnant and 46 percent switched to another modern method within three months of discontinuation. Rates of discontinuation are highest among the young, the less well-educated, and women with unsupportive partners. The availability of alternative methods and support in switching methods may make a substantial difference for rural and poorly educated users. It also seems likely that increases in spousal discussion about fertility intentions and contraception would lead to decreases in discontinuation and the use of more effective methods. Again, while counseling may make a difference in method choice, it is the characteristics of the method (e.g., expected side effects) and the social context that largely determine users' behaviour.

2.4 Importance of Family Planning

An analysis of the contribution of family planning to the MDGs by Moreland and Talbird (2006) showed that satisfying unmet family planning needs in Kenya could avert 14,040 maternal deaths and 434,306 child deaths by the MDG target date of 2015 (Republic of Kenya, 2007). In USAID/HPI (2007), it was noted that the cost savings in providing services to meet MDGs outweigh the additional costs of family planning by a factor of almost 4 to 1. Specifically, the social sector cost savings and family planning costs in Kenya for 2005-2015 are estimated at \$271 million, with maternal health taking \$75 million, while water and sanitation, immunization and education each taking \$36 million,

\$37 million and \$115 million, respectively. This compares with the total cost of family planning estimated at \$71million, which implies that total savings will be \$200 million (Moreland and Talbird, 2006; USAID/HPI, 2007). Promotion of family planning in countries with high birth rates has the potential of reducing poverty and hunger, while at the same time averting 32 percent of all maternal deaths and nearly 10 percent of child mortality.

This would contribute substantially to women's empowerment, achievement of universal primary schooling and long-term environmental sustainability (Cleland et al., 2006). If access to family planning services was increased, the unmet need for family planning could be reduced, thereby slowing population growth rate and reducing the costs of meeting MDGs in terms of universal primary education, which is influenced by the number of children in need of education (Moreland and Talbird, 2006). Hawkins et al., (1995) observed that family planning services offer various economic benefits to the household, country and the world at large. First, family planning permits individuals to influence the timing and the number of births, which is likely to save lives of children. Secondly, by reducing unwanted pregnancies, family planning service can reduce injury, illness and death associated with child birth, abortions and sexually transmitted infections (STIs) including HIV/AIDS. Further, family planning contributes to reduction in population growth, poverty reduction and preservation of the environment as well as demand for public goods and services (Shane, 1997; Cincotta and Engelman, 1997).

Other substantial economic benefits could include demographic bonus or dividends. According to David et al., (2002), when this occurs, it boosts productivity and allows added savings or investment. David et al., (2002) observed that family planning helps to reduce the number of high-risk pregnancies that result in high levels of maternal and child illness and death. Wawire (2006) noted that high population growth is associated with high illiteracy rates and low education level that make it difficult to implement government programmes, given their budgetary implications. According to World Bank, (2003), the use of family planning services is an important issue for a developing country like Ghana.

The World Bank, (2003) noted that this was due to the benefits gained in terms of development through reductions in fertility levels. Furthermore, the uptake of family

planning increases choices available to people, particularly women, by allowing individuals and society more opportunities for social and economic development. Singh et al., (2004) revealed that a high fertility rate (which in many cases is attributed to low contraceptive prevalence rate) impedes economic growth.

Singh et al., (2004) observed that countries with high "population pressure" or with rapidly growing populations may not be able to meet the large education, labour, health, and infrastructure-related demands of the population. Eastwood and Lipton (2001) posited that reducing fertility can help alleviate poverty and stimulate economic growth. They noticed that reducing the birth rate by 5 births per 1,000 during the 1980s would have reduced the average national incidence of poverty from 18.9 percent in the mid-1980s to 12.6 percent in the mid-1990s. Merrick, (2002) forecasted that declining birth rates can result in an improved dependency ratio, with an increasing number of productive adults relative to the number of young and elderly dependents. This, Merrick (2002) contended, would be realized only if countries responded with appropriate family planning policies and the resources that would have been required to meet the needs of a larger number of dependents. According to USAID/HPI (2007), family planning can slow population growth and reduce demographic pressure, which can in turn help countries to lift themselves out of poverty. Reduced population sizes mean a decreased burden on national expenditures for education, health and other social services, as well as less strain on the environment and natural resources. This further contributes directly to reduced infant and maternal mortality and WUSANE morbidity.

2.5 The Proportion/Rate of Health Workers That Use Family Planning

Public health workers are the first link of a chain, the most peripheral element of the health system and it is through them that family planning services were expected to get to the people of Ghana. Health workers are generally more informed about family planning methods than any other groups of people. Attitude and practice of family planning is largely determined by the user's knowledge about the methods and is further strengthened by the provider's positive disposition to the process (ICFP,2009). Female doctors and nurses whose specialty is family planning are seven times more likely than women in the general population to use intrauterine devices (IUDs) for their own contraception. (Rettner R, 2014). As cited by Rettner R, 2014, the a survey conducted in the U.S from 2006-2010, out of five hundred and fifty(550) family planning providers, including obstetricians, gynaecologists, midwives and nurses, three hundred and thirty-five (335) constituting sixty-one per cent (61%) used family planning, (Rettner R, 2014). It is however known that knowledge does not all the time translate into practice. In another study conducted in Nigeria by Onwachuku et al., (2005), 50% of Community Health Extension workers who were trained to educate households and rural communities on family planning methods were non-current users of family planning methods even though majority constituting seventy-four per cent (74%) had ever used at least a method before.

Thirty (39%) of non-current users were single; the age group of 25–29 years had the highest number of single non-current users (43.3%). The lowest number of non-current users (6.7%) was among the age group of 35–39 years.

Covington et al., (1986) reported that 57% of the currently married obstetrics /gynecologists and their spouses were using contraceptives. They found out that obstetricians/gynecologists and other specialists were more likely to use an IUD than any other method whiles house

officers were more likely to use oral contraceptives and general practitioners use rhythm or withdrawal.

2.6 Health Workers' Choice of Family Planning Methods

The availability of methods plays a vital role in women's acceptability of family planning and enables them to sustain their continuation of use (Ross, Hardee et al., 2012). There are widely known methods of family planning. The methods are categorised into injectables, Pills (regular and emergency), natural methods (abstinence, lactational amenorrhoea method, rhythm method and coitus interruptus), barriers (condoms, cervical caps), implants and permanent methods such as (bilateral tubal ligation, vasectomy and IUCD's).

According to Guttmacher institute, (2015) a study conducted among three hundred and thirty-five (335) family planning providers, including obstetricians, gynaecologists, midwives and nurses, who used family planning methods revealed that forty-two per cent (42%) used long acting methods of birth control like IUD's and Implants whereas only six per cent (6%) of their counterpart females in the general population used such methods. The level of knowledge about a family planning is a strong predictor of its use among young adults. Current studies suggest that female doctors and nurses whose work are in areas related to family planning are seven times more likely than women in the general population to use intra uterine devices for their own contraception (Patel, 2012). In a study by Onwachuku et al., (2005), fifty-seven per cent (57%) of Community Health Extension workers used injectable: intermediate-acting whiles about five per cent (95.2%) used Natural methods

Furthermore, Nwachukwu and Obasi, (2008) in their study to examine the extent of utilization of Modern Birth Control Methods (MBCM) among rural dwellers in Imo State Nigeria collated data on three hundred and sixty households selected randomly through the use of questionnaires and Focus Group Discussion. The results showed that only 30% of the respondents used MBCM while 57% of them used the traditional birth control methods. The most popular modern method was the condom (24.2%). This was followed by the IUD, used by only 2.5% of the respondents. Some of the identified factors that hindered the use of MBCM included perceived negative health reaction, fear of the unknown effects, cost, spouse's disapproval, religious belief and inadequate information. For a better understanding and utilization of MBCM, it is recommended that adequate educational campaign should be mounted in the rural areas on the advantages of MBCM.

2.7 Socio-Economic Factors Influencing the Use of Family Planning Methods An investigation led by Beekle and McCabe (2006) discovered that socio-cultural norms such as male/husband dominance and opposition to contraception, and low social status of women to a large extent determine the uptake of contraception by women in Nigeria. There are some contraceptive methods of family planning that are expensive, and some couples cannot afford to use or purchase them due to their financial situations in the society. Olaitan and Olukunmi, (2011) stated that people in rural areas cannot afford to use the expensive contraceptive methods of family planning such as Intra-uterine devices (IUD), vasectomy and female sterilization.

Furthermore, another study conducted among young male and female participants showed that condom knowledge was associated with a 33% increased odds of ever using them. (Ryan et al., 2007). However, a study carried out on contraceptive use among women

enrolled into preventive HIV vaccine trials, insufficient knowledge of certain methods was reported as the reasons for not using contraception. This misconceptions relating to FP methods and their incorrect use might have led to inconsistent use resulting in unintended pregnancies (Kibuuka et al., 2009). Another survey conducted in 14 countries on 7000 women between 14-40 years showed that knowledge gap in FP methods restricts women's contraceptive choices and hence use, and that women fail to take advantage of new contraceptive methods due to lack of knowledge and stay with the familiar options (Rossella, 2006).

2.8 Demographic Characteristics That Influence the Utilisation of Family Planning The uptake of family planning has been proven by various researches to be closely related to demographic factors like higher levels of education and having children who are over fourteen (14) years old. Other factors like age, sex, income levels and self-perceived health do not appear to have a strong influence on the use of family planning (Saurina et al., 2012). Some studies suggest that more women would choose long-acting birth control if they were educated about the methods, and if the methods were less costly (Rettner, 2014).

2.8.1 Partner Involvement/Support

Bawah (2002) in a study in the Kasina Nankana District of Ghana affirmed that husbandwife communication about family planning predicts contraceptive use when other factors were controlled. The studies further revealed that discussion among couples promote contraceptive use. Many women find it difficult to communicate their personal preferences because of fear of physical desertion by their partners hence these women who choose contraception do not require their partners' knowledge (Maharaj, 2000). The view of one's spouse has to be sought when determining the birth control methods to be adopted. For

example, not all male counterparts are comfortable having sex with condom. In that case, birth control pills might be a better choice for preventing an unwanted pregnancy, according to the National Institute of Health (Olaitan, 2009). Available studies showed that, in many African countries like Ghana, males often dominate in making important decisions in the family including reproduction, family size and contraceptive use (Caldwell & Caldwell, 1987; Adongo et al., 1997)

2.8.2 Financial cost of family planning method

The cost of contraceptives varies extensively in different markets and between branded and generic products. A study which was conducted by Levin, Caldwell et al., (1999) in rural Bangladesh to find out if cash prices influenced family planning choices, showed that respondents put little emphasis on cost. Studies carried in Egypt, Nepal, Pakistan and Zambia by Casterline and Sinding, (2000) revealed that not only the fear of health side effects of contraceptives deters women from using a method, but also the financial cost of managing the side effects as well as potential loss of labour and productivity

2.8.3 Birth restriction and spousal consent

A study conducted by Konje and Ladipo (1999) noted that suppliers can be over eager in their control of contraception supplies and as a result impose inappropriate contraindications for their use. In many countries, some suppliers discourage nulliparous women from obtaining oral contraceptives and IUCDs. For birth restrictions, providers had a view that women must have a minimum number of children before they can be given a method (Stanback and Twum-Baah, 2001). This is because many of the providers (94%) believed that, the hormonal method particularly the injectables could delay fertility or cause

permanent infertility. Again for IUCD, providers added that the cervix of some of the clients were tight.

2.8.4 Age and Family Planning use

Rob et al., (2007) in their study on contextual influences on modern contraceptive use among women irrespective of their HIV status, in six countries in Sub-Saharan Africa that included Kenya, Malawi, Tanzania, Ivory Coast, Burkina Faso, and Ghana, showed that younger age especially age group (20-29) years was more likely to be associated with use of modern contraceptives. Discoveries in Tanzania state that the use of contraceptive in age group (20–29) years was higher. Utomo et al., (1983) moreover in their study on factors affecting use and non-use of contraception among women following analysis showed that older age was one of the four major independent factors associated with the use and nonuse of contraception.

2.8.5 Parity and Family Planning use

An investigation of demographic and socio-cultural factors influencing contraceptive use among currently married women in Uganda showed that higher contraceptive use was associated with a higher number of surviving children. Contraceptive use was 26.2% among women with three or more surviving children compared with 19.0% of women with no surviving children used contraceptives (Agyei and Migadde 1995). Besides, Todd et al., (2008) in their study on factors associated with contraceptive use among hospitalized obstetric patients reported that contraceptive use was independently associated with having a greater number of living children. Feldman and Maposhere, (2003) likewise in their study to discover the impact of HIV/AIDS on sexual and reproductive lives of women living with HIV in Zimbabwe found that women with several children wanted to avoid further

pregnancies. Another study on factors affecting use and non-use of contraception showed that the number of living children was one of the major independent factors affecting the use and nonuse of contraception (Utomo et al., 1983)

2.8.6 Education level and Family Planning use

TANSAROJ/

A study on fertility and FP patterns among women in urban Karachi-Pakistan, demonstrated a solid pattern toward declining fertility and increasing utilization of contraceptives among relatively well-educated, middle-class population (Hagen et al., 1999). Another study on factors affecting use and non-use of contraception among women showed that current users of contraceptives were more educated or had spouses who were more educated than their counterparts who were not current users (Utomo et al., 1983). Rob et al., (2007) in their study on contextual influences on modern contraceptive use among women irrespective of their HIV status, in six Sub-Saharan African countries that included Kenya, Malawi, Tanzania, Ivory Coast, Burkina Faso, and Ghana showed that secondary or higher educational attainment was more likely to be demonstrated with of use of modern contraceptives in all the six countries; for example in Burkina Faso, higher educational attainment was more likely to be associated with the use of modern contraceptives compared to lower educational attainment.

CHAPTER THREE

3.0 METHODOLOGY

This part inspects the technique used to achieve the research objectives. The section presents design of the study, the study area, population and sampling procedures of the study. The section likewise details the data collection and analysis tools employed in the study.

3.1 Study Design

A cross sectional design was used for the study. This is because the data was collated on public health workers in a single time period. The study also adopted descriptive and explanatory methods in the analysis of the study. The descriptive methods were employed to examine the proportion of the public health workers using family planning methods and the level of usage of the various forms of family planning methods. The explanation methods were also employed to expatiate on the effects of socio-economic and demographic factors on the uptake of family planning methods among public health workers in the Kumasi metropolis.

3.2 Study Area

King Osei Tutu I founded Kumasi in the 1680's to serve as the capital of the Asante State. Kumasi started with three communities of Adum, Krobo and Bompata, and has now grown in a concentric form to cover a total of about 90 communities/suburbs. It came under British rule in 1890 and was previously known as Garden City of West Africa.

Kumasi is bounded by four districts which is all within Ashanti Region; to the north by Asokore Mampong (Recently curved out of Kumasi) and Kwabre, on the south Bosomtwe-Atwima Kwanwoma; on the east, Ejisu-Juaben; and on the west, Atwima.

With respect to Health there are five Sub-divisions each with a Government Hospitals. The five public Health Services in the sub-metro with their respective hospitals are as follows Manhyia North-Tafo Government Hospital, Manhyia South-Manhyia Government Hospital, Asokwa- Kumsi South Hospital, Bantama- Sunterso Government Hospital and Subin- Maternal and Child Health Hospital. Kumasi South Hospital has been designated as the Regional Hospital. Other health facilities in the metropolis include Komfo Anokye Teaching Hospital (KATH), is one of the two national autonomous hospitals, four quasi health institutions, (Kwame Nkrumah University of Science and Technology, KNUST Hospitals, Police & Prisons Clinics), three Christian Health Association of Ghana(CHAG) institutions (Church of Christ Clinic, Kwadaso SDA & Historic Adventist Herbal Hospitals. In addition there are 180 known private health institutions in the metropolis.

3.3 Sample size calculation for the quantitative component

The GDHS (2014) report indicates that 27% of currently married women are using all the method of family planning. The sample size was calculated using the formula below:

5%

Where n = sample size.

P = estimated proportion of married women who use any method of contraception.

d = margin of error (standard value of 0.05).

Z =confidence level (standard value of 1.96).

Therefore, n =
$$(1.96)^2 \times 0.27 \times (1-0.27) = 303$$

 $(0.05)^2$

To make up for possible effects of non-response rate, 10% of the sample size was added to 303 giving a total sample size of 331.

3.4 Study Population

The study population was all the public health workers in the five public hospitals in Kumasi Metropolis. The public hospitals include Tafo Government Hospital, Manhyia Government Hospital, Kumasi South Hospital, Suntreso Government Hospital and Maternal and Child Health Hospital. The total staff population of the study of 1080 and their distribution among the various surveyed public hospitals in the Kumasi metropolis is shown in Table 3.1. The respondents were both male and female public health workers in the Kumasi Metropolis. The Table 3.1 further shows the sample size distribution.

Table 3.1: Distribution of sample size of the public hospitals in the Kumasi metropolis

Hospitals	Staff population	% within Staff population	Sample size
Tafo	212	19.6	65
Suntreso	240	22.2	74
МСНН	159	14.7	49
Kumasi South	284	26.3	87
Manhyia	185	17.1	56
Total	1080	100.0	331

Source: Field Survey, 2015

3.5 Data Collection Techniques/Methods and Tools

The sample size calculated for the study was 331 health workers from all five public hospitals in Kumasi Metropolis. The respondents of the study were selected using a multistage sampling technique. This was employed to ensure fair representation of the various health workers within the metropolis in the study. In the first stage, all the five Dpublic hospital in Kumasi metropolis were used since the metropolis had only five hospitals. Furthermore, in the second stage all the public health workers of these hospitals were stratified into six staff categories as doctors, nurses, pharmacist, medical laboratory technicians, physiotherapist and administrators. Table 3.1 shows proportional representation of sample size calculated from the population of the various hospitals used in the study. Table 3.1 indicates that out of the total sample size of 331 staff, 65 were selected from Tafo, 74 from Suntreso, 49 from MCHH, 87 from Kumasi South and 56 from the Manhyia Hospital. The proportion of the staff category within each sampled public hospital selected for the study is further shown in Table 3.2. In the third stage, a simple random sampling by balloting procedure was further employed to select a number of public health workers from each stratum. The simple random sampling method was adopted after the stratification because each of the sampling units within each stratum was homogeneous.

Table 3.2: Sample Size Distribution by Staff Category in the Kumasi Metropolis

Table 512. Sample Size Distribution by Stair Category in the Examasi victiopolis								
THE REAL PROPERTY.	Doctors	Nurses	Pharmacy staff	Medi. Lab.	Physio. staff	Admi. staff	Total	
Tafo	9	156	16	19	2	10	212	
%	4.2	43.6	7.5	9.0	1.0	4.7	100.0	
SSH	3	47	5	6	1	3	65	
Suntreso	15	180	19	14	1	11	240	

%	6.3	75.0	8.0	5.8	0.5	4.6	100.0
SSH	5	55	6	3	1	4	74
МСНН	6	125	10	10	0	8	159
%	3.8	78.6	6.3	6.3	0	5	100.0
SSH	2	37	3	3	0	3	49
K-South	21	210	20	20	3	10	284
%	7.4	74	7	7	11.1	3.5	100.0
SSH	7	64	6	6	1	3	87
Manhyia	12	129	19	13	1	11	185
%	6.5	69.7	10.3	7.0	0.5	5.9	100.0
SSH	4	38	6	4	1	3	56

Note | SSH: Sample Size for Each Hospital

Source: Field Survey, 2015

The data collection was done by administering a structured questionnaire (both close and open ended) to collect data from the selected health workers in Kumasi Metropolis. The GDHS (2008) questionnaire on contraception was adopted and modified to suit the study. The questionnaire was used to obtain socio-demographic and socioeconomic information including age, number of children, educational level, occupation, religion, ethnicity and the highest educational level attained by respondents. Additional information obtained include availability of method choice and cost of method, intention for use, reasons for discontinuation or switching methods, where the current method was obtained and information given by providers on chosen method.

3.5.1 Inclusion/ Exclusion Criteria

Respondents included in the study were doctors, nurses, pharmacy staffs, medical laboratory staffs, physiotherapist staffs and administrative staffs (who are married either ordinance, customary or cohabitating). Health workers who said their religious beliefs do not permit them to use family planning methods were excluded from the study. Married health workers undergoing infertility treatment were also excluded.

3.6 Study Variables

This section of the chapter examined the considered variables in the probit model employed to examine public health workers decision to adopt or not to adopt family planning methods in the Kumasi metropolis.

3.6.1 Dependent Variables

The dependent variable considered for the study was public health workers uptake of family planning methods or not. This therefore implies that the public health workers choice to adopt or not adopt family planning methods is dichotomous and hence the employment of the binary probit model.

3.6.2 Independent Variables

The independent variables employed for the study were in two folds: socio economic factors and socio demographic factors. The socio demographic factors included in the study were marital status, educational level, religion, age and parity. The socio demographic factors considered in the probit model included level of income, payment for FP, access to electricity and income from other household members.

3.7 Pre-testing/Pilot Study

The data collection tools and instruments were validated by pre-testing in Kumasi South Hospital, one of the Government Hospitals in Kumasi Metropolis. The pretesting ensured that respondents did not have any difficulties understanding the questionnaire. The questionnaires were pre-tested on 10 respondents after which corrections were made where necessary.

3.8 Data Handling

The collected data was validated for completeness. The cleaned data was doubled entered using a template created in Microsoft Access. After entry, the data was imported into STATA version 12 for analysis. Data was checked for completeness and accuracy on a daily basis so that irregularities were detected promptly.

3.9 Data Processing and Analysis

Data cleaning was done and only completed questionnaires were entered into Microsoft Access for data processing and analysis. Recoding of some of the responses were done and transferred to STATA version 12 for analysis. Results from the analysis were presented using descriptive statistics. Binary probit regression was used for modeling family planning method choice. The developed depended variable was public health workers choice to adopt or not to adopt family planning methods. The explanatory or independent variables included the socio-demographic factors and socio-economic characteristics. The other objectives of the study however were descriptively analyzed using the cross tabulation method.

3.9.1 Empirical Analysis

In this study, a public health worker was defined as an adopter if he or she was found to be using any form of family planning method currently. The adoption variable was therefore defined as 1 if a public health worker is an adopter of family planning methods and 0 if otherwise. This study adopted the binary probit regression to assess the socio-economic and socio-demographic factors influencing public health workers adoption of family planning methods. The independent variable was a discrete dichotomous variable. The justification for using probit was based on its simplicity of calculation using its marginal effects to assess the magnitude of the effect of each independent variable.

The probability that a public health worker will adopt family planning method was postulated as a function of some socioeconomic and demographic factors. Therefore, the cumulative probit probability model was econometrically specified as follows:

$$Z_i \square \square \square \square \square \square i x_i \square_i$$

Where Zi is the binary dependent variable (adoption or non-adoption of family planning methods), β is constant, βi refers to the marginal effects of the independent variables, Xi constitute the independent variables, and ϵ is the error term.

The equation was estimated by maximum likelihood method. This procedure does not require assumptions of normality or homoscedasticity of errors in predictor variables. This analysis was carried out using STATA version 12.0.

3.10 Ethical Consideration

Ethical clearance was obtained from KNUST's Committee on Human Research, Publications and Ethics (CHRPE). Permission was sought from the Municipal health directorate and the facilities that were used for the study. All the ethics in social research such as anonymity, confidentiality, voluntarism and informed consent were observed. Anonymity has to do with not adding any personal information of the respondents such as their names, phone numbers and any identifiable features that were provided. To ensure confidentiality of information volunteered by respondents, the researchers intend to keep both questionnaire and data to themselves alone except for any possible publication later. The answered questionnaire will not be made available to the public.

The concept of voluntarism was also catered for in this study. Respondents were allowed to voluntarily participate in the research without any form of coercion. All works from which literature was quoted for this study had been acknowledged through both in-text referencing and bibliography.

3.10.1 Quality Control

It involves measures put in place to guarantee that data collected is of good quality to ensure that results obtained are accurate and valid. The following measures were put in place to ensure quality control. During data collection process, questionnaires were coded with respective research assistant's serial number and initials. Completed questionnaire were double checked each day on the field and within 24 hours to ensure all information has been properly collected and recorded. Feedback on unclear responses and omission were noted and confirmed from respective research assistants.

Errors and omissions detected were discussed with identified research assistant and where necessary, they were asked to go back and make corrections. Data collected that was obviously inconsistent were not included in data processing and analysis

3.10.2 Limitations

Information on service delivery factors associated with family planning method choice was obtained from respondents which could be subjective.

3.11 Assumptions of the study

The study assumes that, there were no / minimal recall bias.

CHAPTER FOUR

4.0 RESULTS OF THE STUDY

This chapter of the study presents the result based on the key variables of the study in an attempt to covering all the research questions. The major areas captured by the chapter includes demographic characteristics of the respondents, the socio economic characteristics of the respondents, the proportion of the public health workers currently using family planning methods, the family planning methods most patronized by the public health workers and the socio economic and demographic factors influencing health workers usage of family planning methods. Out of the total questionnaires of 331 sent out in an attempt of meeting the sample size, 314 were successfully returned and producing a response rate of 94.9%.

4.1 Socio Demographic Characteristics of Respondents

The socio demographic characteristic of the surveyed public health workers in the sampled public health units are examined in this section of the study. The key socio demographic characteristics of the public health workers discussed included sex distribution, age distribution, parity, category of staff, religious status and the highest level of education.

The result of the section is descriptively presented in Table 4.1.

Table 4.1: Socio Demographic Information of Respondents

Socio Demographics	Adopters	s of FP	Non-adopt		
	Frequency	Percent	Frequency	Percent	Total
Sex distribution			347		
Male	81	76.4	25	23.6	106(100.0)
Female	145	69.7	63	30.3	208(100.0)
Total	226	72.0	88	28.0	314(100.0)
Age distribution			16 1		
21-30 years	72	69.9	31	30.1	103(100.0)
31-40 years	92	80.0	23	20.0	115(100.0)
41-50 years	38	63.3	22	36.7	60(100.0)
Above 51 years	24	66.7	12	33.3	36(100.0)
Total	228	72.0	88	28.0	314(100.0)
Category of staff	4		THE P		
Doctor	33	76.7	10	23.3	43(100.0)
Nurse	101	71.6	40	28.4	141(100.0)
Pharmacy	25	71.4	10	28.6	35(100.0)
Medical laboratory	15	50.0	15	50.0	30(100.0)
Administrative	39	76.5	12	23.5	51(100.0)
Physiotherapy	13	92.9	1	7.1	14(100.0)
Total	226	72.0	88	28.0	314(100.0)
Religious status				100 V	
Christian	194	72.9	72	27.1	266(100.0)
Traditional	2	40.0	3	60.0	5(100.0)
Moslem	27	69.2	12	30.8	39(100.0)
Others	4	100.0	0	0.0	4(100.0)
Total	226	72.0	88	28.0	314(100.0)
Highest level of education					
Diploma/HND	50	55.7	37	44.3	87(100.0)

Degree	105	83.3	21	16.7	126(100.0)
Master's Degree	23	65.7	12	34.3	35(100.0)
МВСНВ	22	75.9	7	24.1	29(100.0)
Others	26	70.3	11	29.7	37(100.0)
Total	226	72.0	88	28.0	314(100.0)

Source: Field Survey, 2015

The results of table 4.1 show that the majority (76.4%) of the surveyed males were adopters of family planning. Similarly, the majority (69.7%) of the surveyed adopters of the family planning practices were females. The majority of the surveyed employees of the public hospitals were within the age category of 31 and 40 years. Out of these respondents, the majority (80.0%) were adopters whereas 20.0% were also non-adopters of family planning practices. Furthermore, out of the total surveyed respondents of 108 within the age category of 21 and 30 years, the majority (69.9%) were adopters of family planning practices. The majority of the surveyed respondents above 41 years were also adopters of family planning practices.

The surveyed health professionals were predominantly adopters of various forms of family planning methods. The majority (76.7%) of the surveyed doctors were adopters of family planning methods, likewise the other health professionals. The dominant religious group within the surveyed area was Christianity. Out of the total surveyed respondents of 266, the majority (72.9%) were adopters of various family planning methods. The majority (69.2%) of the surveyed Moslems were also adopters of family planning methods. However, the majority (60.0) of the traditional believers were non-adopters of family planning methods. This implies that unlike the traditional believers, the majority of the Christians and Moslems in the Kumasi metropolis have highly embraced various forms of family planning methods. It evident from the Table 4.1 that the majority of the adopters of family planning methods have higher level of education. Out of the total degree holders surveyed, the majority (83.3%) were adopters of family planning methods. The majority

(65.7%) of the Master's degree holders were also adopters of family planning methods. Similarly, the majority of the diploma, HND and MBCHB degree holders were also adopters of various family planning methods. This phenomenon could be attributed to their better understanding of the various family planning methods and their professional requirements that often offer them limited them in child bearing and caring.

4.1.1 Marital and Residential Information

This section of the study discusses the marital and residential information of the surveyed Public Health Workers (PHW) in relation to their adoption of family planning methods. The key information discussed have to do with marital status, years of marriage, having children and the number of children, the type of residence and the head of the household. The result of the section is presented in Table 4.2.

Table 4.2: Marital and residential information of the respondent

Adopters of FP		Non-adopt	Total	
Frequency	Percent	Frequency	Percent	1
2	\ D	17	1	
164	72.6	51	58.0	215(68.5)
37	16.4	14	15.9	51(16.2)
6	2.7	4	4.5	10(3.2)
9	4.0	17	19.3	26(8.3)
10	4.4	2	2.3	12(3.8)
226	100.0	88	100.0	314(100.0)
9				
25	9.1	9	21.6	34(10.8)
81	29.7	14	34.1	95(30.3)
120	44.0	10	24.4	130(41.4)
35	12.8	4	9.8	39(12.4)
12	4.4	4	9.8	16(5.1)
273	100.0	41	100.0	314(100.0)
SAN	JE P	9		
183	81.7	62	68.9	245(78.0)
37	16.5	26	28.9	63(20.1)
4	1.8	2	2.2	6(1.9)
224	100.0	90	100.0	314(100.0)
	164 37 6 9 10 226 25 81 120 35 12 273 183 37 4	Frequency Percent 164 72.6 37 16.4 6 2.7 9 4.0 10 4.4 226 100.0 25 9.1 81 29.7 120 44.0 35 12.8 12 4.4 273 100.0 183 81.7 37 16.5 4 1.8	Frequency Percent Frequency 164 72.6 51 37 16.4 14 6 2.7 4 9 4.0 17 10 4.4 2 226 100.0 88 25 9.1 9 81 29.7 14 120 44.0 10 35 12.8 4 12 4.4 4 273 100.0 41 183 81.7 62 37 16.5 26 4 1.8 2	Frequency Percent Frequency Percent 164 72.6 51 58.0 37 16.4 14 15.9 6 2.7 4 4.5 9 4.0 17 19.3 10 4.4 2 2.3 226 100.0 88 100.0 25 9.1 9 21.6 81 29.7 14 34.1 120 44.0 10 24.4 35 12.8 4 9.8 12 4.4 4 9.8 273 100.0 41 100.0 183 81.7 62 68.9 37 16.5 26 28.9 4 1.8 2 2.2

1	35	18.7	25	43.1	60(24.5)
2-3	119	63.6	24	41.3	143(58.4)
4-5	23	12.3	9	15.5	32(13.1)
More than 5	10	5.3	0	0.0	10(4.0)
Total	187	100.0	58	100.0	245(100.0)
Type of residence					
Renting	121	53.8	55	61.8	176(56.1)
Institutional quarter	38	16.9	6	6.7	44(14.0)
Owning	63	28.0	24	29.2	87(28.3)
Others	3	1.3	2	2.2	5(1.6)
Total	225	100.0	89	100.0	314(100.0)
Head of household		Jin.			
Spouse (Wife/Husband)	165	87.8	72	69.9	237(75.5)
Cohabitant	18	8.5	6	5.8	24(7.6)
Child	_ 1	0.5	1	1.0	2(0.6)
Parent/Parent in law	1	0.5	3	2.9	4(1.3)
Son in law/daughter in law	26	12.3	21	20.4	47(15.0)
Total	211	100.0	103	100.0	314(100.0)

Percentages are in Parentheses

Source: Field Survey, 2015

The results of Table 4.2 show that the majority of the surveyed respondents that have adopted various methods of family planning were married whereas 16.4% also engaged in consensual union. Furthermore, 2.7%, 4.0% and 4.4% of the surveyed respondents that have undertaking various methods of family planning methods were divorced, widowed and separated respectively. Out of the total married respondents that have undertaking various family planning methods, majority of them have been married for 6 to 10 years whereas 44% have been married for 6 to 10 years. However, the majority (34.1%) of nonadopted of FP have been married for 2 to 5 years. The majority (81.7%) of the surveyed respondents that have undertaking family planning methods have children or are planning to have children whereas 16.5% have no children. The majority (63.6%) of these who had adopted FP have 2 to 3 children whereas 12.3% also had 4 to 5 children. The majority (53.8%) of the respondents of the study that have undertaking family planning methods reside in rented houses whereas 28.0% reside in their own houses. However, 16.9% of the respondents that have undertaking family planning reside in institutional quarters. The majority (87.8%) of

the head of households were spouses (wife or husband) whereas 8.5% is the cohabitant. However, for 12.3% of the surveyed respondents the head of the household is their parent or parent in laws.

The results of the table 4.2 show that the majority of the surveyed respondents that have not undertaking family planning methods are also married whereas 16.2% are also in consensual unions. However, 8.3% and 3.8% of the surveyed respondent who have not undertaking family planning methods are widowed and separated respectively. Out of these married respondents that have not adopted family planning methods, 17.2%, 34.1% and 24.3% have been in marriage for less than a year, 2 to 5 years and 6 to 10 years respectively. However, 14.6% and 9.7% of these respondents have also been married for 11 to 20 years and more than 20 years respectively. The majority (68.9%) of the surveyed respondents that have not adopted family planning methods have children or planning to have children whereas 28.9% have no children. The majority of these adopters of family planning methods have 2 to 3 children whereas the majority of non-adopters of family planning have 1 child which is 43.1%. The type of residence of the majority (56.1%) of the surveyed respondents who have not adopted family planning methods was renting whereas 28.3% also live in their own built houses. The head of the households of the majority of the respondents who have not adopted family planning methods was their spouses (Wife or Husband).

4.1.2 Socio Economic Characteristics

The socio economic characteristics of the surveyed respondents from the sampled public health sectors are examined in this section of the study. The key socio economic characteristics of the public health workers examined included the nature of the job, steady income, adequacy of income to feed household, access and use of electricity, main fuel used

for cooking and other household members having steady source of income. The result of the section is descriptively presented in Table 4.3.

Table 4.3: Socio economic Characteristics of Respondents

Variables	Adopter	s of FP	Non-adop	Total	
	Frequency	Percent	Frequency	Percent	
Nature of job					
Full time	170	75.2	73	83.0	243(77.4)
Part time	56	24.8	15	17.0	71(22.6)
Total	226	100.0	88	100.0	314(100.0)
Have steady income					
Yes	178	79.8	70	76.9	248(79.0)
No	31	13.9	14	15.4	45(14.3)
Sometimes	10	4.5	4	4.4	14(4.5)
Missing values	4	1.8	3	3.3	7(2.2)
Total	223	100.0	91	100.0	314(100.0)
Variables	Adopters of FP	Adopters of FP	Non- adopter of FP	Non- adopter of FP	TOTAL
	Frequency	Percent	Frequency	Percent	
Adequacy of income to fe	eed household	7	2		
Yes	80	35.4	30	34.1	110(35.0)
No	110	48.7	35	39.8	145(46.2)
Sometimes	12	5.3	1	1.1	13(4.2)
Not Completely	24	10.6	22	25.0	46(14.6)
Total	226	100.0	88	100.0	314(100.0)
		100.0	00	100.0	314(100.0)
Access and use electricity					
have physical access and use	224	99.1	88	100.0	279(99.4)
have physical access but don't use	2	0.9	0	0.0	2(0.6)
don't have access	0	0	0	0	0(0)
Total	226	100.0	88	100.0	314(100.0)
Main fuel used for cooking	ng		BB		
Wood	0	0.00	0	0.00	0(0.0)
Charcoal	33	16.1	20	18.3	53(16.9)
Gas	161	78.5	86	78.9	247(78.7)
Electricity	11	5.4	3	2.8	14(4.4)
Total	205	100.0	109	100.0	314(100.0)
Other household member			107	100.0	317(100.0)
			1	Г	1
Yes	178	78.4	64	73.6	242(77.1)

No	49	21.6	23	26.4	72(22.9)
Total	227	100.0	87	100.0	314(100.0)

Percentages are in Parentheses

Source: Field Survey, 2015

The results of Table 4.3 show that the majority (75.2%) of the surveyed respondents that have adopted family planning methods are engaged in full time jobs whereas the remaining 24.8% are also engaged in part time jobs in the public health sector. The majority (79.8%) of the surveyed respondents that have adopted family planning methods also have steady income sources whereas 13.9% do not. However 35.4% of the surveyed respondents practicing family planning methods thought that their income was adequate to feed the household whereas 48.7% did not. Furthermore, 5.3% of the respondents are sometimes able to produce the adequate income to feed the household. The main source of fuel used for cooking by the majority (78.9%) of the surveyed respondents not practicing various methods of family planning was gas whereas 18.3% also used charcoal. However both adopters and non-adopters of family planning do not use wood as their source of fuel at home. The majority (78.4%) of the respondents undertaking family planning methods have other household members with steady source of income.

The results of Table 4.3 further show that the majority (83%) of the surveyed respondents without family planning methods were engaged in full time jobs whereas 17% were engaged in part time jobs. The majority (76.9%) of the surveyed respondents that have not adopted family planning methods had steady income sources whereas 15.4% did not. The main source of fuel used for cooking by the majority (78.7%) of the surveyed respondents not using family planning methods was gas, which is similar to the respondents practicing family planning methods. Similar to the condition of the adopters of family planning

methods, the majority (77.1%) of the surveyed respondents without family planning methods have other household members with steady source of income whereas 22.9% do not.

4.1.3 Usage of FP, household size and cost of FP

This section of the study examines the relationship between the usage of family planning methods among the public health workers and household size and the cost of family planning methods. The result of the section is descriptively presented in Table 4.4.

Table 4.4: Usage of FP, household size and cost of FP

Usage of FP	Household Size			Cost of Family Planning Me			Methods	
	Min.	Max.	Mean	SD	Min.	Max.	Mean	SD
Yes	1	15	4.83	2.16	1	11	3.58	3.13
No	2	10	3.94	1.87				
Total	1	15	4.58	2.12	1	11	3.58	3.13

Source: Field Survey, 2015

The results of the table 4.4 show that on the average the public health workers that had adopted family planning methods had larger household sizes than the non-adopters of family planning methods. The average household size of the adopters was 4.83 members and non-adopters of 3.94 members. The results of the table (4.4) furthers shows that the adopters of family planning methods paid on average an amount of GH¢3.58 for adopting a particular method of family planning. The minimum amount paid for a method was GH¢1, which was predominantly for the purchase of condoms. However, the maximum amount paid for a particular method of family planning was ¢11.

4.2 Proportion of usage of family planning methods among public health workers The proportion of the surveyed public health workers currently using family planning methods in the surveyed area are examined in this section of the study. This section examines whether

SANE NO

the respondents intended to give birth and their reasons, whether they had discussed family planning with their partners, who the initiators of use of contraceptive methods in the household was. The results of the section are presented graphically and through tabular analysis are shown by Figures 4.1, 4.2, 4.3 and Tables 4.5 and 4.6.

Table 4.5: Wish to give birth and reasons

Variables	Frequency	Percentage(%)
Wish to have more children	4	
Yes	191	60.8
No	101	32.2
Missing values	22	7.0
Total	314	100.0
Reasons for wishing to give birth	100	
Inadequate Boys	76	24.2
Inadequate Girls	42	13.4
Yet to Complete Family	123	39.2
Husband's Demand	51	16.2
Family Pressure	16	5.1
Missing values	6	1.9
Total	314	100.0

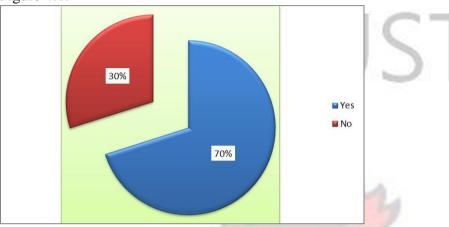
Source: Field Survey, 2015

The results of table (4.5) shows that the majority (60.8%) of the surveyed respondents of the study wished to have more children whereas 32.2% did not. The reason given by the majority (39.2%) of the surveyed respondents for their wish to give birth to more children was that their desired family size was not yet complete. However, reasons given by 24.2%, 13.4% and 16.2% respondents wishing to have more children was inadequate boys, inadequate girls and husband's demand respectively.

4.2.1 Family planning discussion with partner

This section of the study examined whether the surveyed respondents had discussion on family planning practices with their respective partners. The response is presented in

Figure 4.1.



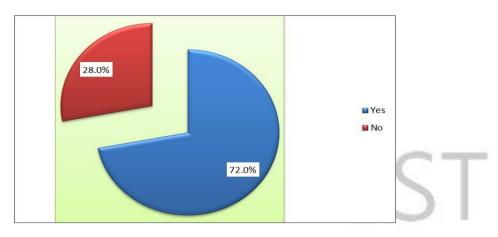
Source: Field Survey, 2015

Figure 4.1: Discussion of planning methods with partner

The results of the Figure 4.1 show that the majority (70.0%) of the surveyed respondents of the study discussed family planning methods with their respective partners. However, 30.0% of the surveyed respondents of the study did not discuss family planning methods with their partners.

4.2.2 Usage of planning methods

The proportion of the surveyed public health workers currently practicing various methods of family planning were examined in this section of the study. The result of the section is presented graphically by Figure 4.2.



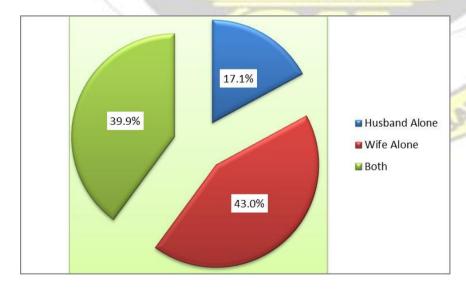
Source: Field Survey, 2015

Figure 4.2: Usage of planning methods by households

The results of the Figure 4.2 show that the greater proportions (72.0%) of the surveyed respondents were currently using various methods of family planning. However, 28.0% of the surveyed respondents were currently not using any method of family planning. This implied that the public health workers were predominantly employing various methods of family planning.

4.2.3 Initiator of contraceptive methods

This section of the study discusses the initiators of contraceptive methods in the families of the public health workers. The result of the section is presented in Figure 4.3.



Source: Field Survey, 2015

Figure 4.3: Initiators of contraceptive methods in the household

The results of the Figure 4.3 show that 43.0% of the surveyed respondents suggested that the discussion of contraceptive methods is often initiated by wife alone whereas 17.1% suggested that it is initiated by husbands alone. However, 39.9% of the surveyed respondents were of the opinion that both the husband and wife often initiated the discussion on methods of contraceptives.

4.2.4 Family planning methods used

This section of the study examines the various methods of family planning adopted by the health workers in the surveyed area. The results of the section are presented in Table 4.6.

Table 4.6: Family planning methods adopted

Method of Family Planning (FP)	Frequency	Percent (%)	Rank
Condom (COM)	129	41.1	1st
Withdrawal(WIM)	41	13.1	2nd
Injectable(INJ)	40	12.7	3rd
Breastfeeding(BRF)	25	8.0	4 _{th}
Abstinence (ABS)	18	5.7	5th
Pill (PILL)	16	5.1	6th
IUCD (ICD)	15	4.8	7th
Calendar Method (CAM)	14	4.5	8th
Others (OTH)	10	3.2	9th
Missing values	6	1.9	10 TH
Total	314	100.0	~/

Source: Field Survey, 2015

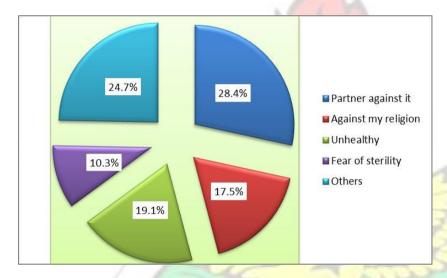
The results of the table 4.6 show that 41.1% and 13.1% of the health workers were currently using the condoms and withdrawal respectively as their main family planning methods. Also, 12.7% and 4.8% of the surveyed respondents are currently using the injectables and the intrauterine contraceptive device (IUCD) as their main family planning methods

respectively. Furthermore, abstinence, breastfeeding and pill were also other family planning methods adopted by 5.7, 8.0 and 5.1% of the surveyed respondents respectively.

4.2.5 Reasons for non-usage of family planning methods

This section of the study examines the reasons for the non-usage of family planning methods by a number of the surveyed health workers in the sampled public health sector.

The result of the section is presented in Figure 4.4.



Source: Field Survey, 2015

Figure 4.4: Reasons for non-usage of family planning methods

The results of figure 4.4 show that 28.4% and 17.5% of the surveyed respondents of the study that had not undertaken family planning methods gave reasons such as partners against it and against their religion respectively. Furthermore, 19.1% and 10.3% of the surveyed health workers attributed their lack of usage of FP to fear of it causing poor health and sterility.

4.2.6 Availability and FP service points

The availability and family planning services points from the surveyed hospitals of the public health workers are examined in this section of the study. The result of the section is descriptively presented in Table 4.7.

Table 4.7: Availability and FP service points

Variables	Frequency	Percent(%)
Is your preferred method of FP available at your health unit		
Yes	255	81.2
No	27	8.6
Missing values	32	10.2
Total	314	100.0
Personnel administering FP		
Nurse	64	20.4
Doctor	27	8.6
Public Health Nurse	165	52.5
Others	37	11.8
Missing values	21	6.7
Total	314	100.0
Numbers of times of receiving FP services in the last 12 month	S	7
Once	71	22.6
Twice	58	18.5
Thrice	27	8.6
None	130	41.4
More than thrice	28	8.9
Total	314	100.0
Visit public health unit to access FP	//	3/
Yes	190	60.5
No	108	34.4
Missing values	16	5.1
Total	314	100.0
If no, reason		
Men don't need to access family planning	13	12.0
Only female health workers at the public health unit	4	3.7
Feels shy to visit public health unit	73	67.6
Others	18	16.7
Total	108	100.0

Source: Field Survey, 2015

The results of table (4.7) show that the majority (81.2%) of the surveyed respondents indicated that their preferred methods of family planning are available at their respective health facilities whereas 8.6% indicated otherwise. The majority of these surveyed respondents received the family planning services from public health nurses. However, 8.6% of the respondents surveyed received the family planning services from Doctors in the health facilities. The majority (41.4%) of the surveyed respondents did not require family planning services from their respective health officers whereas 22.6% received the needed FP service. Furthermore, 18.5% and 8.6% of the surveyed respondents received family planning services twice and thrice in the last 12 months respectively at the public health unit.

4.3 Patronized methods of family planning among public health workers

ARAS CW SANE

This section of the study examines the adoption of the various family planning methods by the various categories of staff and gender. The result of the section is descriptively presented in Table 4.8.

Table 4.8: Usage of Family Panning Methods by Staff Category and Gender

		Methods of Family Planning					Total				
		CAM	COM	WIM	ICD	ABS	BRF	PILL	INJ	ОТН	
C	Categ. of Staff										
	Doctor	4(12.5)	12(37.5)	7(21.9)	5(15.6)	1(3.1)	0(0.0)	0(0.0)	1(3.1)	2(6.2)	32(100.0)
	Nurse	10(9.6)	22(21.2)	9(8.7)	9(8.7)	4(3.8)	9(8.7)	12(11.5)	19(27.9)	0(0.0)	104(100.0)
	Pharm staff	0(0.0)	18(81.8)	1(4.5)	0(0.0)	1(4.5)	2(9.1)	0(0.0)	0(0.0)	0(0.0)	22(100.0)
	Med. Lab.	0(0.0)	7(41.2)	0(0.0)	0(0.0)	9(52.9)	0(0.0)	1(5.9)	0(0.0)	0(0.0)	17(100.0)
	Physio staff	0(0.0)	6(46.2)	0(0.0)	0(0.0)	0(0.0)	0(0.0)	3(23.1)	0(0.0)	4(30.8)	13(100.0)
	Adm. Staff	0(0.0)	24(60.0)	4(10.0)	1(2.5)	3(7.5)	4(10.0)	0(0.0)	0(0.0)	4(10.0)	40(100.0)
Т	Total	14(6.1)	89(39.0)	21(9.2)	15(6.6)	18(7.9)	15(6.6)	16(7.0)	30(13.2)	10(4.4)	228(100.0)
C	Gender		-	3	2	1	13		part of the same o		
	Male	6(7.4)	51(63.0)	4(4.9)	0(0.0)	9(11.1)	4(4.9)	0(0.0)	1(1.2)	6(7.4)	81(100.0)
	Female	8(5.4)	38(25.9)	17(11.6)	15(10.2)	9(6.1)	11(7.5)	16(10.9)	19(19.7)	4(2.7)	147(100.0)
Τ	Total	14(6.1)	89(39.0)	21(9.2)	15(6.6)	18(7.9)	15(6.6)	16(7.0)	20(8.8)	10(4.4)	228(100.0)

Percentages are in Parentheses

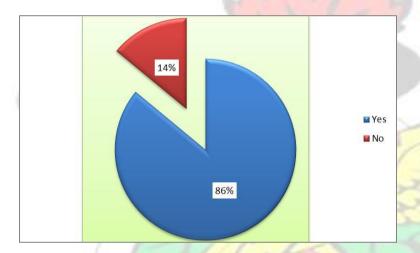
Source: Field Survey, 2015



The result of the table (4.8) shows that out of the total doctors surveyed, 37.5% are currently using condoms (COM) as method of family planning whereas 12.5% are also currently using the calendar method (CAM). However, 21.9% and 15.6% of the doctors are also currently using withdrawal methods (WIM) and Intrauterine Contraceptive Device (ICD) as their preferred family planning methods respectively. Out of the total surveyed nurses of 104, 21.2% are currently using condoms (COM) as method of family planning whereas 27.9% are currently using Injectable (INJ) as their preferred family planning method. The current family planning methods employed 11.5% and 9.6% of the surveyed nurses were the calendar method (CAM) and pills (PILL) respectively. The study further showed that out of the total surveyed Pharmacy staff, the majority (81.8%) are currently using condom as their preferred family planning method whereas 9.1% are also currently using the breastfeeding (BRF) method of family planning. However, the pharmacy staffs that were using the abstinence (ABS) method were 4.5% whereas those also currently using the withdrawal methods (WIM) as their preferred family planning method were 4.5%. The majority (52.9%) of the surveyed medical laboratory staff are currently using the abstinence (ABS) as their preferred family planning method whereas 41.2% are also currently using condoms. The remaining surveyed medical laboratory staffs of 5.9% are also currently using pills (PILL) as their preferred family planning method. Finally, the majority (46.2%) of the surveyed Physiotherapy staff are currently using the condom (COM) method of family planning whereas 23.1% are also currently using the pill (PILL) method and the remaining 30.8% are using other (OTH) methods. Finally, out of the total surveyed administrative staff of the public hospitals in the Kumasi metropolis, the majority (60.0%) are currently using condoms (COM) as their preferred family planning method whereas 10.0% are also currently using the withdrawal methods (WIM). However, 10.0% and 7.5% of the surveyed administrative staff are also currently using the breastfeeding (BRF) and abstinence (ABS) methods as their preferred family planning methods respectively. It is therefore evident from the result that the most employed family planning method by the surveyed staff of the public hospitals in the Kumasi metropolis was the condom method.

4.3.1 Satisfaction with the family planning methods

The satisfaction of the surveyed respondents with regard to the practice of the various methods of family planning accessed from the various public health units is discussed in this section of the study. The result of the section is presented in Figure 4.5.



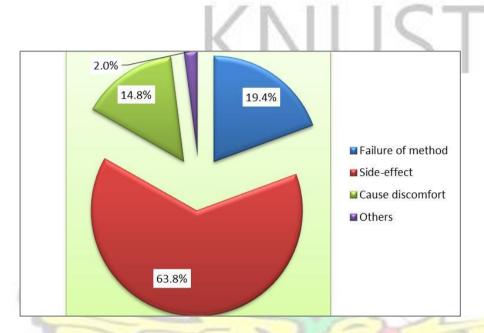
Source: Field Survey, 2015

Figure 4.5: Satisfaction with Family Planning Methods

Out of the total respondents of 228 that adopted family planning methods, the majority (86.0%) were not satisfied with the adopted method whereas the remaining 14.0% were satisfied with the adopted family planning methods.

4.3.2 Reasons for non-satisfaction of family planning methods

This section of the study examines the reasons behind the dissatisfaction of a section of the surveyed respondents about the practiced family planning methods. The result of the section is graphically presented in Figure 4.6



Source: Field Survey, 2015

Figure 4.6: Reasons for non-satisfaction of family planning methods

Out of the total 196 respondents that were not satisfied with adopted family planning method, the majority attributed it to the numerous side-effects of the methods. However, 19.4% and 14.8% of the surveyed respondents who were not satisfied with the family planning methods attributed it to failure of the methods and the resulting discomfort from the methods.

4.4 Socio-economic and demographic factors influencing health workers usage of FP

Table presents the output from the binary probit model. The Pseudo R² of the assessed model was 0.2493, demonstrating that 25% of the change in the responding variable (reception of birth control strategies) is clarified by the model or the independent variables.

To further study the logical force of the model, a measurement in view of probability proportion (LR) is proper. The significance of the probability proportion measurement shows that the model takes after a chi-square approximation (χ 2) with 8 degrees of flexibility. The Hosmer-Lemeshow insights (df= 8, p = 0.1519) for the Probit model is irrelevant. This is on account of, the watched likelihood did not achieve importance at α = 0.05 on χ 2 conveyance with 8 degrees of flexibility. Hosmer and Lemeshow (2000: 145-147) proposes that inconsequential insights shows a decency of attack of a model. Along these lines, it can be presumed that the Probit model adequately clarifies the data. That is, there is sufficient proof to recommend that the goodness of fit of the general model is high

Table 4.9: Binary Probit Regression of the Factors Influencing FP Adoption

Adoption of Family Planning Methods	df/dx	Std.	Z	P> Z
		Err.		
Demographic Factors		3		
Gender	0.0001	0.0000	2.75	0.006**
Age	0.0067	0.0017	3.83	0.000**
Marital Status	0.1452	0.0479	3.48	0.000**
Religion	0.0140	0.0314	0.45	0.653
Education	0.2566	0.0652	4.70	0.000**
Household Size	0.1499	0.0643	2.71	0.007**
Type of Residence	0.0088	0.0093	0.94	0.345
Number of children (Parity)	0.3428	0.1245	3.22	0.001**
Socio-Economic Factors	177			//-
Income	0.0401	0.0214	1.86	0.063
Payment for FP	0.0187	0.0313	0.59	0.558
Access to Electricity	0.3383	0.0825	4.86	0.000**
Income from other Household Members	-0.0063	0.0144	-0.44	0.661
Goodness Of Fit Of The Model			N.	
Number of Observations	314	-	00	
LR Chi ² (15)	78.01			
Prob> Chi ²	0.0000	0 3		
Pseudo R ²	0.2493			
Log likelihood	-117.44			
Number Of Groups	10			
Hosmer-Lemeshow chi ² (8)	15.39			
Prob> chi ²	0.1519			

Dependent Variable: Adoption of Family Planning Methods dF/dx is for

discrete change of dummy variable from 0 to 1 (Marginal Effects)

Source: Output from STATA 12

The results of the Table 4.9 show that there is positive relationship between gender and the adoption of family planning practices among the public health workers surveyed at a statistical significance level of 1%. This therefore implies that there is positive marginal effect of 0.0001 units on the practices of the various methods of family planning. It further implies that the females have the greater probability of adopting family planning methods as compare to their male counterparts. There is also positive relationship between the age of the respondents and the practice of family planning methods at a statistical significance level of 1%. The marginal effect of 0.0067 implies that a unit change in the age of the surveyed public health workers is associated with 0.0067 unit improvement in the adoption of family planning methods among the public health workers. This implies that the aged public workers have greater probability of adopting family planning methods compare to their younger counterparts. The marital status of the surveyed respondents had a positive influence adoption of family planning methods at a statistical significance level of 1%. The marginal effect of 0.1452 indicates that any marginal unit change in the marital status of the respondents is associated with 0.1452 unit improvement in health workers adoption of family planning methods. This therefore implies that the married health workers have the greater probability of adopting family methods compare to their separated or divorced counterparts. The educational status of the surveyed health workers is positively related to family planning practice at a statistical significance level of 1%. The marginal effect of 0.2566 indicates that any marginal improvement in the level of education of the health workers is associated with 0.2566 unit improvement in their practice of family planning methods. This therefore implies that the highly educated public health workers have relatively greater probability of adopting family planning methods. The household size of the surveyed respondents was positively related to the practice of family planning methods at a statistical significance level of 1%. The marginal effect of 0.1499 indicates that any marginal increase in the household size of the public health workers is associated with 0.1499 unit practice of family planning methods. This therefore implies that public health workers with greater household size relatively have higher probability of adopting family planning methods.

The result of the table (4.9) further shows that the nature of the job of the public health workers was found to negatively influence the family planning practices methods at a statistical significance level of 1%. The marginal effect of 0.1219 indicates that the full time public health workers have higher probability of adopting family planning methods as compare to their part time public health workers. The income of the public health workers was found to positively influence the family planning practices of the workers at a statistical significance level of 10%. The marginal effect of 0.0401 indicates that a marginal unit increase in the income level of the public health workers is associated with 0.0401 unit increase in the level of family planning adoption among the public health workers. This therefore implies that the public health workers with greater income levels relatively have greater probability of adopting family planning methods in the study area. The public health workers access to electricity is positively related to family planning adoption at a statistical significance level of 1%. The marginal effect of 0.3383 indicates that a marginal improvement in the public health workers access to electricity is associated with 0.3383 unit improvement in the workers adoption of family planning methods.

CHAPTER FIVE

5.0 DISCUSSION OF THE RESULT

This chapter of the study discusses the major findings of the study. The chapter links the result of the study to the research questions, objectives, the key variables and the reviewed literature.

5.1 Proportion of Health Workers using Family Planning

The study found that the greater percentage of the public health workers is currently practicing various methods of family planning with only 28% without any form of family planning. This study confirms an improvement in Onwachuku et al. (2005) study that showed that 50% of Community Health Extension workers who were trained to educate households and rural communities on family planning methods were current users of family planning methods with further seventy-four per cent (74%) ever using at least a method before. The higher adoption of family planning methods among the public workers could be due to the fact that Health workers are generally more informed about family planning methods than any other groups of people. This is further supported by the fact that the attitude and practice of family planning is largely determined by the user's knowledge about the methods and is further strengthened by the provider's positive disposition to the process (ICFP, 2009). These family planning methods are often adopted by the households of the public health workers through partnership discourse. Consistent

with this finding was a study in the Kasina Nankana District of Ghana which affirmed that husband-wife communication about family planning predicts contraceptive use when other factors were controlled.

The initiators of the various family planning methods in the household among the public health workers were often women. This is in contrast to the available studies that showed that, in many African countries, males often dominate in making important decisions in the family including reproduction, family size and contraceptive use (Caldwell & Caldwell, 1987; Adongo et al., 1997). Most of the adopters did not received family planning services at the public health unit.

The public health workers that rarely adopt any form of family planning methods attribute it to reasons such as the unwillingness of their partners, health, religion and fear of sterility. For others their preferred methods of family planning methods are not available at the public health units. The unavailability of the preferred family planning methods is supported by Ross et al. (2012) who indicated that the choice of methods available plays a vital role in women's acceptability of family planning and enables them to sustain their continuation of use. Furthermore, reasons such as desire to have more children of a preferred gender, yet to complete family size and husbands demands often impede the desire of public health workers to adopt family planning methods.

5.2 Patronized Methods of Family Planning Among Public Health Workers The predominantly used method of family planning among the public health workers was condom. Apart from this, the other major family planning methods adopted by the public health workers were injectable, withdrawal, abstinence, pill, intrauterine contraceptive

devices (IUD) and Lactational Amenorrhoea Method (LAM). The least practiced family planning method among the public health workers was the calendar method in the Kumasi Metropolis. This is supported in a study by Onwachuku et al. (2005) where fifty-seven per cent (57%) of Community Health Extension Workers used injectable whiles about five per cent (5%) used Natural methods.

Furthermore, the female public health workers patronized the family planning services more than their male counterparts. The adopters of the family planning services were satisfied with the methods. However, the few adopters of the family planning methods that were not satisfied with the methods attributed it to factors including failure of the methods, side-effects, and causes of discomfort. Some studies in Egypt, Nepal, Pakistan and Zambia by Casterline and Sinding in 2000 also affirmed this finding by indicating that the fear of health side effects of contraceptives deterred women from using family planning methods. Furthermore, the studies indicated that the hormonal method particularly the injectables could delay fertility or cause permanent infertility.

5.3 Socio-economic characteristics influencing the usage of family planning methods. The study revealed that the majority of the public health workers were full time workers. The nature of the job of the public health workers was therefore found to negatively influence their adoption level of family planning methods. The public health workers with full time jobs have greater probability of adopting family planning methods. Though the majority of the adopters and non-adopters of family planning methods have steady income, relatively more of the adopters had steady income. It was therefore not surprising that the income status of the public health workers were found to have positively influenced the adoption level of family planning methods. In many Ghanaian communities, the rich are more concerned with their family size relatively to the poor and hence prefer to adopt

family planning methods to manage the size of their families. Moreover, there are some family planning methods that are expensive and with low finance cannot afford to use or purchase them in the society. This finding is supported by the study of Olaitan and Olukunmi (2011) that stated that lower income earners find it difficult in complying with standard methods of contraception. Furthermore, the public health workers accessibility of electricity was a positive influence on their adoption of family planning methods. This could be explained by the fact that the public health workers with electricity had more sources of entertainment that could reduce their likely of making babies.

5.4 Demographic characteristics influencing the utilization of family planning The study revealed that both adopters and non-adopters of family planning methods were married with few of them also engaged in consensual union. Covington et al. (1986) supported this when they found out that 57% of the currently married obstetrics/ gynecologists and their spouses were using contraceptives. The majority of married public health workers that have adopted family planning methods have been in the marriage for 6 to 10 years whereas the majority of the non-adopters have been in their marriage for 2 to 5 years. Generally, the inferential analysis revealed that marital status of public health workers had a positive influence on their adoption or usage of family planning methods. The married public health workers were found to have greater probability of adopting family planning methods compare to their unmarried counterparts. This could be explained by the fact that married couples often are more likely to have children already compared to their unmarried counterparts and so would wish to adopt family planning methods to control and plan their families.

Household size was found to positively influence public health workers adoption or usage of family planning methods. This implies that the public health workers with larger household sizes have greater probability of adopting family planning methods in order to control or limit the household size. The average household size of the adopters of family planning methods of 4.83 members is larger than that of the non-adopters of 3.94 members support this assertion.

Gender and age of the public health workers were also found to have significantly influenced their adoption level of family planning methods. The educational status of the public health workers was also found to positively influence family planning methods. This therefore implies that the highly educated public health workers have greater probability of adopting family planning methods. This finding is supported by the study of ICFP (2009) that showed that level of education on family planning services by public health workers have a positive influence on their usage of family planning methods. Patel (2012) also suggested that the level of knowledge about a family planning is a strong predictor of its use among young adults.

CHAPTER SIX

6.0 CONCLUSIONS AND RECOMMENDATIONS

This chapter of the study summarizes key findings with figures and makes appropriate segmented and targeted recommendations to specific stakeholders and interested parties.

SANE

6.1 Conclusions

Currently 72% of the public health workers in the Kumasi metropolis are using various methods of family planning. Six of the major family planning methods adopted by the health workers in birth control were condoms, injectable, withdrawal, abstinence, pill, and intrauterine contraceptive device. The adoption of the family planning methods were frequently initiated by their wives. Most of the public health workers in Kumasi metropolis do not access family planning services from the public health unit. The public health workers were often satisfied with these adopted family planning methods. However, those that were dissatisfied with the methods mentioned side-effects, failure of method, and discomfort as the cause. Furthermore, some of the public health workers could not adopt the family planning methods because their preferred methods were not available with the public health units.

The major demographic factors revealed to influence the public health workers adoption of family planning methods in the Kumasi metropolis were gender, age, marital status, education, and household size. The public health female workers were found to have greater probability of adopting family planning methods. The married also have higher probability of adopting family planning methods because of their higher tendency of having children and hence the need to control and manage effectively the birth rate. The majority of the public health workers that have adopted family planning methods were married for 6 to 10 years with 2 to 3 children and resided in rented houses. The highly educated and the public health workers with larger household sizes have greater probability of adopting family planning methods. On the average, the adopters of the family planning methods have household size of 4.83 members whereas the non-adopters have household size of 3.94 members. The major socio-economic factors that were found to have influence

on public health workers adoption of family planning methods were income and the use of electricity as their source of energy. The majority of the public health workers practicing the family planning methods have full time jobs with steady income. The income of the adopters however was inadequate to feed their respective households. The adopters of the family planning methods also have access and use electricity as most of them reside in rented houses in the Kumasi metropolis.

6.2 Recommendations

Based on the conclusions and the summarized findings of the study, several imperative recommendations have been proposed to the policy formulation of MOH and other stakeholders on family planning methods in the public health units in the Kumasi metropolis.

Since the majority of the non-adopters of the family planning methods were dissatisfied with the methods for a number of reasons including fear of side effects, discomfort of the methods and fear of sterility, they need more education and the introduction of alternative family planning methods with minimal side effects and discomfort. Such activity would enhance their probability of adopting family planning methods.

Furthermore, some of the health workers failed to adopt the family planning methods because of the absence of their preferred methods. Hence, the public health units should make available enough and alternative family planning methods in order to attract more public health workers to adopt family planning methods.

Moreover, the study revealed that the female health workers were the more initiators and adopters of family planning methods. Therefore the interest of their male partners in family planning methods could be enhanced through public education on the need for family planning. Further, the positive influence of education on the adoption of family planning methods implies that any significant efforts to educate the general public on family planning issues could trigger their interest and enhance greater adoption among the general public.



REFERNCES

- A.T. Beekle and C. McCabe, "Awareness and Determinants of Family Planning Practice in Jimma, Ethiopia," *International Nursing Review* 53, no. 4 (2006): 269-76.
- Agyei, W. K., and Migadde, M. (1995). "Demographic and sociocultural factors influencing contraceptive use in Uganda." *PubMed article indexed for MEDLINE* [online]. 27(1): pp. 47-60.
- Casterline J. B. &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
- Cincotta, W. A., &Engelman, H. D. (1997). "Is the Asian family planning program model suited to Africa?," *Studies in Family Planning* 19(1): 19–28
- Cleland, J. (2001). "Potatoes and pills: An overview of innovation-diffusion contributions to explanations of fertility decline," in John B. Casterline (ed.),
 Diffusion Processes and Fertility Transition: Selected Perspectives. Washington,
 DC: National Academy Press, pp. 39–65.
- Cleland J, Bernstein S, Ezeh A, Faundes A, Glasier A, Innis J. "Family planning: the unfinished agenda." *Lancet*. 2006 Nov 18; 368(9549):1810-27.
- Cleland JG, Ndugwa RP, Zulu EM. "Family planning in sub-Saharan Africa: progress or stagnation?" <u>Bulletin of the World Health Organization 2011</u>; 89:137-143.
- Covington et al, Physician Attitudes and Family Planning in Nigeria, "Studies in Family Planning, "vol. 1, No. (Jul. - Aug., 1986), pp. 12-180. Published by: Population Council

- Darroch JE, Singh S, Nadeau J: In Brief (No.5) New York. "In Contraception: an investment in lives, health and development." *New York: Guttmacher Institute and* UNFPA; 2008.
- David E. B., David C., & Jaypee S., (2002), "The Demographic Dividend: A New Perspective on the Economic Consequences of Population Change," New York, Rand.
- Doss, C. R. (2003). "Understanding Farm Level Technology Adoption: Lessons
 Learned from CIMMYT's Micro Surveys in Eastern Africa." CIMMYT Economics
 Working Paper 03-07. Mexico. D.F.: CIMMYT. 103.
- Eastwood, R. & Lipton, M. (2001). "The impact of changes in human fertility on poverty," *Journal of Development Studies* 36(1): 1–30.
- Fauveau V., Wojtyniak B., Koenic M. A., Chakraborty J., & Chowdhury, A. I.
 (1989). "Epidemiology and causes of deaths among women in rural Bangladesh."
 Int. J. Epidemiol. 18(1): 139-145.
- Feldman, R. & Maposphere, C. (2003). Safer Sex and Reproductive Choice: Findings from "Positive Women: Voices and Choices" in Zimbabwe.

 *Reproductive Health Matters; 11, pp. 162-173.
- Grange A. 2002. Reducing maternal and neonatal morbidity in Nigeria: Assessment of the needs of the health sector. In: Dada OA, editor. "Population and reproductive health in developing world challenges for the new millennium." Proceedings of a symposium in honour of Professor JIB Adinma, NnamdiAzikiwe University Sept. 2002.
- Hagen C., Fikree A., Fariyal F., Sherali A., &Hoodbhoy F., (1999). "Fertility and Family Planning Trends in Karachi, Pakistan." *International Family Planning*

- Perspectives. 25, (1), 53-89.
 Hawkins, J., Matteson P. S., & Tabeek E. S. (1995), "A Fertility Control in Fogel,"
 C. I. and N. F. Woods (Eds.), A Comprehensive Handbook. London, UK, Sage
 Publishers, Inc
- Herz B., &Measham, A. R. (1987). "The safe motherhood initiative: Proposals for action." Washington D.C., World Bank.
- Hosmer D. W., &Lemeshow, S. (2000). "Applied logistic regression (2nd edn.)".
 New York: Wiley.
- Hogan MC, Foreman KJ, Naghavi M, Ahn SY, Wang M, Makela SM, Lopez AD,
 Lozno R, Murray CJL. Maternal mortality for 181 countries, 1980–2008: "A systematic analysis of progress towards Millennium Development Goal 5". *Lancet* 2010, 375(9726):1609–11623.
- IKECHEBELU1 et al, Knowledge, attitude and practice of family planning among Igbo women of south-eastern Nigeria, *Journal of Obstetrics and Gynaecology, November* 2005; 25(8): 792–795
- Khan M. M. A. &Rahman M. (1996). Determinants of contraceptive methodchoice in rural Bangladesh. *International Centre for Diarrhoeal Disease* Research (ICDDR) Working paper 117
- Kenya National Bureau of Statistics: Kenya Demographic Health Survey (2008.)
- Maine D., Rosenfield A., Wallace M., Kimball A. M., Kwast B., Papiernik E., & White, S. (1987). "Prevention of maternal deaths in developing countries.
 Program options and practical considerations." Prepared for the international "Safe Motherhood" Conference, Nairobi, Kenya p. 50.
- McCarthy J., & Maine, D. (1992). "A framework for analyzing the determinants of maternal mortality." *Studies in family Planning* 23(1): 23-24.

- ☐ Merrick, T. (2005). "Poverty Reduction: Does Reproductive Health Matter?" *HPN*Discussion Paper Series. Washington DC: World Bank.
- Moreland, S. &Talbird, S. (2006), "Achieving the Millennium Development
 Goals: The Contribution of Fulfilling the Unmet Need for Family Planning."

 Washington, DC: Constella Futures, Policy Project
- New York Times 2009, "Successful Family Planning Efforts Essential to
 Alleviating Global Poverty, Elevating Women, Opinion Piece" Retrieved on
 06/06/2010; from: http://www.medicalnewstoday.com/articles/145330.php
- Nwachukwu, J. &Obasi, M. (2008). "Use of Modern Birth Control Methods among Rural Communities in Imo State, Nigeria." African Journal of Reproductive Health, 12(1), 102-108.
- Olaitan and Olukunmi, (2011). "Factors influencing the choice of family planning among couples in south west Nigeria." *International Journal of Medicine and Medical Sciences* 3(7), 227-232.
- Oladeji D. (2008). "Socio-cultural and norms factors influencing family planning choices among couples in Ibandan Metropolis," Nigeria. European Journal of Scientific Research 23 (2), 212-218
- Olaitan OL (2009). "Sexual Behaviour of University Students in South West
 Nigeria." Egypt. Acad. J. Biol. Sci. (Zool.), 1(1): 85-93. www.eajbs.eg.net
- Onwuhafua et al, "Knowledge, attitude and practice of family planning amongst community health extension workers in Kaduna State, Nigeria," *Journal of Obstetrics and Gynaecology*, July 2005; 25(5): 494–499
- Postpartum family planning annotated bibliography 2008–2014
- Republic of Kenya (2007), Kenya Vision 2030 the Popular Version, Nairobi:

Government Printer.
Rob S., Baschieri A., Steve C., Monique H., &Nyovani M., (2007). "Contextual Influences on Modern Contraceptive Use in Sub-Saharan Africa American" *Journal of PublicHealth*[online].97(7):1233–1240. Available from: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1913073/?tool=pmcentrez [Cited]

12 May 2009]

- Ross J, Hardee K et al, "Access to contraceptive methods and prevalence of use,"
 J Biosoc Sci. 2013 Nov; 45(6): 761–778
- Rachael Rettner, "What Birth Control Method Do Family Planning Docs Use?"
 IUDs & Implants, Live science, May 13, 2014
- Shane, K. (2009). "Levels, Trends, and Reasons for Contraceptive Discontinuation." DHS Analytical Studies No. 20. *Calverton, MD*: ICF Macro.
- Singh, S., Darroch, J., Vlassof, M. & Nadeau, J. (2004). Adding It Up: "The Benefits of Investing in Sexual and Reproductive Health Care." *New York*: UNFPA
- Stephenson R., Beke A., &Tshbangu D. (2008). Community and health facility influences on contraceptive method choice in the Eastern cape, South Africa.
 International Family Planning Perspective, 34 (2), 62-70. Doi: 10.1363/34062
- Todd C. S., Michelle. M. I., Malalay A., Pashtoon A., Faridullah A., Smith J., M., (2008). Cross-sectional analysis of factors associated with contraceptive use among hospitalized obstetric patients in Kabul, *Afghanistan National Institute of Health*. 78(3): 249–256.
- United Nations (UN) (2006). Levels and Trends of Contraceptive Use as
 Assessed in 2000. New York: Department of Social Affairs, Population Division,
 United Nations.
- UNFPA. Maternal Health in Africa. 2013

- □ UNFPA: Contraceptives save lives. 2012
- UNFPA. Global Need for Family planning, Retrieved on 06/06/2010; from:
 http://www.unfpa.org/rh/planning/mediakit/docs/new_docs/sheet1-english.pdf
- UNFPA: Ensuring that Every Pregnancy is Wanted (no date). Retrieved on 06/06/2010; from: http://www.unfpa.org/rh/planning.htm
- USAID: Repositioning Family Planning in Sub- Saharan Africa (August 2006).
 Retrieved on 06/06/2010. www.usaid.gov/our_work/globa-1-health//pop/techare
 as/ repo sitioning/briefs/repo_subafr.pdf
- USAID/HPI (2007), Achieving Equity for the Poor in Kenya: Understanding Level of Inequities and Barriers to Family Planning Services, Washington D.C.
- Utomo B., Alimoeso S., & Park, C.B, (1983). Factors affecting the use and non use
 of contraception. PubMed article indexed for MEDLINE [online].10(20): 19-48.
- Wawire, N. H. W. (2006), Determinants of Tax Revenue in Kenya, PhD
 Dissertation, Kenyatta University, Nairobi
- Westoff, CF. Unmet Need for Modern Contraceptive Methods. DHS Analytical Studies No. 28. Calverton, Maryland, USA: ICF International, 2012.
- World Bank, World Development Indicators, Washington, DC, 2009.
- World Bank (2003), World Development Report 2004: Making Services Work for
 Poor People, Washington, DC: World Bank
- World Health Organization (1986). Prevention of maternal mortality. Report of a
 WHO Interregional meeting, Geneva 11-15. Nov. 1985. Geneva, WHO, 1986.
 (Memo) p. 23.
- World Health Organization (WHO) (1991). Maternal mortality ratios and rates: A tabulation of available information. 3rd Ed. *Geneva*, WHO. p.100.
 - World Health Organization (WHO). 1992. The tenth revision of the International

- ☐ Classification of Diseases (KD-10). Geneva:
- WHO. World Health Organization (WHO). 2001. United Nations Children
 Emergency Fund and United Nations Funds for population activities, maternal
 mortality in 1995. Estimates developed by WHO, UNICEF and UNFPA,
 WHO/RNR/OI. Geneva: WHO. -www.fpconference2009.org



APPENDICES

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY.

SCHOOL	OF PU	JBLIC	HEALTH	QUESTIONNAIRE
HOSPITAL	NUM	BER/H	OSPITAL	_
STUDY ID	NUM	BER		DATE
INTERVIE	WED _			
	V			

DEAR RESPONDENT,

This study is being conducted to identify the uptake of family planning methods by public health workers in Kumasi Metropolis. We appeal to you to kindly fill this questionnaire.

You are assured of strict confidentiality of the information you will provide. You do not have to write your name on the questionnaire. Kindly tick $\{\sqrt{}\}$ your response.

DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

1.	Marital status	_
	a. Married	d. Widowed
	b. Consensual union/partners	e. Separated
	c. Divorced	R P F
		777
2.	Sex	The same of the sa
	a. Male	b. Female
	1 6000	
3.	Age	
	a. 21 and 30 years	c. 41 and 50
	b. 31 and 40 years	d. Above 5 Lydars
4.	Category of staff?	13
	The same of the sa	
	a. Doctor	d. Medical Laboratory
	staff	
	b. Nurse	e. Administrative staff
	c. Pharmacy staff	f. Physiotherapy staff
5.	Religious status	
	a. Christian 🔲	c. Traditional
	b. Other, specify	d. Moslem

6.	Ho	ow long have you been married?	
	a.	Less than one year	d. Between 11 and 20 years
	b.	Between 2 and 5 years	e. More than 20 years
	c.	Between 6 and 10 years	IICT
7.	Do a. b.	you have children? Yes No	051
8.	If t	the answer to the above question is yes a. One b. Two c. Three	d. Four e. Five f. More than five
9.		re planning to have children?	
	a. b.	Yes No	
	0.		
10.	If t	the answer to the above question is no,	when do you plan to have a child
	• • • •		······
11.	Wl	hat is your highest level of education?	
		I de l'in e	
	a.	Diploma	Dartonto do con
	b.	HND	e. Doctorate degree f. Others specify
e. D	egre	ee 🔲	in Galeis speerly
	_	laster's degree	
	1	E 1 2	3 3
12.	Ту	rpe of residence?	34
	a.	Renting	S AA
	b.	Institutional quarter	-:0
	c.	Owning	ENC
	d.	Others, specify	
13	Нο	ousehold size?	

Specify	
14. Who is the head of household? a. Spouse (Wife / Husband)	
SOCIOECONOMIC CHARACTERISTICS OF RESPONDENTS	
15. Is your job full- or part-time? a. Full time b. Part time	
16. Do you have a steady income? a. Yes b. No	
17. Do you feel that your income is enough to feed all the members in your family? a. Yes c. Sometimes b. No d. Not completely	ır
18. How much did you pay for the family planning service the last time? GH♥	
19. Does your household have access and use electricity? a. Have physical access and use	
b. Have physical access but don't use	
c. Don't have access	
20. What is the main fuel used for cooking by the household? a. Wood b. Charcoal c. Gas d. Electricity	
21. Does anyone else in the household have an income from any source?	

b. No	a. Yes		
PROPORTI PLANNING 22. Do you	wish to ha a.	PATRONIZED FORM ve more children? Yes No	M OF FAMILY
23. Reasons family	for being	willing to give birth a. Inadequate boys b. Inadequate girls	d. Has not completed e. Husband demand
c.	Family pressur	e f. Others, spe	ecify
24. Do 25. Are	a. b. you current a.	s family planning with your s Yes No tly using any family planning Yes No	TH
26. Who ini a. b. c.	tiated the use of one Husband alone Wife alone Both	contraceptive methods?	
27. If yes, we months?		7	f. Breaktfeeding
b. c.	Condom Withdrawal		g. Pills h. Injectables

	d. Intrauterine contraceptive device (IUCD) i. Vasectomy/Tubal
	Ligation
	e. Abstinence j. Others, specify
	28. Reason for non-use of family planning methods.
	a. Partner against it d. Fear of sterility
	b. Against my _r religion e. Other, specify
	c. Unhealthy
29.	Do you think you will use a contraceptive method in the future?
	a. Yes
	b. No
30.	Are you satisfied with family planning method?
	a. Yes
	b. No
21	Reason for non-satisfaction of family planning methods
31.	
	a. Failure of method
	b. Side-effect
	c. Cause discomfort
	d. Others, specify
32.	Is your preferred choice of family planning method available at your
34.	health facility?
	a. Yes
	b. No
33	If "NO" to the above question, what account for the shortage of family planning
55.	method
	SANE
34.	Who did you receive the family planning services from?
	a. Nurse
	b. Doctor

	c. d.	Public health Nurse Others, specify
35.	Но	w many times did you go for family planning services in the last 12 months? a. Once b. Twice specify
36.	. Do	you go to the public health unit to access family planning services? a. Yes b. No
37.	If'	NO" to the above question, why?
	a.	Men do not need to access family planning
	b.	Only females health workers works at the public health unit
	c.	Feels shy to go the public health unit
	d.	Others, specify
	12	SANE NO