**ENSIGN COLLEGE OF PUBLIC HEALTH, KPONG,
EASTERN REGION, GHANA**

FACTORS AFFECTING CONTRACEPTIVE USE AMONG WOMEN AGED 15-49 YEARS IN WORAWORA TOWNSHIP

by

PATRICK LOTSU

A Thesis submitted to the Department of Community Health in the Faculty of Public Health in partial fulfilment of the requirements for the degree

MASTER OF PUBLIC HEALTH

Supervisor: DR JOANA NERQUAYE-TETTEH

May, 2016

DECLARATION

I hereby declare that except for references to other people work, which I have dully cited, this project submitted to the school Ensign College of Public Health, Kpong is the results of my own investigation, and has not been presented for any other degree elsewhere.

PATRICK LOTSU (147100014) …… ……

(Student) Signature Date

Certified By:

Dr. Joana Nerqyaye Tetteh …… ……

(Supervisor) Signature Date

Certified By:

Dr. Christopher N. Tetteh …… …….

(Dean) Signature Date

DEDICATION

This work is dedicated to the Almighty God whose abundant grace, mercy and love have seen me through the period of my programme. To my lovely wife Mrs. Annette Kugbegah Lotsu whose encouragement and support made me pursue this programme.

ACKNOWLEDGEMENT

I would like to express my sincere gratitude and deep appreciation to my supervisor Dr Joana Nerquaye Tetteh whose advice, encouragement and support made this work accomplished. His guideline was very clear since the beginning of the process and his input has always been valuable in term of giving direction and helping to solve problems in this work. Special thanks to Dr Steve Manortey who helped me a lot, especially with statistical problems.

Many thanks to all lecturers for their enthusiastic teaching, consistent encouragement and valuable suggestions, which contribute to enhance my skills and knowledge. A big thank you goes to my medical superintendent Dr Isaac Tetteh Secorm for his words of encouragement; without him I would not have made it this far. Special thanks and appreciation for my wife, Annette Kugbegah, for her endless efforts in providing all of my needs during my study process.

I am also grateful to all my kids for their overall support in term of prayers, especially little Nayram, who will always put a smile of my face when I am stressed up. I am also grateful to all my classmates, most especially Eric Agboka and Philip Amoah for their help and assistance during the period of my study. Finally, I would like to give special thanks to all my family, most especially my brother Emmanuel Lotsu, for their support, encouragement and help during the period of my study.

Definition of Terms

Contraceptive: A method, agent or device use to prevent pregnancy

LIST OF ABBREVIATIONS

ARH: Adolescent Reproductive Health

CPR: contraceptive prevalence rate

DHS: Demographic Health Survey

FP: Family Planning

GDHS: Ghana Demography Health Survey

GFR: Ghana Demography Health Survey

GHS: Ghana Health Service

TFR: Total Fertility Rate

ABSTRACT

In the days of old, having many children gave economic might because the more people gave birth, the more hands were available to till the land and cultivate crops. However, with pressure on social amenities, scarce resources, high dependency ratio, lack of employment and high incidence of poverty, a lot of people are trying to limit the number of children they give birth to. The aim of this thesis was to determine factors affecting contraceptive use among women aged 15-49 years in Worawora township. A cross sectional survey using quantitative method was employed. A total of 390 women were conveniently sampled and a questionnaire was administered to obtained data. Bivariate and multivariate analysis was employed using binary logistic model. Majority of the respondents were within the 15-24 age group and were predominantly Christian. We found significant association between the use of contraceptives and age, number of children, number per household, occupation, marital status, educational level of partner and discussing with partner before using contraceptives.

Women in the age group 41-49 years were less likely to use contraceptive as compared to their counterpart in age group 15-24 years. As the number of children increased, there were higher odds of using contraceptive among women who had 1-3 children. The occupation of the respondents did not influence the use of contraceptive. Women who were divorced were 4.4 times more likely to use contraceptives. Religion was not significantly associated with the use of contraceptives. Moslems were 1.2 times more likely to use contraceptives compared to traditionalists. Occupation of husband had no influence on contraceptives use. Partners who had secondary education were 2.1 times more likely to use contraceptives compared to partners with primary education. Respondents who discussed with their partner before using contraceptive were less likely to have use contraceptive as compared to those who did not discuss with their

partners before use.

Conclusion: Knowledge and awareness of contraceptives use was high among women in Worawora township with age 15-24 years been the highest users. Policies on contraceptives use should aim at this age group.

Keywords: Contraceptive use, women aged 15-49 years, Worawora township

TABLE OF CONTENT

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

1.0 INTRODUCTION

1.1 Background of the study.

In the days of old, having many children gave an economic might because the more people given birth to, the more hands were available to help till the land and cultivate crops. However, with pressure on social amenities, scarce resources, high dependency ratio, lack of employment and high incidence of poverty, a lot of people are trying to limit the number of children they give birth to (Fallis 2013a).

Contraception is one of the major determinants of fertility levels (Helena & Otupiri 2016). Its use has increased steadily over the years and is currently widespread throughout the world; however, progress has not been the same in terms of geographical areas, and problems still remain in terms of both increasing the level of contraceptive use (Helena & Otupiri 2016) to meet current demand in certain regions and making available various types of contraceptive methods to individuals wishing to use contraception (Fallis 2013a).

The persistent high rate of fertility in Ghana and sub-Sahara African countries, accompanied by declining mortality, have given rise to unprecedented rapid population growth, thereby contributing to poverty, environment degradation and a deteriorating quality of life for majority of the people (Fallis 2013b).

The United States Agency for International Development (USAID) estimates that in the past 30 years, there has been an increase both in population and in contraception use in the developing world. As a result, it was estimated that in 2015 there were 500 million

contraceptive users in developing countries, which nearly doubled the prevalence in 2000 (Schivone1 2016).

In 2011–2013, 61.7% of women aged 15–44 in the United States were using contraception. The most common contraceptive method being used was the pill (16.0%) (Daniels et al. 2014). Nearly all women use contraception at some point in their lifetimes , although at any given time they may not be using contraception for reasons such as seeking pregnancy, being pregnant, or not being sexually active, which could affect prevalence of contraceptive use in America (Daniels et al. 2014). According to world development indicators, contraceptive use prevalence rate among women between the ages of 15-49 years from 2007-2013 in USA was high (76%), which was double that of Ghana (34%) during the same period (Childinfo 2014).

In 2015, 64% of married or in-union women of reproductive age worldwide were using some form of contraception; however, contraceptive use was much lower in the least developed countries (40%) and was particularly low in Africa (33%) (Nations 2015). Growth in contraceptive use prevalence until 2030 is expected mainly in the regions of sub-Saharan Africa and Oceania. Between 2015 and 2030, the time period of the 2030 Agenda for Sustainable Development, contraceptive use is projected to grow particularly in regions where less than half of married or in-union women of reproductive age currently use contraception (Nations 2015). Contraceptive prevalence is projected to increase from 17 to 27% in Western Africa, from 23 to 34% in Middle Africa (Nations 2015).

Globally, modern contraceptive utilization has increased in the recent past –from 54% in 1990 to 57% in 2012; however, the estimates in Africa remain persistently low at 23% and

24%, respectively within the same time periods (Andi et al. 2014) . The estimates among countries in the Sub-Saharan region are much lower than the aforementioned figures. This is attributed -among other factors -to shortfalls in health infrastructure and transport facilities (Andi et al. 2014).

An analysis of modern contraceptive prevalence rates (CPR) in recent Demographic and Health Surveys shows that three countries have achieved a much more rapid increase in CPR than any other countries in sub-Saharan Africa: Ethiopia, Malawi, and Rwanda (Nations 2015). The annual increase in CPR of modern methods among married women of reproductive age was 2.3% in Ethiopia (2005-2011), 2.4% in Malawi (2004-2010), and a dramatic 6.9% in Rwanda (2005-2010), according to the DHS reports for the years noted (Nations 2015). According to trends in contraceptive use worldwide, prevalence in 2015 was several times as high in Northern Africa and Southern Africa (53% and 64%, respectively) as in Middle Africa (23%) and Western Africa (17%); contraceptive use has been increasing recently in Eastern Africa and now stands at 40%, due to several factors (Nations 2015).

In Ghana, a country with multiple ethnic sets and religious groupings, efforts made by the Ghana Health Service (GHS) and other agencies to promote the use of contraceptives have resulted in a general increase over the last two decades. Currently, there has been steady decline in the total fertility rate, from 6.4 births per woman in 1988 to 4.2 births per woman in 2014 (GDHS 2014).

The fertility rate varies with education and economic status. Women with no education have 4.6% more children than those with secondary education (6.2% versus 4.2%). Fertility

increases as education and wealth decreases (GDHS 2014).The disparity of use of family planning methods among the urban and rural, and rich and poor puts many women in most deprived settings at a disadvantage (GDHS 2014) .

Average contraceptive prevalence in the Volta Region of Ghana was estimated to be 30% relative to the national prevalence which increased from 13 to 27% from 1988 to 2014; modern contraceptive methods also increased four times from 5% to 22% during the same period (GDHS 2014).

Lack of formal education among women, socio-cultural beliefs and spousal communication were found to influence contraceptive use. Furthermore, favorable opening hours of the facilities and distance to health facilities influenced the use of modern contraceptives (Eliason 2014).

A study conducted in Talensi in the Northern Region of Ghana showed that major motivating factors to the usage of contraceptives were to space children and to prevent pregnancy and sexual transmitted infections; major reasons for not accessing family planning services were opposition from husbands and misconceptions about family planning (Apanga & Adam 2015).

In the Upper East Region of Ghana, factors associated with the use of contraceptives included exposure to integrated primary healthcare services, the level of education, socioeconomic status, couple fertility preference, marital status, and parity (Achana et al. 2015).

The total fertility rate (TFR) for the Biakoye District is 3.4% and the general fertility rate (GFR) was 98.5 births per 1000 women aged 15-49 years as at 2014(Biakoye District Directorate 2014).

1.2 Problem Statement.

Table 1.0 New acceptors for contraceptive use in Worawora 2014

Year	Total new acceptors	Ages					
		10-14	15-19	20-24	25-29	30-34	35+
2012	**234**	7	38	72	64	58	35
2013	**612**	1	24	38	55	67	47
2014	**1035**	21	153	229	185	239	208

Source: Annual Report- Family planning Biakoye District. 2014

The above data shows an increase in the number of people using contraceptive from 2012 to 2014; from 234 to 612 and 1035, respectively. It is worth noting that the above data are hospital data and do not reflect the true degree of contraceptive use in Worawora township. Till date, there is no known research in Worawora that explored the factors affecting contraceptive use. This research therefore seeks to find out the factors affecting contraceptive use among women in Worawora.

1.3 Rationale of the study

The findings of the study will inform the District Health Directorate (DHD) to help improve upon contraceptive use in Worawora Township. It will also be used as basis for further study as it will add to the quantum of knowledge. On a more personal note, as a health manager, the study will enable the researcher understand the situation on ground in order to identify strategies and interventions that can be implemented. Finally, other

stakeholders, such as the Ministry of Health (MOH), GHS and its agencies would be also able to use findings from the study, which could be applied to other districts in the country.

1.4 Research hypotheses

The overall goal of the research is to find out the factors that affect contraceptive use in Worawora township. The hypotheses for this research are:

1. Contraceptive use among women is low in Worawora
2. Socio-cultural factors are not associated with contraceptive use
3. Service factors are associated with contraceptives use

Conceptual framework

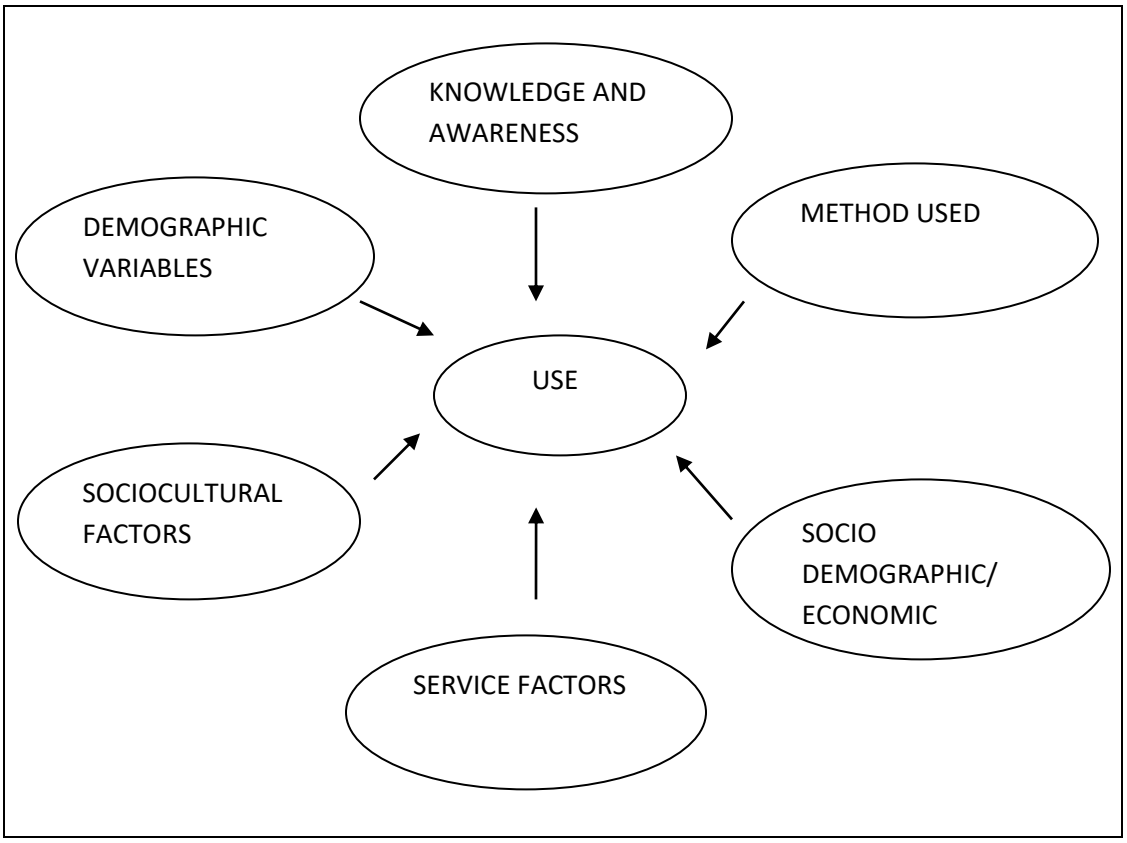

Figure 1.0 Conceptual framework of factors affecting the use of contraceptives among women in Worawora township

1.6 Research Question

What are the factors affecting contraceptive use among women in the Worawora township?

1.7 General objective

The aim of this study is to determine the factors affecting contraceptive use among women in the Worawora township.

1.8 Specific objectives

To determine:

1. Knowledge and awareness of contraceptive use among women
2. Method of contraceptive use
3. Source of information on contraceptive use
4. Socio-demographic and socio-economic factors affecting contraceptive use among women
5. Socio-cultural factors affecting contraceptive use
6. Service factors affecting the use of contraceptives

1.9 Profile of the study area

The Worawora township is one of the major towns in the Biakoye District of the Volta Region of Ghana. It is bordered to the north by Apesokubi, to the east by Jasikan, to the south by Abotease and to the west by Tsremye. The Worawora town has four communities, namely Gyamarakrom, Kotomase, Awerekyetere and Osuosroum. Worawora has a total population of 65,901, with male and female's populations of 33,057 and 32,844, respectively (2010 National Population Census). The town is one of the poorest in the country, with doctor to patient ratio of 1:7456, midwife to patient ratio of 1:1213, and nurse

to patient ratio of 1:3389. The inhabitants of the town are mainly farmers and traders. Worawora has a hospital, a senior high school, a few primary schools, a rural bank, a police station and social amenities like a community center.

The town is connected to the national electricity grid and has pipe borne water. The vegetation is of grassland and deciduous trees. There are densely vegetated areas around riverbanks. The commonest trees are dawadawa, baobab, nim and mango. The climatic conditions are made up of pronounced dry and raining seasons. The raining season starts from March to October and is characterized by heavy rainfall, which peaks in June.

1.10 Organization of report

Chapter one is made up of the introduction, problem statement, rationale, research questions, and the objectives of study. Chapter two reviews the research literature on factors affecting contraceptive use. Chapter three presents the methodology used to test the hypothesis: it describes the research design, study setting, study population, sample size, sampling technique, data collection procedures, data analysis procedures and ethical considerations. Furthermore, instruments that were used in the research are described and a description of the relevant statistical techniques used is provided. Chapter four presents the results of the study. Chapter five provides a discussion of the research findings. Chapter six offers concluding remarks and provides recommendations for further research on the factors affecting contraceptive use among women in Worawora township, and the implications of the present findings for practice.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This chapter will review research literature on contraceptive use and the factors affecting contraceptive use. The chapter will be divided into six sections. Section 1 will deal with knowledge and awareness of contraceptive use among women, section 2 will be devoted to the methods of contraception, section 3 will be devoted to the sources of information on contraceptive use, section 4 will deal with socio-demographic and socio economic factors affecting contraceptive use among women, whilst section 5 reviews the socio-cultural factors that affect contraceptive use and section 6 deals with service factors that affect the use of contraceptives.

2.2 Knowledge and awareness of contraceptive use among women

There is convincing evidence that poverty incidence is always higher among larger households (Orbeta 2005). Indeed, the population and poverty nexus is not new but remains an important development issue for many countries (Orbeta 2005). In the Philippines, for instance, the debate on the role of population growth and family size in development, in general, and on poverty in particular, remains largely unresolved. Recent research has added the important dimension of vulnerability to poverty to the debate on the determinants of the welfare status of a population. (Orbeta 2005)

There are many women who get pregnant but it is not their wish, because they do not have knowledge of contraceptives (Netshikweta 2007). These pregnancies are mostly unplanned and unintended, and many are terminated either legally or illegally (Netshikweta 2007).

Around 30–50% of women presenting for choice on termination of pregnancy were not using contraceptives at the time of conception, and similar numbers of pregnancies were unplanned and unwanted (Netshikweta 2007).

Women's knowledge on contraceptive methods reflects their accessibility to family planning information that has effect on their behavior and how they relate to contraceptive usage. This study hypothesized that contraceptive use among women is low in Worawora. In contrast, women who know about contraceptives have a greater chance of using contraception (GDHS 2014).

More than one-quarter of married women in Ghana use some method of contraception, 22% of them use a modern method of family planning and 5% use a traditional method (GDHS 2014). Injectable (8%), implants (5%), and pill (5%) were the most commonly used modern methods. Among never married, sexually active women age 15-49 years, about one-third (32%) use a modern method of family planning; the most commonly used methods were the pills (8%), male condom (8%), and injectable (7%) (GDHS 2014). Use of modern methods of family planning varies by residence and region. One-quarter of married women in rural areas use modern methods, compared to 1 in 5 married women in urban areas (GDHS 2014).Modern contraceptive use ranges from a low of 11% in Northern Region to a high of 30% in Volta Region (GDHS 2014).

In a study conducted in Bangladesh on family planning, about 40% of respondents had heard family planning (FP) messages or about FP methods (Islam & Thorvaldsen 2012).Among both modern and traditional methods, the contraceptive pill ranked first, about two-thirds (66.0%) of married women used this method more than two times than the

national figure (28.5%) Place of residence, religion, age, school attendance, husband's school attendance, service provided in the community, distance to the service center, and exposure to mass media were significantly associated with knowledge of FP and on use of contraceptive (Islam & Thorvaldsen 2012).

A cross-sectional study carried out in Cape Coast in the Central Region of Ghana among adolescents in selected senior high schools showed that almost 21% of students with knowledge of contraception were users, 82% of sexually active respondents were non-users, and condom was the most common contraceptive method used (Hagan & Buxton 2012). Also, 60% and 30% of respondents obtained knowledge about contraception from the media (tv/radio) and peers (friends), respectively (Hagan & Buxton 2012). However, almost 32% of the study participants thought contraceptives were for only adult married persons. The study confirms that there is a need for aggressive advocacy and dissemination of information on adolescent reproductive health (ARH) and family planning methods before initiation of sexual activity among the adolescent population in Ghana (Hagan & Buxton 2012).

In a quantitative, hospital-based, unmatched case-control study in the Volta Region, marital status, employment status, number of total pregnancies, and knowledge about contraception were found to be associated with induced abortion; there was a 4% reduction in the odds of induced abortion in married women compared with women who were single (odds ratio [OR] 0.11, 95% confidence interval [CI] 0.07–0.22) (Klutsey & Ankomah 2014). The study confirmed that lack of knowledge about contraceptives and being single or employed were associated with increased likelihood of induced abortion. It was also

found that women with a higher number of pregnancies had a greater odds of induced abortion (Klutsey & Ankomah 2014).

A study on knowledge, non-use, use and source of information on contraceptive in rural Lagos among 816 females of reproductive age, found that married respondents were about 3 times more likely to know of contraceptives than single respondents (Afolabi et al. 2015).

2.3 Method of contraceptive use

The effectiveness of birth control methods is critically important for reducing the risk of unintended pregnancy. The type of method chosen will inform continued use base on individual tolerance and compliance level. A study into factors influencing the utilization of family planning service in Kwabre District of Ghana indicated that most women had high level of knowledge about contraceptives but this does not translate into the use (Fallis 2013a). Most of the respondents (30.5%) were aware of at least 3 methods of contraception, 4.7% were aware of 7 to 9 contraceptive methods and 91.7% of the respondents had knowledge on at least two contraceptive methods (Fallis 2013a). These women had access to family planning services but the qualities of the services offered were quite low in terms of availability of different contraceptive methods. The most common contraceptive methods available were the pill, injection and the condom. Another study revealed that women have high level of knowledge about contraceptives but this does not translate into the use of modern contraceptives (Fallis 2013a)

In South Africa, injectable progestins, particularly medroxyprogesterone acetate, was the preferred choice or method of contraception (Oord et al. 2012). A study conducted on predictors of modern contraceptive methods use among married women in western

Ethiopia reported an overall utilization rate of modern contraceptives of 71.9 %; the most common form of modern contraceptives used was injectable (60.3 %) (Tekelab et al. 2015).

2.4 Source of information on contraceptive Use

A study conducted by Afolabi et al on contraceptive methods revealed that schools/educational institutions were the major sources of contraceptive information among single respondents, whilst health facilities were the major sources of such information among married respondents (Afolabi et al. 2015) . Married women were about 6 times more likely to source information on contraceptive use from health facilities, whilst single women were about 4 times more likely to source, such information from schools and educational institutions; about thrice more likely to source it from other sources -such as traditional birth attendants; and about twice more likely to source it from friends and colleagues (Afolabi et al. 2015). Most singles feel insecure or shy visiting the hospital in order to access the family planning facility for information unlike married women (Afolabi et al. 2015).

According to Boniface et al, the place where respondents obtained their contraceptives influenced the type of contraceptives used; those who obtained them from hospitals were more than likely to favor the use of long -term contraceptives, and they are usually the married women. In contrast, single respondents most often (49.1%) relied on chemist shops (Oye-Adeniran et al. 2005). It is probable that married persons requiring contraception are more likely to require longer-lasting methods such as those that may be provided in hospitals, e.g., IUDs and injectables. Young unmarried persons, in contrast, are more likely to use oral contraceptives and condoms, which are obtainable over the counter and from the chemists. The source of contraceptive therefore influences the use of contraceptives (Oye-

Adeniran et al. 2005). According to Khurana and Bleakley in their study on young adults' sources of contraceptive information, doctors/nurses were the most frequently used contraceptive information source reported (Khurana & Bleakley 2015). Significant variations existed in source use based on demographic characteristics and sexual risk history; females were more likely to obtain contraceptive information from health care professionals, whereas males were more likely to report friends, partners, internet and television/radio as their frequently used source (Khurana & Bleakley 2015). Young adults with a sexual risk history were more likely to rely on doctors/nurses and less likely to report friends and internet as their frequently used source than those without a sexual risk history (Khurana & Bleakley 2015). Receiving contraceptive information from doctors/nurses was associated with greater accuracy in knowledge about contraceptive use and efficacy as compared to all other sources (Khurana & Bleakley 2015).

2.5 Socio-demographic and socio -economic factors

Population growth varies a lot from region to region and from community to community. Population is determined by birth rate, death rate and migration flows (Hijazi 2013). This entire factor is in turn depending on numerous socioeconomic factors. These factors are interacting in many different ways ;so is not easy to identify and quantify them (Hijazi 2013). So, it has become necessary to study the factors affecting contraceptive. Studies have been undertaken to identify various socio- economic and other factors which are responsible for contraceptive adoption (Hijazi 2013). Studies relating to socio-demographic and socio-economic factors related to contraceptive use should consider its impact on fertility. Therefore it has become necessary to review the existing literature on socio-economic and demographic factors affecting contraceptive use (Hijazi 2013).

A study to examine the socio-demographic determinants of modern contraceptive use among women in the Asuogyaman District of Ghana revealed that although 97% of survey respondents knew of at least one modern method of contraceptive, only 16% of them were using modern contraceptives (Teye 2013). Level of education, place of residence, and work status significantly influenced modern contraceptive use among women; fear of side effects, desire for more children, and partner's disapproval were the main barriers to modern contraceptive use in the study area (Teye 2013). The use of traditional methods of contraception was also very high because of the perception that they are safer. The study confirms that in addition to making family planning services available and accessible, health workers must address attitudinal factors such as fear of side effects and high fertility preferences (Teye 2013).

In Uganda, a study that used the 2006 and 2011 Demographic and Health Survey data to examine the socio-demographic factors that influence contraceptive use, that the likelihood of using contraception was associated with women's educational attainment (Kalule-sabiti et al. 2015). In each age group, over one-third of women with secondary or higher education, but far fewer women with no education, reported modern contraceptive use (Kalule-sabiti et al. 2015). This was also revealed in the GDHS that those who attained a higher education were using more of a method of contraceptive (GDHS 2014).

In a study conducted by Lakew et al, on geographical variation and factors influencing modern contraceptive use among married women in Ethiopia, significant socio-economic, urban –rural and regional variation were found in modern contraceptive use among women of reproductive age in Ethiopia; the authors therefore encouraged strengthening community conversation programs and female education should be given top priority (Lakew et al.

2013). Different studies have identified such demographic factors as age of women, number of living children, desired family size and experience of child death as major factors that influence contraceptive use (Palamuleni 2013). Contraceptive use is lowest among young women, reaches a peak among women in their thirties and declines among older women (Palamuleni 2013). This is indicative of a high desire for child bearing among young women, and a high growing interest of spacing births among women in their thirties (Palamuleni 2013).The proportion of women using contraceptives declines at older ages of reproduction, due to the fact that older women are not at a high risk of pregnancy (Palamuleni 2013). Studies have shown that use of contraception increases with parity of woman up to the third or fourth child and then decline thereafter, partly because many women have a desire to space births at early reproductive age and seek to stop after the desired family size has been achieved (Palamuleni 2013). Survival status of children is likely to affect the practice of contraception. Studies indicate that women in a polygamous marriage are less likely to use contraceptives than women who live in monogamous marriages (Palamuleni 2013).

According to Okech in his study on contraceptive use among women of reproductive age in Kenya ' s city slums, demographic and socio-economic factors affect the use of family planning services by the women in city slums (Okech et al. 2011). Use of family planning was found to be highest among women aged between 20 –39 years compared to those below 20 years and above 39 years; whereas 49% of the women who were using contraceptives were aged 20 -29 years, 41% were aged between 30 -39 years, whilst no woman aged 50 years and above was found to be using any form of family planning services (Okech et al. 2011).On the other hand, 4% and 6% of the women who were using

family planning services were less than 20 years and between 40-49 years of age, respectively. Majority of those using contraceptives had post primary education, while the least users of family planning had no formal education (Okech et al. 2011).In percentage terms, 49% of the users of family planning services had secondary education, 28% had university education, 15% had primary education with 6% reported no formal education (Okech et al. 2011).Out of the 51% of women using contraceptives, 52% were Protestants, 35% Muslims and only 13% were Catholics (Okech et al. 2011).

2.6 Socio-cultural factors of contraceptive use

Religious and cultural factors have the potential to influence the acceptance and use of contraception by couples from different religious backgrounds in very distinct ways; within religions, different sects may interpret religious teachings on this subject in varying ways and individual women and their partners may choose to ignore religious teachings (Nangendo 2012). Cultural factors are equally important in couples' decisions about family size and contraception; a review of religious literature on predictors of contraceptive use in Ghana showed that a contraceptive use differential by religious groups is accounted for by the differences in socioeconomic and demographic characteristics of these women (Omomia 2014).In a study among women utilizing health facilities in western Kenya, it was found that cultural beliefs that equate family planning methods with interference in fecundity and fertility may argue against the use of these methods in the long term (Nangendo 2012). Moreover, the desire to give birth and nurture children, fear of side effects, bride wealth presentations, and disapproval by couples and others may be stumbling blocks to contraceptive use in the study region (Nangendo 2012).

In a study on religious and cultural influences on contraception, it was revealed that religious and cultural factors have the potential to influence the acceptance and use of contraception by couples from different religious backgrounds in very distinct ways (Srikanthan & Reid 2008).The study confirmed that when new immigrants are faced with the challenges of acclimating to a new society and a new way of life, they may anchor strongly to traditional religious and cultural expectations regarding family, sexuality, and fertility (Srikanthan & Reid 2008).

While health care providers must be cautious not to attribute stereotypical religious, social, and cultural characteristics to women seeking advice about contraception, they do need to recognize that different value systems may influence contraception decision-making in couples of different faiths. This increased cultural awareness needs to be tempered by the understanding that each patient encounter is unique (Srikanthan & Reid 2008). The values that an individual woman holds may not be in keeping with the official teachings of her religion or the cultural norms reported by other members of the same culture (Srikanthan & Reid 2008).

A study conducted in Jordan showed that women use contraceptives to increase birth intervals and not to limit family size; unlike traditional and Catholic faiths, Protestant and other Christian churches do not directly or indirectly oppose contraceptive use (Underwood 2000). Therefore the higher contraceptive use among Protestant and Other Christian faiths may be influenced by their lack of opposition to contraception, abortion, and sterilization; these churches have also been seen to be more used to local customs and practices (Underwood 2000).

A study into how attitudes towards family planning and discussion between wives and husbands affect contraceptive use in Ghana revealed that 77% of cohabiting marital partners held similar attitudes toward family planning and 73% of concordant couples approved of contraceptive use (Salway 1994); however, only 61% of the wives correctly reported their husband's attitude. Although 76% of the couples agreed on whether they wanted more children, only 44% gave concordant responses on ideal family size. Among respondents who reported knowing a contraceptive method, 35% of wives and 39% of husbands said they had discussed family planning with their spouse during the previous year (Salway 1994). Urban residence, wife's attitude toward family planning and discussions of family planning between spouses had significant independent associations with current contraceptive use (Salway 1994). Husband–Wife communication about family planning and contraceptive use is an important factor in the use of contraceptives (Salway 1994).

A study conducted by Hijazi on factors affecting contraceptive use among women of reproductive age in Northern Jordan revealed that during the last two decades, a number of sociocultural norms, community traditions, and religious beliefs constrained women’s use of contraception (Hijazi 2013). Some researchers have found that the degree to which FP and contraceptive use have an impact on family size is often influenced by a number of factors, including the value of large families, son preference, social and familial pressures to have children, and religious opposition against the use of contraceptives (Hijazi 2013). As supported by various experts and literature sources, such factors appear to modify a woman’s ability and willingness to accept and utilize a variety of contraceptive methods; to help overcome barriers to contraceptive use and achieve a greater decline in fertility rates,

contraceptives interventions should target the individual's values and perceptions as well as cultural norms and religious attitudes (Hijazi 2013).

2.7 Service factors affecting contraceptive use

A study conducted in Nepal on contraceptive use and discontinuation patterns, revealed that misinformation about methods and services exist on a variety of levels; both acceptors and providers report misconceptions about methods in the community (USAID 2003). These misconceptions include fears that some methods may cause severe health problems such as cancer, and this may deter some couples from seeking family planning methods even if the methods are available and high quality services are provided (USAID 2003). Another misconception is service providers believe that women do not go for follow up visits because the facility is too far or that women lacked the time, but few acceptors themselves listed these reasons (USAID 2003).

In a study conducted on the prevalence and motivation for covert contraceptive use in Zambia, women's covert use of contraceptives accounted for about 6-20% of all current contraceptive use; difficult spousal communication about contraception was the strongest determinant of covert use; husbands' disapproval of contraception did not have direct influence on covert use (Biddlecom & Fapohunda 1998). The article concluded that covert contraceptive use is a sign that providers must continue to take into account women's rights to confidentiality in family planning services and programmes (Biddlecom & Fapohunda 1998)

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the research design, study setting, study population, sample size, sampling technique, data collection procedures, data analysis procedures and ethical consideration.

3.2 Research methods and design

Taking into consideration resources and finances management, 2 out of the 4communities making up the Worawora township were selected randomly: Gyamarakrom and Kotomase. In selecting the communities, paper was cut into pieces and with the names of each of the 4 communities written on a piece of paper. The pieces of paper were folded and thoroughly mixed in a bag. A neutral person not associated with the study picked 2 pieces of papers the from the bag without replacement, and communities selected were Gyamarakrom and Kotomase. A cross-sectional study using quantitative methods was employed to examine the factors affecting contraceptive use among women of reproductive age in Worawora.

3.3 Data collection techniques and tools

Data was collected by trained interviewers using a semi-structured questionnaire which was interviewer-administered to respondents and pre-tested prior to use. The questionnaire comprised of questions on methods of contraceptive use, socio-demographic characteristics, knowledge and awareness of contraceptive use, services factors and socio-economic factors which affect the use of contraceptives.

3.4 Study population

The study population comprised of women of reproductive age (15-49years) in Worawora township

3.5 Study variables

Independent variables: age, number of children, occupation, marital status, religion, church attended, number of persons per household, method of contraceptive used, socio-demographic, socio-economic, socio- cultural and service characteristics.

Dependent variable: use of contraceptives

3.6 Sample size calculation

From the 2010 National Population Census it was estimated that 2695 of the population in Worawora will be women of reproductive age between 15-49 years (Anon 2014). With this data, a sample size of 372 individuals was calculated for the study with a 95% confidence interval using and a margin of error of 5%. Making room for non-response rate of 5%, a total of 390 women were recruited for the study using RAOSOFT software.

3.7 Sampling

Among the selected communities, 195 women aged between 15-49 years had the equal chance of being selected as participants from each of the selected communities. In each community, the researcher stood in the middle of the community and spun a pen on the ground. The house to which the tip of the pen pointed to was the first house entered.

On entering each house, convenient sampling was used to select the respondents using the following inclusion criteria:

- living in study area for over 1year

- aged between 15 and 49 years
- working or studying in the study area for the past 1year
- capable of independent communication, and
- giving informed consent to participate in the study

In each household, any woman who met the inclusion criteria was selected.

3.8 Pretesting

Pretesting was done in Apesokubi township which has similar characteristics to the study communities.

3.9 Data handling

Data from the questionnaire were double-entered on a daily basis into a computer using stata software; verification and cleaning were done concurrently with data collection.

3.1 Data analysis

Socio-demographics and background data were summarized using frequency tables and graphs. Ninety-five percent confidence intervals were used to describe the variability of the data. Bivariate and multivariate analyses were conducted using Chi–square to test for association between the dependent and independent variables. Pearson's Chi–square test of independence was adopted to determine whether there is a significant association between the various variables and contraceptive use. Binary logistic regression was also used to determine the likelihood of the independents variables being associated with contraceptive use by the respondents. Data was analyzed using Stata software (version 14.1). Statistical significance was set at $p < 0.05$

3.11 Ethical consideration

Informed consent was obtained from each participant before enrollment into the research study. Respondents were only identified on the basis of unique identification numbers. The data obtained was kept strictly confidential and made available only to persons connected with the study. Ethical and administrative approval to conduct of the study was obtained from the Ethics Review Committee of the Ensign College of Public Health, Kpong and the Ghana Health Service District and the Director of Biakoye District.

3.12 Scope and limitations of the study

The study was restricted to the Worawora township and data was collected from the 2 communities. The study could have covered all the 4 communities; however, the researcher was confronted with time constraints.

CHAPTER FOUR

4.0 RESULTS

4.1 Introduction

This chapter presents the results of the study. First, the demographic characteristics of respondents are provided, and then the results of the Chi-square analysis are presented.

4.2 Demographic characteristics of respondents

Table 1 below show the demographic distribution of the 390 respondent who participated in the study. Majority (48%) of participants were within the ages of 15-24 years; half of the respondents (50%) had between 1-3 children and more than a third (38%) had no children. About (40%) of the respondents were students, (19%) were farmers and (18%) were traders. About (49%) were singles and less than (1%) were widowed. Most of the women (73%) belonged to the Christian religion and about 3% belonged to the traditional religions

Table 4 -1 Demographic and background distribution of women of reproductive age in Worawora.

Variable	Categories	N (%)
Age group	15-24	187 (48)
	25-34	120 (31)
	35-40	63 (16)
	41-49	20 (5)
Number of children	1-3	195 (50)
	More than 3	45 (12)
	None	150 (38)
Occupation	Student	158 (40.5)
	Civil servant	84 (21.5)
	Farmer	74(19)_
	Trading	69(17.7)
	Seamstress	5(1.3)
Marital status	Married	162 (41.5)
	Single	190 (48.7)
	Divorced	35 (9)

	Widow/widower	3 (0.8)
Religion	Christianity	285 (73.1)
	Islamic	94 (24.1)
	Traditional	11 (2.8)
Church attended	Orthodox	128 (32.8)
	Pentecostal	158 (40.5)
	Mosque	92 (23.6)
	No church	12 (3.1)
Number of persons per Household	1	44 (11.3)
	2-5	171 (43.8)
	6-8	119 (30.5)
	9 and above	56 (14.4)

4.3 Summary of major findings

The awareness level of contraceptive was high; most participants (97%) had heard of a method and (74%) used a method of contraceptives. Knowledge on contraceptives was high about: (75%) reported it was a method that was used to prevent pregnancy and (6%) indicated it was a method used to prevent STDs. Majority of the respondents representing (31%) reported severe bleeding as one of the problems encountered whilst using contraceptives and less than 2% reported had weight gain.

Source of information on contraceptive use.

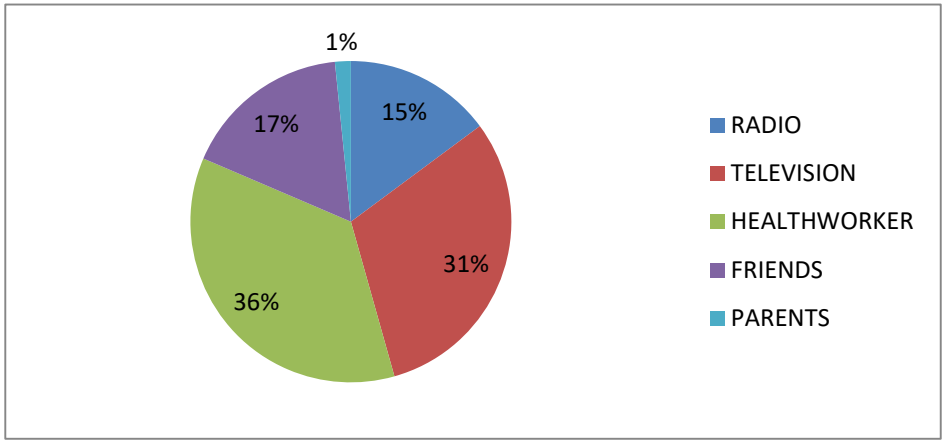

Figure 4.1 Proportion of women in Worawora Township who heard about contraceptives from various sources

Majority of the respondents 36% heard about contraceptives from health workers whilst

1% heard about it from their parents.

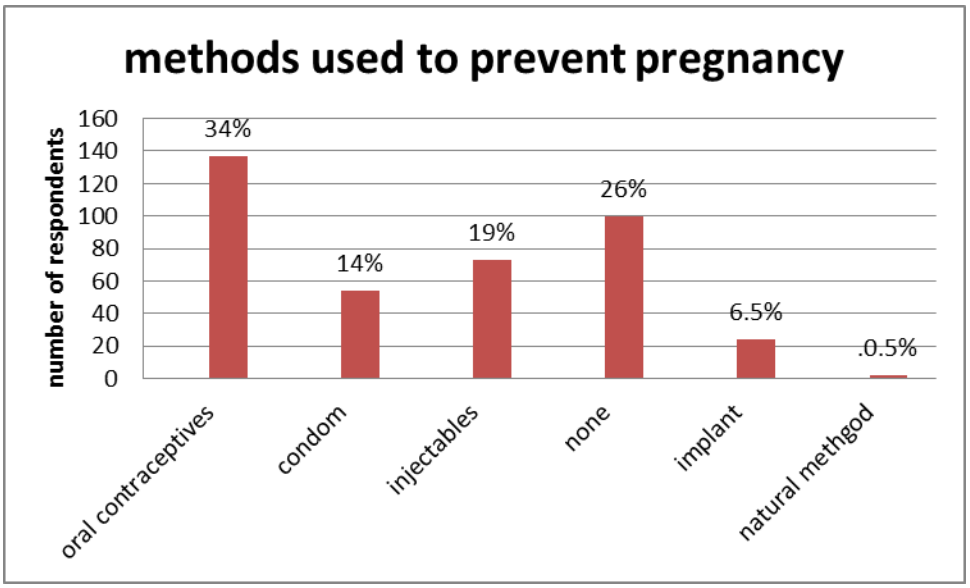

Figure 4.2 Proportion of women in Worawora township who used a method of contraceptive

Majority of the respondents used oral contraceptives

Access to Methods

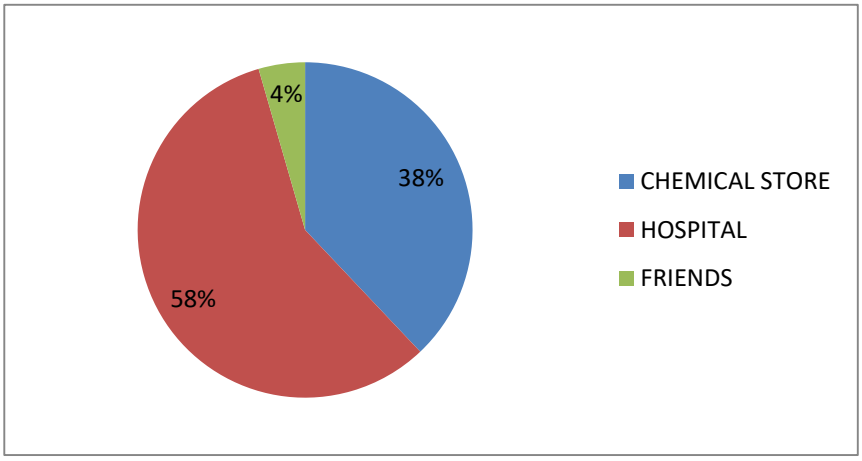

Figure 4.3 Proportion of women in Worawora township who had access to contraceptive methods

Majority of the respondents 58% accessed contraceptive method from the hospital and only 13% theirs from friends.

Table 4-2 Table of Variables

VARIABLES	CATEGORIES	N (%)
Known contraceptive	Condoms	86 (22.8)
	Injectable	94 (24.9)
	Pills	153 (40.6)
	Implants	34 (9.0)
	All	9 (2.4)
	Natural method	1 (0.3)
Ethnic group	Akan	160 (41.0)
	Ewe	127 (32.7)
	Guan	42 (10.7)
	Hausa	57 (14.6)
	Ga	4 (1.0)
Educational level of partner	Primary	87 (22.3)
	Secondary	192 (49.2)
	Tertiary	95 (24.4)
	Illiterate	16 (4.1)
occupation of your boyfriend /husband	Non-Government worker	224 (57.4)
	Government employment	93 (23.9)
	Student	73 (18.7)
Religion encourages the use of contraceptives	Yes	211 (54.1)
	No	179 (45.9)
Do you need approval from your husband before using contraceptives	Yes	185 (48)
	No	205 (52)
Need approval from your in-laws before visiting the hospital	Yes	60 (15.4)
	No	330 (84.6)
Discuss with your partner before using contraceptives	Yes	174 (44.6)
	No	216 (55.4)
prefer to have less than 4 children	Yes	319 (81.8)
	No	71 (18.2)
Partner support you in	Yes	252 (64.6)

having less than 4 children?	No	138 (35.4)
Belief say about the use of contraceptives?	Accept the use	217 (55.6)
	Does not accept the use	173 (44.4)
Time taken to the hospital	Less than 30 minutes	226 (58)
	30 mins-1hr	140 (36)
	More than 1hr	24 (6)
Methods use readily available	Yes	247 (85.2)
	No	43 (14.8)
Pay for contraceptives	Yes	247 (85.2)
	No	43 (14.8)
Contraceptive expensive	Cheap	133 (45.9)
	Moderate	121 (41.7)
	Expensive	31 (10.7)
	very expensive	5 (1.7)
Waiting time at the hospital	Less than 30mnts	166 (57.2)
	30mnts-1hr	100 (34.5)
	More than 1hr	24 (8.3)
Time facility open	7-8am	218 (75.2)
	8-9am	63 (21.7)
	9-10am	9 (3.1)
Times favorable to you	Yes	249 (85.9)
	No	41 (14.1)
Relationship of the staff to you	Nice	149 (51.4)
	Very nice	87 (30.0)
	Rude	27 (9.3)
	Very rude	27 (9.3)

From the Table 4-2 above, majority of the respondents belong to the Akan ethnic group. The main educational level of partners was secondary school level (49.2%).The partners of the respondents were mostly non-government workers (57.4%).About (54%) of the respondents reported that their religion accepted the use of contraceptives, whilst (47%) needed approval from their partners to use contraceptives. Majority of the respondents did not need approval from in-laws to use contraceptives (85%) and majority of the respondents did not inform their partners before using a method of contraceptive (55.38%).

Majority of the respondents preferred to have less than 4 children (82%) and about 65% reported that their partner/spouse were in favor of it. Most respondents' religious beliefs accept the use of contraceptive (56%). Majority of the respondents (58%) used less than 30 minutes to get to the hospital and (85%) had the method they wanted ready available. About (85%) of the respondents paid for their contraceptives; among those who paid (46%) reported that it was cheap.

Results of the Chi-squared tests

The individual research hypotheses that were documented in Chapter one of this study were tested. The results are presented below.

Table 4.3 Contraceptive use among women is low in Worawora

Use	Frequency (%)
NO	100 (25.6)
YES	290 (74.4)

From the table it was revealed that the use of contraceptive was high, with 74% of the respondents using it.

Table 4.4 Association of sociocultural factors and the use of contraceptive among women in Worawora township

Discuss with partner	Use contraceptives		Total
	NO	YES	
YES	4	170	174
	4.	58.6	44.6
NO	96	120	216
	96.	41.4	55.4
TOTAL	100	290	390

P<0.001

There was significant association between the use of contraceptive and discussing with partner before using it. (P< 0.001)

Table 4.5 Association of partner support having less than four children with use of contraceptives among women of reproductive age in Worawora

PARTNER SUPPORT	USE		TOTAL
	NO	YES	
YES	73	179	252
	73.0	61.7	64.6
NO	27	111	138
	27.0	38.3	35.4
TOTAL	100	290	390
	100.00	100.00	100.00

P<0.042

There was association between the use of contraceptive and the partner supporting having less than four children, (P<0.04)

It was revealed that none of the service variables has an association with the use of contraceptives.

Table 4.6 Results of bivariate analysis on the use of contraceptive among women in Worawora township

Variables	**Categories**	**Use**		**P value**
		Yes n (%)	**No n (%)**	
Age group	15-24	136 (72.7)	51 (27.3)	0.001
	25-34	93 (77.5)	27 (22.5)	
	35-40	54 (85.7)	9 (14.3)	
	41-49	7 (35)	13 (65.)	
Number of children	More than 3	33 (73)	12 (27)	0.007
	1-3	158 (81)	37 (19)	
	None	99 (66)	51 (34)	
Number of person per household	1	37 (84.1)	7 (15.9)	0.002
	2-5	134 (78.4)	37 (21.6)	
	6-8	89 (74.8)	30 (25.2)	
	Above 9	30 (53.6)	26 (46.4)	
Occupation	Student	125 (79.1)	33 (20.9)	0.014
	Civil servant	67 (79.8)	17 (20.4)	
	Trading	45(65.2)	24(34.8)	
	Farmer	49(66.2)	25(33.8)	
	Seamstress	4(80)	1(20)	
Marital status	Married	126 (77.8)	36 (22.2)	0.05

	Single	131 (69)	59 (32)	
	Divorced	31 (88.6)	4(11.4)	
	Widow/widower	2 (66.7)	1 (33.3)	
Religion	Christianity	206 (72.3)	79 (27.7)	0.327
	Islamic	75 (79.8)	19 (20.2)	
	Traditional	9 (81.8)	2(18.2)	
Partner support<4children	Yes	179 (71)	73 (29)	0.042
	No	111 (80.4)	27 (19.6)	
Education level of partner	Primary	58 (66.7)	29 (33.3)	0.003
	Secondary	143 (74.5)	49 (25.5)	
	Tertiary	81 (85.3)	14 (14.7)	
	None	8 (50)	8 (50)	
Occupation of partner	Student	45 (61.6)	28 (38.4)	0.003
	Government worker	79 (85)	14 (15)	
	Non-government worker	166 (74.1)	58 (25.9)	
Discuss with partner	Yes	170 (97.7)	4 (2.3)	< 0.001
	No	120 (55.6)	96 (44.4)	

There was a significant association between age group and contraceptive use, with the 15-24 year age group having the highest use (p=0.001). There was a significant association between the number of children and the use of contraceptives with respondents who had between 1-3 children having the highest use (p=0.002).Number of persons per household was significantly associated with the use of contraceptive, with household having between 2-5 people with the highest use (p=0.002).Marital status of the respondents had a near significant association with the use of contraceptive (p=0.05).Religion had no significant association with the use of contraceptives.

Table 4.7 Results of multivariate analysis between background characteristics and the use of contraceptive among women in Worawora township

Use	P- value	Odds ratio	95% confidence interval
Age group			
15-24	-	1	
25-34	0.7	0.9	(0.5 – 1.6)
35-40	0.6	1.3	(0.5 – 3.1)
41-49	0	0.1	(0– 0.4)
Number of children			
none	-	1	-
1-3 children	0.1	2.2	(1.2 – 3.8)
More than 3	0.3	1.6	(0.6 -4.3)
Occupation			
Farmer	-	1	-
Civil servant	0.1	1.9	(0.8 – 4.4)
Student	0.3	1.5	(0.7 – 3.2)
Trading	0.9	1.0	(0.5 – 2.2)
Seamstress	0.5	2.4	(0.2 – 23)
Partner support <4 children			
Yes	-	1	-
	0.5	1.7	(0.9– 2.9)

Women in the age group 41-49 years are 0.1 times less likely to use contraceptive as compared to their counterparts in age group 15-24 years. As the respondents grow older the use of contraceptive decreases. As the number of children increased there was higher odd of using contraceptives among those who had between 1-3 children.

Table 4.8 Results of multivariate analysis between respondent's background characteristics and the use of contraceptive among women in Worawora township

Use	P -value	Odds ratio	95%(CI)
Marital status			
Married	-	1	-
Single	0.3	0.7	(0.3– 1.3)
Divorced	0.1	4.4	(1.3 – 16.1)
Widower	0.8	0.7	(0 – 11.2)
Religion			
Traditional	-	1	-
Christianity	.0.5	0.5	.(0.1 – 3.2)
Islamic	0.9	1.2	(0.2 – 7.6)
Occupation of husband/boyfriend			
Student	-	1	-
Government worker	0.9	1.1	(0.4– 3.0)
Non-government worker	0.8	1.1	(0.5– 2.)
Educational level of partner			
Primary	-	1	-
Secondary	<0.001	2.1	(1.0 – 4.3)
Tertiary	0.2	1.9	(0.7– 5.1)
None	0.2	0.4	(0.1 – 1.5)
Discuss with partner			
no	-	1	-
	<0.1	0.1	(0 – 0.1)

Divorced women were more than 4 times more likely to use contraceptives compared to married women. (p=0.1). Occupation of husband was not associated with contraceptive use. Partners who have secondary education were more than 2 times more likely to use contraceptives as compared to those with primary education (p<0.001).. Respondents who discussed with their partners before using contraceptive were less than 1 times likely to use contraceptives (p<0.1).

5.0 DISCUSSION

Knowledge and awareness of contraceptive use was high among women in Worawora township. Majority use oral contraceptive and accessed it from the hospital. Majority had their information on contraceptive used from health workers and most of the respondents were Akans.

(Islam & Thorvaldsen 2012) found low awareness of contraceptive use among the Mru in Bangladesh. In contrast, women in Worawora were aware and had knowledge about contraceptives, this could be due to the fact that majority of their source of information were from health workers. The Public Health Unit of Worawora hospital where most of the respondents accessed contraceptives gives health education and this could have increased their understanding about the importance of contraceptives. Majority of the respondents were students and may have be influenced by peer pressure from friends to use them. (Hagan & Buxton 2012) found that students with knowledge of contraceptives were users, and most obtained their knowledge about contraceptives from peers (friends).

Fallis (2013a) indicated that women had high level of knowledge about contraceptives but this did not translate into the use, but this is not the case in Worawora township as majority were using a method. This could be due to the fact that because women had knowledge about contraceptive they used them. Tekelab et al. (2015) found injectables were the most common form of contraceptives used in Ethiopia. (Oord et al. 2012) also found injectables as the most preferred choice of contraceptive use in South Africa; however, their study revealed that majority of the respondents were using oral contraceptive pills (35%); this could be due to the fact that since oral medication is not an invasive procedure they were

more comfortable taking them at home. Oral contraceptive could also be gotten at the chemical shops and respondents could get them as and when they need. Adolescents may shy away from the hospital for injectables or IUDs for the fact that they may be labeled as being promiscuous.

(Afolabi et al. 2015) found schools/educational institutions as the major sources of contraceptives information, in contrast to our study where majority of respondents had their information from health workers.

Respondents who had 1-3 children had higher odds of using contraceptives compared to women who had none. This could be due to the fact that the women with children had the required number that they wanted and so did not want to have more children. Divorced women were more likely to use contraceptives, this could be because divorced women protected themselves more from unwanted pregnancies, in contrast to the GDHS report of more married women in Ghana using contraceptives (GDHS 2014).

Religious and cultural factors have influence on use of contraceptive (Srikanthan & Reid 2008). However, religious affiliation of women in this study was not associated with the use of contraceptives. This may be because their religions did not encourage the use of contraceptives.

The occupation of partners did not have an association with the use of contraceptives in our study. Okech et al. (2011) found various socio-economic and demographic factors to be associated with use of contraceptives, including level of education of the women and their partners. In our study, respondents whose partners had secondary education were more likely to use contraceptives.

Discussing the use of contraceptives with their partners before using it was statistically significantly associated with contraceptive use; women who discussed the use of contraceptives with their partners were less likely to use contraceptives (p=0.001). This could be because their partners would like to give birth and produce children, which respondents may not be in favour of. Even though their partners support their idea of having less children, respondents may not be ready to give birth at the time that their partners wanted children so they do not inform them before using contraception. According to Sable et al. (1997), partners, peers and family strongly influence contraceptive use.

Number of people per house hold was significantly associated with the use of contraceptive; this could be due to the fact that people within a household could share ideas together and anybody who is using a method could encouraged others to use method too.

Respondents who were seamstresses were more likely to have use contraceptives; this could be due to the fact that their customers could have discussed various issues with them not only with the dresses they came to sow

CHAPTER 6

6.0 CONCLUSION AND RECOMMENDATION

6.1 Conclusion

Respondents were predominantly Christians, students and between the ages of 15-24 years , and had between 1-3 children. Occupation, discussing with partner, age group, number of children, number of persons per household, educational level of partner and marital status were significantly associated with the use of contraceptives.

6.2 Recommendations

1. Although knowledge and awareness about contraceptive use was high, more awareness should be created on the side effects of contraceptive use to make it more convenient for use.

2.. For general acceptance of contraceptive use, men should be included in the dialogue as most of the decisions regarding family planning and contraceptive use necessitate prior approval from husbands.

3. Religious leaders should be encouraged to preach about contraceptive use, since most of their followers practice what they say.

4. Further research should explore why more divorced women were using contraceptives.

REFERENCE

.Apanga, P.A. & Adam, M.A., 2015. Factors influencing the uptake of family planning services in the Talensi district, Ghana. *Pan African Medical Journal*, 20, pp.1–9.

Biakoye District Directorate, DHMT profile, 2014

Bamgboye M Afolabi, Emmanuel NU Ezedinachi, Iwara Arikpo, Abiodun Ogunwale, Damilola Fatimah Ganiyu,Rashidat A Abu and Adewunmi A Ajibade, 2015. Knowledge , non-use , use and source of information on contraceptive methods among women in various stages of reproductive age in rural Lagos , Southwest Nigeria. , pp.65–75.

Biddlecom, a E. & Fapohunda, B.M., 1998. Covert contraceptive use: prevalence, motivations, and consequences. *Studies in family planning*, 29(4), pp.360–72. Available at: http://www.ncbi.nlm.nih.gov/pubmed/9919630.

Boniface A.Oye-Adeniran, Isaac F. Adesina Oladokun, Abidoye Gbadegesin, Kofo A. Odeyemi and Ekanem E. Ekanem, 2005. Sources of contraceptive commodities for users in Nigeria. *PLoS Medicine*, 2(11), pp.1145–1151.

Childinfo, U.S. of the W.C. and, 2014. Contraceptive prevalence (% of women ages 15-49). Available at: http://data.worldbank.org/summary-terms-of-use.

Daniels, K., Daugherty, J. & Jones, J., 2014. Current Contraceptive Status Among Women Aged 15 – 44 : United States, 2011-2013. *NCHS data brief*, (173), pp.2011–2013. Available at: http://www.cdc.gov/nchs/data/databriefs/db173.pdf.

Eliason, S.J.K.A.-W.C.E.J.N.J.N.M.A., 2014. Reproductive Health Full text Determinants

of modern family planning use among women of reproductive age in the Nkwanta district of Ghana a case¿control study. , pp.1–10

Achana, F.S. et al., 2015. Spatial and socio-demographic determinants of contraceptive use in the Upper East region of Ghana. *Reproductive health*, 12(1), p.29. Available at: http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=4389318&tool=pmcentrez&rendertype=abstract.

Afolabi, B.M. et al., 2015. Knowledge , non-use , use and source of information on contraceptive methods among women in various stages of reproductive age in rural Lagos , Southwest Nigeria. , pp.65–75.

Andi, J.R. et al., 2014. Modern contraceptive use among women in Uganda: An analysis of trend and patterns (1995-2011). *Etude de la Population Africaine*, 28(2), pp.1009–1021.

Anon, 2014. Ghana stastitical service.

Apanga, P.A. & Adam, M.A., 2015. Factors influencing the uptake of family planning services in the Talensi district, Ghana. *Pan African Medical Journal*, 20, pp.1–9.

Biakoye District Directorate, 2014. *DHMT Profile*,

Biddlecom, a E. & Fapohunda, B.M., 1998. Covert contraceptive use: prevalence, motivations, and consequences. *Studies in family planning*, 29(4), pp.360–72. Available at: http://www.ncbi.nlm.nih.gov/pubmed/9919630.

Childinfo, U.S. of the W.C. and, 2014. Contraceptive prevalence (% of women ages 15-49). Available at: http://data.worldbank.org/summary-terms-of-use.

Daniels, K., Daugherty, J. & Jones, J., 2014. Current Contraceptive Status Among Women Aged 15 – 44 : United States, 2011-2013. *NCHS data brief*, (173), pp.2011–2013. Available at: http://www.cdc.gov/nchs/data/databriefs/db173.pdf.

Eliason, S.J.K.A.-W.C.E.J.N.J.N.M.A., 2014. Reproductive Health Full text Determinants of modern family planning use among women of reproductive age in the Nkwanta district of Ghana a case¿control study. , pp.1–10.

Fallis, A.., 2013a. factors influencing the utilisation of family planning service. *Journal of Chemical Information and Modeling*, 53(9), pp.1689–1699.

Fallis, A.., 2013b. No Title No Title. *Journal of Chemical Information and Modeling*, 53(9), pp.1689–1699.

GDHS, 2014. Ghana Demographic and Health Survey.

GDHS, 2015. Key Findings From the 2014 Ghana Demographic and Health Survey National Health Summit. , pp.1–30.

Gillian B. Schivone1, P.D.B., 2016. Contraception in the Developing World: Special ConsiderationsSeminars in Reproductive Medicine. Available at: www.thieme.connect.de/media/srm/201603/lookinside.

Hagan, J.E. & Buxton, C., 2012. Contraceptive Knowledge, Perceptions and Use among Adolescents in Selected Senior High Schools in the Central Region of Ghana. *Journal of Sociological Research*, 3(2), pp.170–180. Available at: http://www.macrothink.org/journal/index.php/jsr/article/view/2311.

Helena, A. & Otupiri, E., 2016. Preventing Repeat Abortions among Women in Kumasi ,. ,

4(1), pp.8–15.

Hijazi, H.H., 2013. Factors affecting contraceptive use among women of reproductive age in Northern Jordan: A framework for health policy action. *Dissertation Abstracts International: Section B: The Sciences and Engineering*, 74(1-B(E)), p.No–Specified. Available at: http://gateway.proquest.com/openurl?url_ver=Z39.88-2004&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&res_dat=xri:pqm&rft_dat=xri:pqdiss:3528641\nhttp://ovidsp.ovid.com/ovidweb.cgi?T=JS&PAGE=reference&D=psyc10&NEWS=N&AN=2013-99141-037.

Islam, R. & Thorvaldsen, 2012. Family planning knowledge and current use of contraception among the Mru indigenous women in Bangladesh: a multivariate analysis. *Open Access Journal of Contraception*, p.9. Available at: http://www.dovepress.com/family-planning-knowledge-and-current-use-of-contraception-among-the-m-peer-reviewed-article-OAJC-recommendation1.

Kalule-sabiti, I., Amoateng, A.Y. & Ngake, M., 2015. The Effect of Socio-demographic Factors on the Utilization of Maternal Health Care Services in Uganda. , 28(1).

Khurana, A. & Bleakley, A., 2015. Young adults' sources of contraceptive information: Variations based on demographic characteristics and sexual risk behaviors. *Contraception*, 91(2), pp.157–163. Available at: http://dx.doi.org/10.1016/j.contraception.2014.09.012.

Klutsey, E.E. & Ankomah, A., 2014. Factors associated with induced abortion at selected hospitals in the Volta Region, Ghana. *International journal of women's health*, 6, pp.809–16. Available at:

http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=4149459&tool=pmcentrez&rendertype=abstract.

Lakew, Y. et al., 2013. Geographical variation and factors influencing modern contraceptive use among married women in Ethiopia : evidence from a national population based survey. , pp.1–10.

Nangendo, S., 2012. Knowledge and Use of Family Planning Methods and Services in West Yimbo Division, Bondo District, Western Kenya. *African Study Monographs*, 33(December), pp.233–251. Available at: http://repository.kulib.kyoto-u.ac.jp/dspace/handle/2433/169672.

Nations, U., 2015. *Trends in Contraceptive Use Worldwide*,

Netshikweta, M., 2007. Knowledge , Perceptions and Attitudes Regarding Contraception Among Secondary. , (November), p.271.

Okech, T.C., Wawire, N.W. & Mburu, T.K., 2011. Contraceptive Use among Women of Reproductive Age in Kenya ' s City Slums. , 2(1), pp.22–43.

Omomia, A.O., 2014. Copyright © 2014 by KAD International All rights reserved. Published in the Ghana. , (1), pp.15–19.

Oord, J. Van Den et al., 2012. NIH Public Access. , 118(4), pp.895–904.

Orbeta, A.C., 2005. ADB Institute Discussion Paper No . 29 Poverty , Vulnerability and Family Size : Evidence from the Philippines. , (29).

Oye-Adeniran, B.A. et al., 2005. Sources of contraceptive commodities for users in

Nigeria. *PLoS Medicine*, 2(11), pp.1145–1151.

Palamuleni, M.E., 2013. Socio-Economic and Demographic Factors Affecting Contraceptive use in Malawi. , 17(September), pp.91–104.

Sable, B.M.R., Libbus, M.K. & Chiu, J., 1997. Pregnancy Tests : Missouri , 1997.

Salway, S., 1994. How Attitudes Toward Family Planning and Discussion Between Wives and Husbands Affect Contraceptive Use in Ghana. *International Family Planning Perspectives*, 20, pp.44–74. Available at: http://www.jstor.org/stable/2133433.

Srikanthan, A. & Reid, R.L., 2008. Religious and cultural influences on contraception. *Journal of obstetrics and gynaecology*, 30(2), pp.129–137.

Tekelab, T., Melka, A.S. & Wirtu, D., 2015. Predictors of modern contraceptive methods use among married women of reproductive age groups in Western Ethiopia: a community based cross-sectional study. *BMC women's health*, 15(1), p.52. Available at: http://www.biomedcentral.com/1472-6874/15/52.

Teye, J.K., 2013. Modern contraceptive use among women in the Asuogyaman district of Ghana: is reliability more important than health concerns? *African journal of reproductive health*, 17(2), pp.58–71. Available at: http://www.ncbi.nlm.nih.gov/pubmed/24069752.

Underwood, B.C., 2000. Islamic Precepts and Family Planning : The Perceptions.

USAID, 2003. Contraceptive Use and Discontinuation Patterns in Nepal : , p.19. Available at: http://www.engenderhealth.org/files/pubs/family-planning/nepal_report_on_contraceptive_use.pdf.

APPENDICES

APPENDIX A; PARTICIPANT INFORMATION AND DECLARATION

Part 1. Participant Information

Introduction

I am from the Ensign College of Public Health and together with our sister institutions within the Ghana Health Service I am conducting a study that involves research to assess the factors affecting the contraceptive used among women in Worawora township. This participant information leaflet explains the research study you are being asked to join. Please take all the time you need to read it carefully. You may ask the research team questions about anything you do not understand at any time. You are a volunteer. You can choose not to take part and if you join, you may quit at any time. There will be no penalty if you decide to quit the study.

Why you are being asked to participate

You are being asked to take part in this study because you live in Worawora a town in Ghana. Specifically, we are interested in talking to women between the ages of 15 to 49 years old.

Procedures

If you agree to be part of the study, a trained project staff will ask you a series of survey questions alone for approximately 60-90 minutes. Your responses will be recorded on

paper and later entered into a computer database by study staff. The questions will only begin after you have agreed to be in the study and have signed the consent form. As a participant, if you agree to participate in this study, data from your responses may be used as part of assessment of identifying factors affecting the prevalence of contraceptive used among women in Worawora

Risk and Benefits

We anticipate minimal or no risk to you. There is no direct benefit to you for being in the study; however, study outcomes may lead to better understanding of local care-seeking barriers and gaps in accessing emergency care and how to effectively use pre-hospital interventions.

Confidentiality

All data will be de-identified and will be kept private. Your identifiable data such as name or date of birth will not be used in documents, reports, or publications related to this research. All survey forms and consent forms shall be kept in locked file cabinets in the office a senior member of the research team in Ghana. When typing your survey responses into the computer, all data will be entered without any information that will make it possible for your identity to be known. The information you provide will be kept strictly confidential and will be available only to persons related to the study (investigator, study staff and other professionals who may be evaluating the study). Institutional Review Board, and the study's sponsor,

We will not record your name on any of the study documents. The information you provide in this survey will be known only by you and the research team. Your responses will not be shown to other participants or community members. The original paper survey forms will be destroyed once data entry is complete.

Voluntariness and Withdrawal

Your participation in the study is completely voluntary and you reserve the right not to participate, even after you have taken part, to withdraw. This is your right and the decision you take will not be disclosed to anyone. It will not affect the care that will be offered to you at the health facility now or in future. If you join the study, you can change your mind later. You can choose not to take part and you can quit at any time. There will be no negative consequences if you choose not to participate in the study. Please note however, that some of the information that may have been obtained from you without identifiers, before you chose to withdraw, may be used in analysis reports and publications.

Cost or Compensation

your participation in this study will not lead to you incurring any monetary cost during or after the study.

Who to contact

This study has been approved by the Institutional Ethics Committee of Ensign College of public health. If you have any concern about the conduct of this study, your welfare or your rights as a research participant or if you wish to ask questions, or need further explanations later, you may contact Patrick Lotsu (0244 187304) of the Ensign College of Public Health.

Do you have any questions?

Part 2, Consent Declaration

"I have read the information given above, or the information above has been read to me. I have been given a chance to ask questions concerning this study; questions have been answered to my satisfaction. I now voluntarily agree to participate in this study knowing that I have the right to withdraw at any time without affecting future health care services"

Signature of **Participant** _____

Date / /20_ _

Name of **witness**_____

Signature of **witness** _____

Date / /20_ _

Name of **investigator**_____

Signature of **investigator** _____

Date / /20_ _

Left thumbprint of participant

APPENDIX B. QUESTIONNAIRE ON FACTORS AFFECTING CONTRACEPTIVE USE AMONG WOMEN IN WORAWORA AGE 15-49 YEARS

This study seeks to find out the factors affecting contraceptive use. This study is purely an academic exercise and respondents are assured of complete anonymity as all information given will be treated with the utmost level of confidentiality.

Background Information of Respondents

1. Age ……..

(1).15-24 (2). 25-34 (3). 35-40 (4) .41-49

2. Number of children

(1) .1 (2) .2 (3) .3 (4) .more than 3 (5) None

3. Occupation

(1). Student (2). Civil servant (3) Non civil servant

4. Marital status

(1). Married (2). Single (3). Separated (4). Divorced (5) widower/widow

5. Religion

(1). Christian (2). Moslem (3). Traditionalist(4).

Others.(Specify)……

6. Which church do you attend (1) Orthodox (2) Pentecostal (3) Mosque (4) No church

7. Number of persons per household(1).1 (2) 2-5 (3) 6-8 (4) 9 and above

The Knowledge and Awareness of Contraceptive Use among Women

8. Have you heard of contraceptives?

(1). Yes (2) No.

9. Where did you hear it from?

(1). Radio(2) television(3) Health worker (4) .Friends (5). Parents

(Specify)……

10. What is a contraceptive?

(1). they are methods use to prevent pregnancies

(2) They are methods used when you want to have fewer children

(3). they are methods use to prevent STDs

(4). other specify…….

11. Which contraceptives do you know?

(1). Condoms (2). Injectable (3). Pills (4). Implants (5). All (6) Natural method

12. Where did you learn about the methods?

(1). Radio (2). Health worker (3). Television (4). Friend

The Method of Contraceptive Use

(13) Do you use contraceptive (1)yes (2)no

14. Which method of contraceptive do you use?

(1). Condoms (2). Oral contraceptive pill (3). Injectable (4). None (5). Implant (6) Natural method.

If none, answer the next question 15

15. What prevent you from using a contraceptive method?

(1). It is too expensive (2). Because of adverse effects (3). My husband does not agree

(4). No boyfriend/husband yet (5) want more children

16. Where do you get access to those methods that you use?

(1). chemical store (2). Hospital (3). Friends (4). Other specify……

17. What are some of the problems you encountered in the use of the family planning?

(1). Amenorrhea (2).Headache (3) .Severe bleeding (4). None (5) Irritation (6) palpitation (7) weight loss

Which Socio-Demographic and Socio Economic Factors Affect Contraceptive Use among Women

18. Which ethnic group do you belong to?

(1). Akan (2). Ewe (3). Guan (4).Hausa (5)Ga

19. Educational level of partner

(1). primary (2). Secondary (3). Tertiary (4).illiterate

20. What is the occupation of your husband?

(1). student (2). Government worker (3). Non-Government worker

Which Socio Cultural Factors Affect Contraceptive Use

21. Does your religion encourage the use of contraceptives?

(1). yes (2). no

22. Do you need approval from your husband to use contraceptives?

(1). yes (2). no

23. Do you need approval from your in-laws before visiting the hospital?

(1). yes (2). no

24. Did you discuss with your partner before using contraceptives

(1). yes (2). no

25. Did your partner approve of the use of contraceptives?

(1). yes (2). no

26. Do you prefer to have less than 4 children?

(1). yes (2). no

27. Does your partner support you in having less than 4 children?

(1). yes (2). no

28. What does your belief say about the use of contraceptives?

……..

……

…….

Which Service Factors Affect the Use of Contraceptives

(29). How long does it take you to get to the hospital?

(1). less than 30 minutes (2). 30 minutes – 1 hr. (3). more than 1 hr.

31. Are the methods that you use readily available

(1) a. yes (2).No

31. Do you pay for contraceptives?

(1). yes (2). no

If yes

32. How expensive are they

(1). cheap (2). Moderate (3). Expensive (4). Very expensive

33. How long do you wait to be seen at the facility?

(1). less than 30 minutes (2). 30mnts -1 hr. (3). more than 1 hr.

34. What time does the facility open? (1) 7-8am (2) 8-9am (3) 9-10am

35. Are the times favorable to you

(1). yes (2).no

What is then relationship of the staff to you

(1)Nice (2) very nice (3) rude (4) very rude.