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EFFECTS OF SPOUSAL DECISION MAKING ON THE TYPE OF CONTRACEPTIVE METHOD USED IN GHANA

BY

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ACCEPTANCE

Accepted by the College of Humanities, University of Ghana, Legon in partial fulfillment of the requirements for the degree of MA (Population Studies).

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DATE

DECLARATION

I, JOSEPH OWUSU OPOKU, declare that unless otherwise indicated in the text or references, this is the result of original research undertaken under supervision at the Regional Institute for Population Studies at the University of Ghana, Legon, between August 2016 and July 2017 and that neither a part nor the whole of it has been presented elsewhere for the award of another degree.

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Date

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DEDICATION

I dedicate this work to my mother Ruth Opoku and my late father, Mr. R.O. Opoku.

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ABSTRACT

The literature suggests an important linkage between inter-spousal decision making and contraceptive use. Decision making in a spousal relationship helps to support spousal growth as compromises can be reached on sensitive topics, especially those regarding fertility preference, the type of contraceptive method to adopt, and other reproductive health issues that affect the woman's overall health and well-being. However, the effect of decision making on contraceptive method choice has received little attention. Therefore, the main objective of the study was to examine the effects of spousal decision making in Ghana and its association with the type of contraceptive method used among women in Ghana.

The dataset used for the study was the 2014 Ghana Demographic and Health Survey (GDHS) women's file and the weighted sample consisted of 1,408 married or cohabiting women who were currently using a method of contraception. Spousal decision making and the type of contraceptive method used was investigated by using cross tabulations and binary logistic regression techniques to assess their associations. At the multivariate level, the relationship between decision making and the type of contraceptive method used was analyzed while controlling for socio-economic and demographic characteristics using binary logistic regression. Decision making was found to be a significant predictor of the type of contraceptive method used as those making joint decisions were more likely to use modern methods. A woman's age, region of residence, educational attainment and number of living children showed significant associations with the type of contraceptive method used.

Findings from the study inform recommendations to improve joint decision making which can result in use of modern methods of contraception. There is also need for further qualitative research to explore the details of spousal decision making and how it influences the type of contraceptive method used.

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

A 2015 trend report by the United Nations (UN) indicates that globally 64 percent of married or in-union women of reproductive age used a method of contraception (UN, 2015). The majority of women in almost all regions of the world use some form of contraception to help control births and prevent unintended pregnancies. However, contraceptive use in least developed countries is still low being 40 percent, and is particularly low in Africa with 33 percent (Ahmed et al., 2012; UN, 2015).

Contraceptive methods can be split into two groups, modern and non-modern (usually referred to as traditional). The most recent literature on the classification of contraceptive methods explains that modern methods should "have a sound basis in reproductive biology, a precise protocol for correct use" and there should be data to indicate that the efficacy of the method has been tested under "various conditions" (Festin et al., 2016; p.292). Traditional or non-modern methods, on the other hand, are all other methods that do not fit into the modern method criteria.

Modern methods include an array of products and procedures, and thus, the majority (57%) of married and in-union women worldwide used modern contraception in 2015, this comprised 90 percent of contraceptive users (UN, 2015). Nevertheless, modern contraceptive use in least developed countries, including Ghana, is low.

In Ghana, the modern contraceptive prevalence rate currently stands at 22.2 percent (GSS, GHS and ICF International, 2015). Similarly, the use of traditional contraceptive methods has been

fluctuating since 1998 in Ghana and has decreased somewhat over the past six years from 7 to 5 percent (GSS, GHS and ICF International, 2015). The use of traditional methods is seen to be higher in societies where family planning prevalence is low and the use of contraception is weak (UN, 2015).

Studies have noted that inter-spousal contraceptive decision making has been recognized as a key factor for adoption and sustained use of family planning because it allows couples to discuss what might appear unclear and exchange information that may change strongly held beliefs (Bawah, 2002; Feyisetan, 2000). In addition to this, not only contraceptive use but also the decision of choosing an appropriate contraceptive method are also largely influenced by inter-spousal communication and decision making (Ogunjuyigbe et al., 2009). The literature has indicated that there is a pathway of influence between spousal communication and decision making on the type of contraceptive method used globally (Islam et al., 2014).

Ideally, it has been made evident that couples spending a substantial portion of their adult lives together are often bound to make decisions together. However, contraceptive use is a taboo subject in some parts of the Ghanaian society (Bawah et al., 1999) and is rarely discussed with men even though studies have shown the importance of men's perception in matters of contraceptive use (Avogo et al., 2008). Various dynamics play out when discussing the male role in decision making, especially about reproductive issues, including contraceptive use. The types of relationships and women's levels of autonomy in the relationship influence whether decision making takes place or not. Young women and especially those in arranged marriages have less decision making opportunities within marriage (Haberland et al, 2003). Studies also suggest that in sub-Saharan African culture, couples largely come from a patriarchal society where men in general have most authority over their wives' next birth, the number of children and when to stop childbearing. In

this situation, there is little or no communication among spouses about women and their reproductive health related issues (Kamal et al., 2012). Being a mostly patriarchal society, Ghana has not been an exception to this problem.

Most women have been deprived of their ability to control their own fertility as one of their basic and important rights because of lack of communication and decision making with their partners. Communicating and making decisions about contraception will bring to light that a better regulated sexuality and productive life affects positively the status of both men and women socially and economically. Additionally, lack of communication and decision making among couples on modern contraceptive use has been identified as one of the main reasons for the lower rate of contraceptive use among women in under developed countries (Bawah, 2002).

It is evident that spousal communication and decision making, in fact, is an explanatory factor in modern contraceptive use (Bawah, 2002; Islam et al., 2014). Many reviews have been directed on family planning reception by women and there has been little male involvement in modern contraception adoption especially in developing countries. Effective spousal communication and decision making promote collective contribution by couples in embracing preventative contraception measures, its practices and continuing usage. Few studies have assessed this role of inter spousal decision making on the choice of either traditional or modern methods. Bearing all this in mind, this study seeks to examine the relationship between inter-spousal decision making and the type contraceptive method used among married women in Ghana.

1.2 Problem Statement

Globally, modern contraceptive prevalence rates for women within reproductive ages have been increasing according to a 2015 United Nations report. However, this increase has not increased

much in sub-Saharan Africa. According to a 2015 report from Index Mundi, modern contraceptive method use is low in sub-Saharan Africa being 22.2 percent as of 2014, and 23.4 during 2011 (IM, 2015). Traditional method use, which is also low but may be an option for those opposed to modern methods, tends to lead to unintended pregnancies and unsafe abortion even among married women (Rutenberg & Watkins, 1997). This issue is made worse in developing countries (WHO, 2009). The use of modern contraceptive methods within some countries in West Africa, including Ghana, has seen improvements while the use of traditional methods is almost stagnant but decreasing faster in rates as compared to modern contraceptive method use (Sharan et al., 2015). Traditional methods have a high failure rate compared with modern methods and are therefore not considered an effective mode of contraception by some research studies (Festin et al., 2016). Therefore, modern contraceptive methods are deemed the most efficient means of protecting one from unintended pregnancies with barrier methods going further to protect against sexually transmitted infections (STIs). As contraceptive prevalence among women in Ghana continues to remain low and fertility continues to stall at high levels, studies that address this subject deserve attention.

Various reasons explain the low contraceptive uptake among women in unions and for the developing world context; the male role could be a factor that bars women from using contraception (Dodoo, 1998). Studies have shown that married or cohabiting women may not necessarily have the autonomy to use contraception, especially in patriarchal societies in sub-Saharan Africa (Jejeebhoy, 2000). Inter-spousal communication and decision making, however, have been shown in studies to influence the use of contraception and the method of contraceptive use within such situations (Bawah, 2002; Tumlinson et al., 2013; Islam et al., 2014; Undelikw et al., 2013). Few studies have examined this relationship using nationally representative data (Salway, 1994) but none have done so in recent times among women in Ghana. However, this is something worth investigating as modernity may have influenced spousal communication habits

among couples. Therefore, this topic requires further investigation in a country such as Ghana and thus suggests a gap in the literature that must be filled.

Even though there have been serious campaign programs by public health facilities to sensitize couples of reproductive age to engage in open communication and decision making on the type of contraceptive method to use, there is still a rising concern of population increase with the total fertility rate still hovering around 4.2 for the past decade. Ghana's fertility rate has been stalling for more than fifteen years while other countries have made considerable efforts to increase contraceptive prevalence to reduce the fertility rate and population growth. This fertility stall has become a persistent problem which needs immediate attention from researchers to study the links between the halt in declining rate and the changes in method of contraception used. One way of achieving a decline in the fertility rate is to persistently address communication and decision making among couples and how it can result in the adoption of contraception, particularly modern methods. This study will add to the literature on this subject by presenting a different aspect of couple communication about contraception, which is decision making about contraception. Some studies on the subject use measures on women's autonomy in other spheres of her life, such as decision making on household issues. Others use vague measures such as whether a discussion took place or not. However, this study specifically seeks to link the method of contraception currently being used by the couple to the discussion they had regarding their method of contraceptive use.

Couples' unintended pregnancies, high fertility and spread of sexually transmitted infections are still on the rise in developing countries like Ghana (Bawah et al., 1999). Socioeconomic problems related to rapid population growth such as unemployment, limits to investing in educational infrastructure, a rise in the number of street children, to name a few, all have an adverse impact on

the economy and its available resources. The increased prevalence of sexually transmitted diseases and infections are often costly to treat and can deplete governments sparse resources. In addition to that, poverty and other socioeconomic problems may result in risky sexual behaviours resulting in unwanted pregnancies which could lead to a rise in maternal mortality through unsafe abortions. All of the above are consequential effects of underuse of modern methods of contraception which may have been as a result of a lack of spousal communication and decision making (Teresa et al, 2011). Thus, these relationships need to be teased out in order to have more empirical evidence to fully address the issues.

Open spousal communication and decision making on the type of contraceptive method used has proved to be an effective tool in developed countries to promote contraceptive use (Ogunjuyigbe et al., 2009). However, the frequency of open discussion about contraception among couples is lower in developing countries. This may be due to the stigma associated with modern contraception, ranging from feelings of mistrust as well as the general love for many children (Ogunjuyigbe et al., 2009). In developed countries, modern methods of contraception are openly talked about among couples, broadly accessible, have increased public awareness and hence results in increased prevalence rates (United Nations, Department of Economic and Social Affairs, 2015). Engaging in research about how communication and decision making among couples also affect modern contraceptive use helps to explore the extent to which spouses communicate and make decisions about their fertility desires and reproductive health. There is a vast amount of literature that indicates that spousal communication and decision making influence the contraceptive use or non-use in general; however, the role it may play in determining the type of method used is unclear. This study therefore seeks to understand how spousal communication and decision making are associated with the method of contraception, that is, whether modern or traditional, used by married/in union women by answering the following questions:

i. What is the relationship between spousal decision making and the type of method of contraception method used among women in union in Ghana?

ii. What are the demographic characteristics of women associated with the type of contraceptive method used?

iii. Are partners' socio-economic characteristics associated with the type of contraception method used?

1.3 Rationale of the Study

While the relationship between spousal decision making and contraception adoption is complex and often reciprocal, research in developing countries has shown that family planning or contraceptive use can greatly impact the growth of a country. The use of modern methods of contraception by couples has become one of the major concerns in both developed and developing countries, since its consequences of non-use are very detrimental to life and also the increase of one's population (Boateng, 2013). Hence, there is the need to research into the effects of spousal communication and decision making on the use of modern methods of contraception. Some researchers have worked on family planning services and contraceptive use and its challenges in Ghana but very few studies have actually worked on spousal decision making and method of contraception adoption. Using a nationally representative dataset, the contribution of this study will be to help assess the effects of spousal communication and decision making on the method of contraception used. The outcome of the study will enable one to identify which type of spousal decision making results in the use of modern methods of contraception among women in Ghana.

Quite a few qualitative studies have been undertaken to understand contraceptive use among couples and men and women's history of use. One study investigated the types of relationships

that warrant use of particular methods among men and women in Accra (Osei et al, 2014). A major finding was that women who wanted to stop using modern contraceptives due to initial side effects continued to use them due to encouragement from their partners. This is indicative of joint decision making resulting in use of modern methods of contraception. Women who had more children than they could financially afford also reported that their husbands recommended the use of modern methods of contraception. It would be beneficial to research this subject using nationally representative quantitative data. Therefore, using the most recent Ghana Demographic and Health Survey dataset, this study enables us to tease out the likelihood of use of modern methods when joint decisions are made versus when one partner solely makes the decision. Spousal decision making as a concept in this study would help explore how couples communicate and decide on the type of contraception to adopt.

In addition, this study will also show the demographic, social and cultural factors that are associated with either traditional or modern method use among women in Ghana. It is important to understand the characteristics of women and their partners that are related to use of particular methods of contraception. The results from these analyses can also be compared to any other studies (or papers using earlier GDHS datasets) on the characteristics of women who use either modern or traditional methods of contraception. Use of modern methods tends to indicate women's access to a service provider who supplies family planning counseling and services. It also indicates her willingness and readiness to limit or space childbearing. Investigating issues of access (or "ability"), "willingness" and "readiness" to use modern methods is an important step that contributes to the literature on fertility decline (Machiyama & Cleland, 2014).

1.4 Objectives of the Study

The main objective of the study is to understand the relationship between spousal decision making on family planning and the type of contraception used by women in union in Ghana.

The specific objectives are:

i. To examine the relationship between spousal decision making and the method of contraception used.

ii. To analyse women's characteristics associated with the adoption of a contraception method.

iii. To examine partners' demographic characteristics associated with the method of contraception used.

1.5 Organization of the Study

The study has been divided into seven chapters. Chapter one contains background information, the problem statement, the objectives of the study, and the rationale for the study. Chapter two comprises the literature review, the conceptual framework and the hypotheses. Chapter three covers the methodology which was used for the study.

Descriptive statistics are used to examine and describe the distribution of the respondents by their background characteristics, partners' characteristics and decision making about contraception that is currently being used in chapter four. The fifth chapter looks at the bivariate relationships between the independent and control variables and the dependent variable, type of contraception method. Chapter six also considers the binary logistic regression models used in the study. These were conducted to examine the relationship between spousal decision making and the type of

contraception method used, while controlling for background characteristics. Chapter seven entails the summary, conclusion and policy implications which were drawn from the study.

CHAPTER TWO

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.1 Introduction

Research has revealed that the relationship between spousal decision making in relation to method of contraception used has not seen the necessary improvement as it should. That is, unmet need for contraception is still low among couples; modern contraception prevalence has also seen a slower increase as compared to previous years (GSS 2015). In light of this, more work is needed to be done in this particular area to bring forth the associations in relation to spousal communication, decision making and method of contraception adopted. Fluctuating results emerge every now and then from the literature, especially on sub-Saharan Africa, on issues regarding prevalence of modern methods of contraception. This chapter seeks to review studies on the concept of spousal decision making, the various factors associated with spousal decision making and the effect of decision making on method of contraception used. The chapter also discusses the conceptual framework used to depict the study as well as hypotheses that will be tested.

2.2 The Concept of Spousal Decision Making

According to the Oxford Advanced Learner's Dictionary, the term decision making refers to "the process of deciding about something important, especially among a group of people or in an organization" (Oxford Advance Learners' Dictionary 8th edition). Trewatha & Newport (2012) explain the decision making process as the selection of a course of action from among two or more possible alternatives in order to arrive at a solution for a given problem (Trewatha and Newport,

2012) In relating this to spousal decision making and method of contraception used, it is clearly shown that there must be existing options which can be prioritized by effectiveness, convenience and appropriateness to be able to come up with a better option. Every spouse needs to make decisions at one point or the other as part of improving their union and all other matters relating to their relationship. Studies have shown that decisions are supposed to be made in the best interest of both spouses. For that matter, decisions made by the spouses are to help make the right choices and also to enlighten the way forward. Be it strategic business activities or reproductive health matters, the processes of making decisions are complex and involve the attention of both parties to compromise to reach an agreement (Trewatha and Newport, 2012).

Decision making in a spousal relationship helps to support spousal growth as compromises can be reached on sensitive topics, especially those regarding fertility preference, the type of contraceptive method to adopt, and other reproductive health issues that affect the woman's overall health and well-being. The whole fabric of family management and its day to day operation is rightly built on decision making. Making better decisions mostly depends on the effective communication tools which are utilized to achieve the best results.

As it was revealed in the above definitions, the spousal decision making process is a consultative affair done by both parties to drive better functioning of the family unit (Kabagenyi et al., 2014). Therefore, it can be said to be a continuous and dynamic activity that pervades all other activities pertaining to the spousal or family unit. Since it is an ongoing activity, the decision making process plays vital importance in the spousal or family system. On the other hand, the lack of spousal communication and decision making can result in inadequate reproductive health knowledge, mistrust towards modern contraceptive usage, unprotected sexual encounters etc, leading to unintended pregnancies Shahabuddin et al., (2016).

2.2.1 Joint decision making versus sole decision making on methods of contraceptive use

Research has shown that sub-Saharan Africa, in particular, has a higher unmet need for modern methods of contraception as compared to other regions across Africa (PRB, 2016). Individual decision making by couples often leads to higher unmet need for contraception (Sharan et al., 2010). Joint contraceptive decision making, therefore, becomes an avenue for couples to really discuss and understand the urgency of modern family planning methods. When spouses communicate and make joint decisions about modern contraception and its intricacies, it creates the platform that encourages open conversations about reproductive health, sexual needs, desired family size and the method of family planning (Salway, 1994; Tumlinson et al., 2013)

Osei (2014) explains that individual decision making about contraception being made often depends on the stage of a couple's relationship. She explains that at the initial stages when a relationship is stable, women make decisions to abandon modern methods of contraception for fear of supposed side effects affecting fertility. However, after children are born, women can make the decision to use modern methods to space or limit births. Machiyama (2014) also explains that, women, even from a higher educational background make decisions to abandon modern methods of contraception. Reasons stated were that they did not have frequent sex which would require effective use of modern contraception. In addition to this, the fear of side effects, as mentioned earlier, also encouraged women to decide on adopting traditional methods rather than the modern methods of contraception. Therefore, the literature shows us that various relationship stages and circumstances determine when a woman solely makes the decision to use contraception and also the type of contraception she will use.

Overall, joint decision making is considered by the literature to be the best choice for couples in terms of contraceptive adoption (Bawah, 2002; Bawah et al., 1999; Islam et al., 2014). Couples

make better choices on fertility, family planning and contraception method to use when joint decisions are made.

2.3 Factors associated with the type of contraceptive method used

2.3.1 Decision-maker for contraception

Every couple communicates and occasionally comes to a consensus about critical issues. An important aspect of spousal decision making as highlighted by Osei (2014) is that couples who genuinely support each other are more likely to make joint decisions on contraception than those who do not adequately support each other. In addition to this, women sometimes make decisions alone to use modern contraception not only to prevent sexually transmitted infections but also to avoid unintended and unwanted pregnancies. Research explains that men are also motivated to use modern methods of contraception because they are not ready to bear the responsibility of becoming fathers. Therefore, they can also make independent decisions to use contraception and also sometimes recommend their partners to adopt a modern method of contraception (Ogunjuyigbe et al., 2009).

On the other hand, Bawah's (1999) findings reveal that the majority of the men, especially in the northern part of Ghana, do not support the idea of using modern methods of contraception. These men therefore make a decision to restrain themselves and their partners from the use of any modern methods of contraception (Bawah et al., 1999). From this literature, men have the complete autonomy to make decisions regarding the use of modern contraception for their wives even though these women may not support the idea. However, in these situations, women determined to limit childbearing may choose to adopt methods secretly, and this may result in the use of modern methods.

Shahabuddin (2016) indicates that husbands make the majority of spousal decisions in relation to contraception when couples are newly married. The study also explained that making joint decisions about fertility and contraceptive related issues prevents external and social actors such as neighbors and in-laws from intervening in the couples' problems (Shahabuddin, 2016) In addition, studies also show that couples make joint decisions in a quest to achieve the best possible result for their families. Joint decisions often lead to final conclusions on couple's appropriate type of contraceptive method to adopt and when to stop childbearing (Kamal et al 2012).

2.3.2 Age of woman

Age of a woman has been considered by many scholars as an important factor which can determine the type of contraceptive method to be adopted. According to Osei et al. (2014), women within the younger ages, usually within 15-24 years, often use modern methods of contraception which are more effective than the traditional ones. This is to prevent not only sexually transmitted diseases but also unintended pregnancies. Later on in life when women get married, around ages 25-34, they often abandon the use of modern contraceptives to use traditional methods for fear that modern contraceptives could affect fertility. After the first few births, couples prefer modern methods of contraceptives to space their children (Lasee & Becker, 1997; Osei et al., 2014).

2.3.3 Educational level

Numerous studies indicate that the educational levels of women and their partners play a major role in helping to increase their knowledge and understanding in matters relating to contraception. Studies such as Radulovic et al. (2006) have found significant relationships between the educational level of women and modern methods of contraception. Higher educational levels of women within the reproductive age groups have helped to mitigate the desire for more children, reduce fertility rates of countries like Singapore and also improve contraceptive prevalence. Some

studies also go as far as to ask if education is the best contraceptive (Hannum and Buchman, 2003). Studies have also shown that improvements in education in countries like India have helped to reduce the population through reduction in unwanted pregnancies. More importantly, investing in the education of young girls will, in the long run, help in achieving great and self-autonomous women. Less and non-educated women are mostly seen to be non-autonomous as compared to highly educated women to take control and decide on critical issues by themselves if need be (Jejeebhoy, 2000). On the other hand, the literature on unmet need among women in Ghana indicates that although the educated women are using contraception, they have "attitudinal resistance" to modern or specifically hormonal methods (Machiyama & Cleland, 2014). Thus, there has been an increase in the use of traditional methods among this "elite" group of women.

2.3.4 Desire for more children

The number of children a woman desires can greatly affect the type of contraceptive method she adopts. Women who have the desire to have more children are more likely to use traditional methods of contraception. This is primarily because of the fear of side effects from modern methods that would result in infertility (Machiyama & Cleland, 2014; Osei et al., 2014). On the other hand, women who have had all their desired number of children and have no need for more will adopt modern methods of contraception. Higher desire for more children by women might be due to high infant and child mortality rates among some regions within sub Saharan Africa. In addition to this, lower desires for more children can be related to demographic pressure from the recent improved child survival rate compounded by economic hardship (Amin, 1998).

2.3.5 Number of living children

The number of living children, just like the desire for more children, is an important factor which can determine a woman's type of contraceptive method used. Women with higher numbers of

children are more likely than those with no children to use modern methods of contraception. Studies such as Oyeka (1989) and Gadalla (1985) explain this significant relationship between the number of living children and modern contraceptive use which is negatively related. On the other hand, women with no children are less likely to use modern methods of contraception (Oyeka, 1989 and Gadalla, 1985).

2.3.6 Religion

The relationship between religious beliefs and the type of contraception adopted are very controversial and may vary among countries. Most religious groups have their own opinions on the use of modern types of contraception being different from other groups. It is very well understood that some religious groups such as the Catholics do not condone the use of modern methods of contraception. The underlying issue is their linkage of modern methods to that of terminating pregnancies (Avong, 2012). However, some research papers have actually found significant associations between Catholics and the use of modern methods of contraception (Hill et al., 2014). Other religious groups such as the Protestants and Pentecostal do not oppose the use of modern methods of contraception. The Islamic groups also do not have any explicit document denouncing the use of modern methods of contraception, and some studies show that they have high prevalence rate for using modern methods of contraception (Osuafor, 2013) Traditional religious groups are also seen in the literature to be strong users of modern methods of contraception (Hill et al., 2014)

2.3.7 Ethnicity

There are some variations when it comes to ethnicity and the type contraceptive method used. These variations are often country based or regional based. Research has shown in Ghana that the five major ethnic groups are the Akans, Ewes, Ga-Adangbes,Mole-Dagbanis and Guans, followed

by other smaller groups. Among these major ethnic groups, Ewes are more likely to use modern methods of contraception as compared to the rest (Addai 1999). Variations in findings are often attributed to the difference in datasets and settings of the surveys.

2.3.8 Type of place of residence and region of residence

Understanding women's type of place of residence gives insight on the particular contraception methods she is likely to adopt. Type of place of residence is normally categorized into rural and urban. Urban areas are areas where human population is enumerated to be over five thousand. On the other hand, rural areas are areas with less than five thousand people. Research shows that people living in rural areas are deprived of some social amenities including reproductive health services such as family planning and contraceptive services. However, emerging literature reveals that there are varied living conditions in the cities, that is, people live in slums within cities having the same social, economic and financial problems as the rural dwellers. This sometimes blurs the findings between rural and urban dwellers. According to Ochako et al., (2016) rural dwellers have a higher prevalence of modern contraception usage than their counterparts in the urban areas. Her study also revealed that women living in 'slums' or rural areas were more likely to use short term modern contraception than women living in urban areas.

In addition, the region of residence can sometimes determine the method of contraception which people are likely to adopt. In Ghana, very few studies have actually considered region of residence and the method of contraception used. Adjei et al (2014) explained that when it comes to region of residence in Ghana, Upper East and Upper West are less likely to adopt modern methods of contraception. This was due to their strong cultural values with regard to fertility and birth control. Bawah (1999) also indicated the strong cultural factors within the three northern regions which resulted in low patronage of modern family planning methods.

2.3.9 Marital Quality

Marital quality in spousal decision making helps to throw more light on couples' reproductive behaviours and attitudes such as family planning and modern contraception adoption. Marital quality, usually measured with a scale depicting one's satisfaction in one's marriage, has been associated with contraception adoption and continued usage in most of the Western settings (Manlove et al., 2011; Franzetta, 2007, 2003, Manning, Longmore and Giordano, 2000). Very few studies have actually considered the effects of marital quality in decision making on modern contraceptive use. Therefore, research to confirm the association in our part of the world is very scarce. Marital quality can be a very essential factor in determining the decisions made by couples on contraception and family planning.

2.3.10 Partners' characteristics

Studies suggest that in the sub-Saharan African setting, the role of men in reproductive health decision making is enormous. (Caldwell, 2009; Gribble & Haffey, 2008; Sharan, Ahmed, May, & Soucat, 2009) in light of the pro-natalist nature of most sub-Saharan African countries and the cultural and societal norms of male autonomy, various factors such as a partner's age and educational attainment may influence whether there is use of modern methods of contraception or not.

In addition to this, research reveals that women who are ten or more years younger than their partners are less likely to use modern methods of contraception due to disparities in social positions, life experiences and resources (Ibisomi, 2014). On the other hand, women who were less than five years younger than their partners were more likely to use modern contraception. However, these associations were not significant indicating that partner's age or age difference between partners is not associated with couple's modern contraceptive use.

Also, educated partners will be more likely to encourage their spouses to use modern methods of contraception. Research has shown that partners who have attained higher education often opt for modern methods and also recommend modern methods of contraception to their wives. Educated partners who are willing to end childbearing are more likely to adopt modern methods in comparison with uneducated partners (Irani, Speizer, & Fotso, 2014; Islam et al., 2014)

2.4 Shortfall of the literature

A major gap in the existing literature is that there are limited works written on decision making on contraceptive methods used by couples. The few studies which already exist show the relationship between spousal communication and modern contraceptive use within the northern regions of Ghana (Bawah, 2002; Bawah et al., 1999). Others solely looked at decision making on contraceptive use. Yet others used measures that established whether communication about contraception took place, without asking who the decision maker was. Finally, some studies that also assessed decision making and contraceptive use used decision making measures that covered other spheres of decision making, such as household decision making. However, his study will investigate the effects of spousal decision making on the type of contraceptive method used, using the 2014 GDHS, which is a nationally representative dataset.

2.5 Conceptual Framework

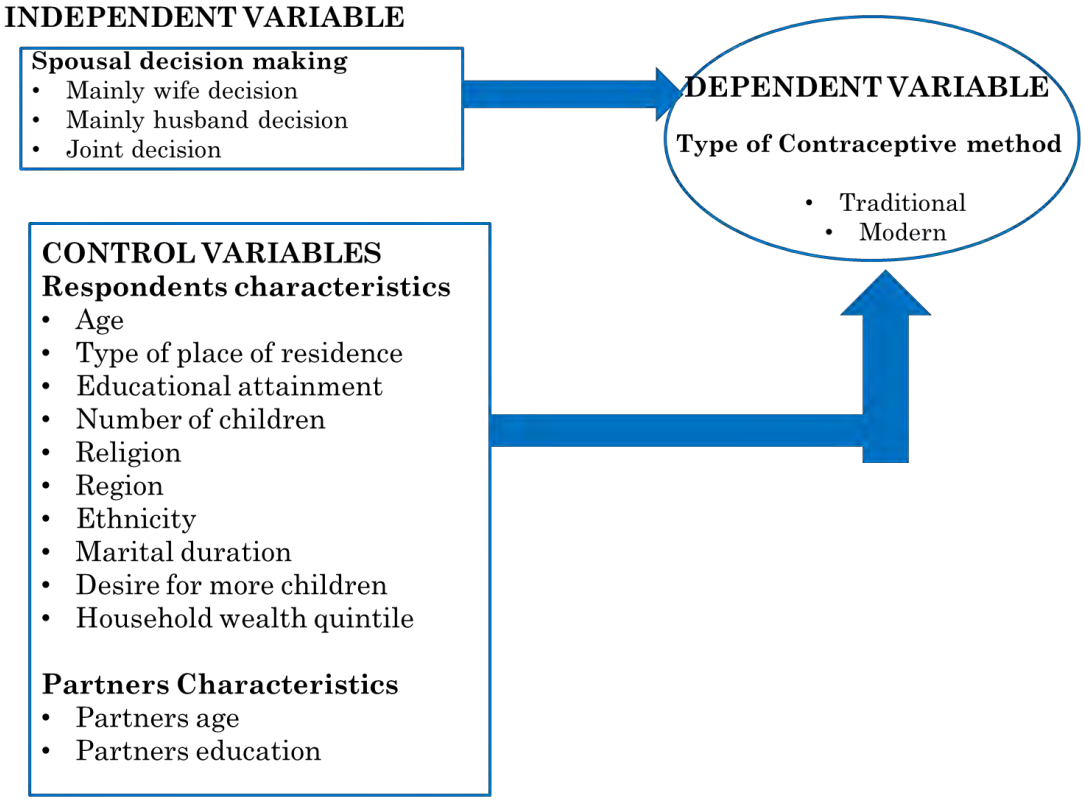
The literature review on spousal decision making and contraceptive use shows that there exists a relationship between couples' decision making, some selected demographic and socioeconomic variables and their method of contraception adopted. The objective of this study is to assess the

independent effect of spousal decision making on contraceptive use. This study adopts and adapts various ideas from studies that assessed spousal communication, spousal decision making and contraceptive method choice into its framework (Islam et al., 2014; Osei et al., 2014; Ochako et al., 2016).

The independent variable, spousal decision making, as illustrated in the framework, may have an influence on modern or traditional contraceptive method use. The decision to adopt a particular type of contraceptive method can be made mainly by the wife, the partner (husband), or it can be a joint decision. Respondents who report to have joint decisions on contraception may be more likely to adopt modern methods of contraception as some emerging qualitative research suggests (Osei et al., 2014). On the other hand, women who make decisions alone on the method of contraception are more likely to adopt traditional methods of contraception as emerging research also reveals. This may be because some women in union report not having frequent sex and hence state that they have no need for modern methods (Machiyama & Cleland, 2014). In addition, side effects of some modern methods also serve as a catalyst for discontinuing use of modern methods by most women. Without the decision making and support from a partner, women are likely to use traditional methods (Machiyama & Cleland, 2014; Osei et al., 2014). Also, men who are prepared to end childbearing are more likely to advocate the use of modern methods than women.

The control variables, as shown, may also directly influence the adoption of a contraceptive method. It must be noted however for the sake of this study that spousal decision making is considered as an independent variable and the illustrated background variables are employed as control variables.

Figure 2 - 1 Conceptual Framework Showing Effects of Spousal Decision Making and Contraceptive Use



Source: Author's modification of Islam et al., Ochacko et al. and Osei et al.(2014)

The conceptual framework above in Figure 2-1 illustrates how the control variables affect both dependent and independent variables. The educational attainment of women has shown in research to change behaviours and attitudes towards contraception and methods to use. However, some of the highly educated (or elite) women in Ghana are still not adopting modern methods due to various reasons, especially issues with side effects. Also, women in rural areas seem to adopt modern methods more than their urban counterparts as discussed earlier. The type of place of residence of women shows the respective opportunities a woman could have in relation to access to appropriate

health services, family planning, proper job prospects, etc. Even though all these factors could improve access to reproductive health needs of the average urban woman, research shows that women who reside in the rural areas are more likely to use modern methods of contraception than those in the urban areas. Therefore, these relationships are expected.

In terms of age, on the other hand, there are associations with using modern methods by younger women than the older women who would want to prevent pregnancy at all cost. Those in the 25 to 34 year age group may be least likely to use modern methods due to the fact that they would want to give birth.

Previous studies have shown significant associations between Catholics and the use of modern methods of contraception (Hill et al., 2014). Other religious groups such as the Protestants and Pentecostals do not oppose the use of modern methods of contraception. In terms of ethnicity, it is suspected that Mole Dagbani, as well as Grussi, Gurma, Mande, Guan ethnic groups are more likely to adopt modern methods of contraception. The reason for this behaviour of the Northern ethnic groups may be due to the strong cultural values associated with fertility and the use of modern contraception (Adjei et al., 2014). Modern family planning services are sometimes made more readily available to them through community health workers. Also, women in these groups using contraception may have to hide and use modern methods (Bawah et al., 1999).

Also, with number of children, spouses with higher numbers of children are more likely to adopt modern methods of contraception whilst women with the desire for children, are more likely to use traditional methods of contraception (Osei et al., 2014). In addition, couples with the desire to have more children are less likely to use modern methods of contraception. Research has shown that, at the initial stages of a stable relationship, women desire for children and therefore abandon the use of modern methods (Osei et al., 2014). The major reasons associated with this behaviour

is the fear of supposed side effects from modern contraception which might affect fertility later on.

2.8 Study Hypotheses

To achieve the objectives of the study, the following hypotheses are formulated to guide the study.

i. Spouses who make joint decisions are more likely to use modern methods of contraception than when the respondent makes the decision to use contraception alone.

ii. The higher the number of children a woman has, the more likely she is to use modern methods of contraception.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

Chapter three provides insights on the data used for the study, the sample and also the methods used. Variables used in the study are also identified and explanations of the categorization procedures are also presented. Also, the methods of analysis which were used in the study to explain relationships among variables are discussed. In addition to that, limitations of the data are also discussed.

3.2 Source of Data

The source of data for the study was the 2014 Ghana Demographic and Health Survey (GDHS) which was carried out by the Ghana Statistical Service and the Ghana Health Service, with support from ICF International. The GDHS has been held every five years since 1988, with the exception of the 2014 survey, which comprises of the most recent dataset, and was conducted six years after the penultimate survey. The survey collected data from 9,396 women between the ages of 15 to 49 years and from 4,388 men aged 15 to 59 years residing in 11,835 households. The data were collected within a three-month period, starting in September and ending in November 2014.

Within the ten administrative regions of Ghana, respondents were selected using a two-stage probability sampling technique. The current Demographic Health Survey used 412 enumeration areas which were carefully chosen using a cluster sampling technique. The stratified probability sampling technique allowed 12,831 family units to be selected. Within the chosen enumeration

areas, household members who met the selection criteria were targeted and selected for interviews GDHS, (2014).

Women, men and household questionnaires were the only instruments used to collect the data from the field. Respondents' socioeconomic and demographic backgrounds were collected in detail in addition to issues regarding family planning methods, contraception practices, nutritional status of women and young children, to name a few. The 2014 GDHS collected information from more women than the previous surveys, and is thus an improvement upon preceding surveys. Information from the women questionnaire alone were used in this study. This is because it provides the necessary information on women, their partners and also their reproductive behaviours. The GDHS is collected nationally and by applying the necessary weighting techniques, the results from this study can be generalized to the total population.

The GDHS women's data file was utilized for this study. The data contain all information of respondents aged between 15 and 49 years. The data were weighted and filtered out missing cases to obtain 1,408 women who were either currently married or cohabiting with their partners. These are also women using some form of contraception since they were the target respondent group.

3.3 Variables in the study

3.3.1 Independent Variable

According to the literature, decision making has been measured in different ways. However, in this study decision making about contraception is measured in the question: "Would you say that using contraception is mainly your decision, mainly your husband's/partner's decision, or did you both decide together?" Women's responses could be placed in the following categories: mainly

wife's decision, mainly husband's/partner's decision and mainly joint decision. The four women who stated that 'Others' made the decision were placed with the 'husband's decision' category.

3.3.2 Dependent Variable

Type of contraceptive method used is the dependent variable. Respondents who were using a method of contraception were asked about their main method. The main methods women reported using were the pill, injectable, jelly, diaphragm, implants, male condoms, female condoms, natural calendar method, withdrawal, and rhythm/periodic abstinence. The first seven methods were grouped into modern methods while the last three were categorized as traditional methods, based on the contraceptive method classification by Festin et al. (2016).

Table 3- 1 Measurement of the independent and dependent variables

Variable	Measurement
Type of Contraceptive Method	Modern Traditional
Decision Maker for contraception	Mainly wife Mainly husband Joint decision

Table 3-1 above shows the dependent and independent variables and how they are measured. Type of contraceptive method is measured using modern or traditional types. Decision maker for contraception is also measured using decision made by: mainly wife, mainly husband or joint decision.

3.3.3 Control Variables

The control variables consisted of both the characteristics of the respondents and the characteristics of their partners. Age, educational level attained, ethnicity, number of living children, type of place of residence, region of residence, religion, marital duration, desire for more children and household wealth quintile were the personal characteristics of the respondent in the study. Respondents' partners' age and educational attainment are also added in the study.

Table 3-2 Measurement of the control variables

Variable	Measurement
Age	15-24 years 25-34 years 35+ years
Educational Attainment	No education Primary Middle/JHS Secondary/SHS/Higher
Number of living children	0 1 2 3 4 5 6 +
Type of place of residence	Urban Rural
Region	Western Region Central Region Greater Accra Region Volta Region Eastern Region Ashanti Region Brong Ahafo Region Northern Region Upper West Region Upper East Region

Household wealth index	Poorest Poorer Middle Richer Richest
Ethnicity	Akan Ewe Ga-Dangme Mole Dagbani Guan/Grussi/Gurma/Mande/Others
Religion	Catholic Protestant(Anglican, Presbyterian, Methodist) Pentecostal/Charismatic (Charismatic, Pentecostal, Other Christian groups) Moslem Traditional/Spiritualist /Other
Desire for more children	Wants within 2 years Wants after 2 years Wants/Undecided Wants no more
Marital Duration	0-4 5-9 10-14 15+
Partners' educational Attainment	No education Primary Secondary Higher
Partners age	15-24 25-34 35+

Table 3-2 above shows the control variables such as age, educational attainment, number of living children and how they are measured.

3.4 Methods of Data Analysis

The statistical software package, SPSS (version 21), was used to analyze the large scale data used for the study, and then generate outputs which display analyses of frequencies, cross-tabulations and regression models. Decision making about contraception and contraceptive methods used were analyzed using frequencies and percentages in tables and graphs. Bivariate analyses using cross-tabulations were carried out. To help examine the significant differences between demographic and socio-economic characteristics of the respondents as well as decision making on contraception with the method of contraceptive used, cross tabulations were done. In addition to this, associations were examined to see if they were statistically significant using chi square tests. Binary logistic regression models were used at the multivariate level to examine the characteristics of decision making.

3.5 Limitations of data

First of all, due to the cross-sectional nature of the data the study cannot emphatically state that a particular method of decision making led to the use of a particular contraceptive method. It simply assesses the relationship between decision making and contraceptive method choice to suggest that the manner in which decisions are made and by whom is associated with a type of method finally used by women. Also, there are no standard measures for relationship quality which would have been a very important variable for studying spousal decision making. In addition, the data are susceptible to over-reporting and under-reporting of certain men's characteristics such as age and educational level by women. This can either bloat the figures in the data or otherwise cause inconsistencies in the results.

CHAPTER FOUR

SOCIO-DEMOGRAPHIC AND SOCIO-ECONOMIC CHARACTERISTICS OF RESPONDENTS

4.1 Introduction

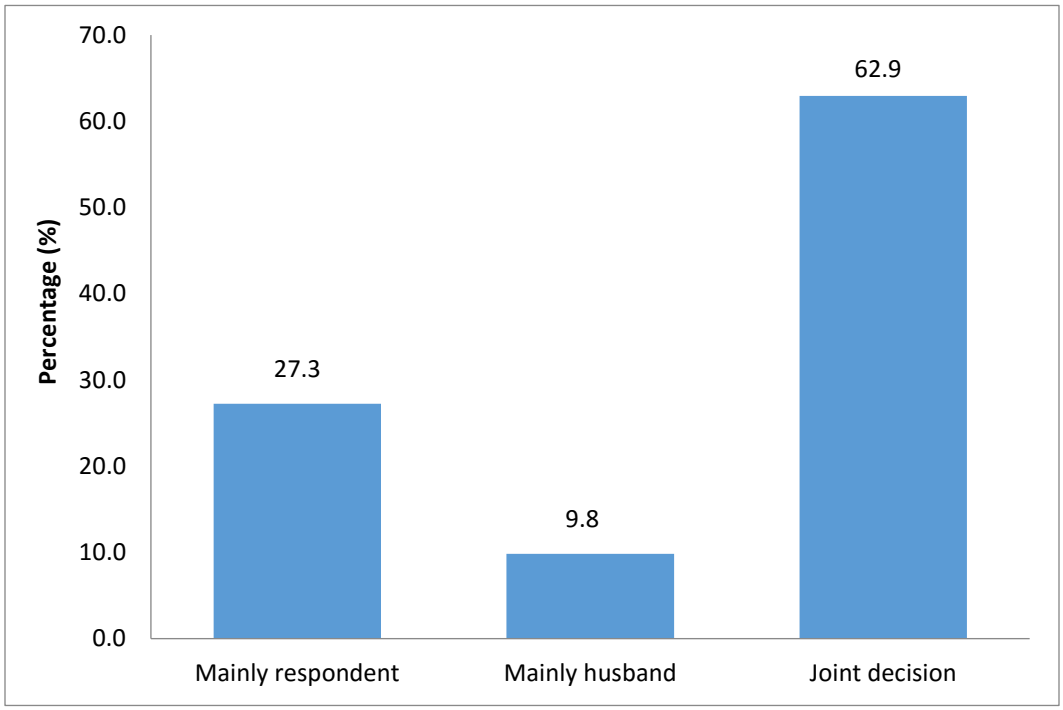
The type of method of contraception used can be influenced by several factors. This chapter shows the socio-demographic and socio-economic characteristics of the respondents. It also makes available supplementary information on the respondents' partners, such as their age and level of education. Frequency tables, graphs and charts are used in this section of the study to present the outcomes from univariate analyses.

4.2 Independent and dependent variables

4.2.1 Decision making on contraception

As indicated in Figure 4.1, the smallest proportion (9.8%) of the respondents reported that mainly their husband handled the decision making in relation to contraceptive method type. On the other hand, about sixty-three percent (62.9%), representing the largest proportion of the respondents, reported that decision making was a joint decision. Again, 27.3 percent of the respondents reported that the decision made on contraceptive method type was mainly the wife's (respondent's) decision.

Figure 4-1 Distribution of respondents by decision making on contraception

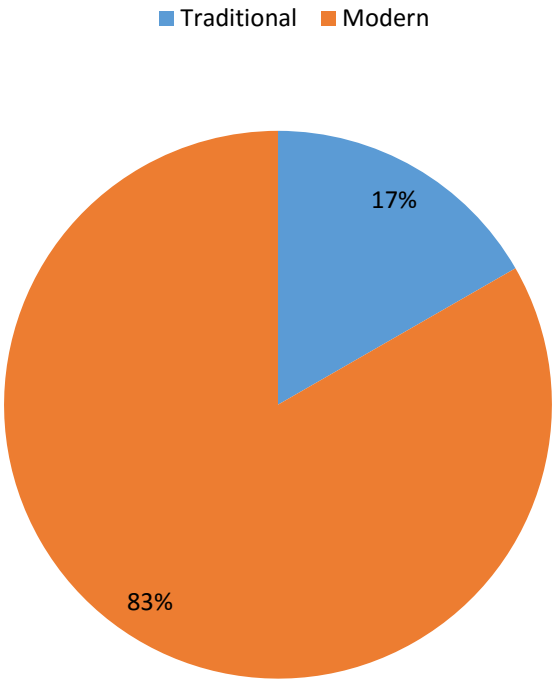


Source: Computed from the 2014 GDHS dataset

4.2.2 Type of contraceptive method used

The type of contraceptive method adopted, the dependent variable, is a dichotomous categorical variable which was recoded as 'traditional' and 'modern'. The results displayed in the pie chart in Figure 4.2, suggest that 83 percent of respondents were currently using the modern type of contraception while 17 percent were using the traditional method.

Figure 4-2 Distribution of respondents by type of contraceptive method



Source: Computed from the 2014 GDHS dataset

4.3 Characteristics of respondents

4.3.1 Age of woman

Age is a continuous variable and usually measured in five or ten year age groups. However in this research paper, the ages of women are categorized into 15-24, 25-34 and 35+ years. Table 4-1 shows that more women fell into the 25-34 year age group (44.4%) followed closely by the oldest age group (35 years and above) at approximately 42 percent. The youngest age group consisting of 15 to 24 year old women is the least represented with 14.1 percent of women falling in this category.

Table 4-1 Percentage distribution of respondents by their age

Age	Frequency	Percent
15-24	199	14.1
25-34	625	44.4
35+	584	41.5
Total	1408	100.0

Source: Computed from the 2014 GDHS dataset

4.3.2 Number of Living Children

The number of living children can have an effect on a woman's subsequent use of a particular type of contraception method. The results from the Table 4-2 indicate that the highest percentage (20.5%) of respondents have three children. Respondents who reported to have no children had the smallest proportion of 5.5 percent of the study sample.

Table 4-2 Distribution of respondents by number of living children

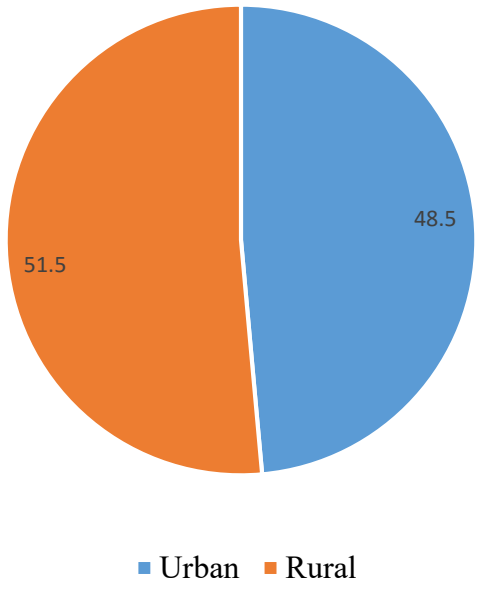
Number of living children	Frequency	Percent
None	77	5.5
1	189	13.4
2	273	19.4
3	289	20.5
4	246	17.5
5	149	10.6
6+	186	13.2
Total	1408	100.0

Source: Computed from the 2014 GDHS dataset

4.3.3 Type of place of residence

Respondents were categorized into either residing in rural or urban areas. Figure 4.3 below shows the percentage of people staying within the rural and urban areas. In this study, the GDHS definition for rural and urban is used which indicates that urban settings are those settlements with a population of 5000 or more people. Rural on the other hand refers to a settlement of less than 5000 people. The chart shows that 48.5 percent of urban and 51.5 percent of rural dwellers were in the sample.

Figure 4-3 Distribution of respondents by type of place of residence



Source: Computed from the 2014 GDHS dataset

4.3.4 Household Wealth Quintile

The household wealth quintile as stated in Table 4-3 is categorized by the respondent being in one of the following five groups: Poorest, Poorer, Middle, Richer and Richest. Respondents categorized as "richest" had the highest percentage (24.6%) at the time of the survey. Also,

respondents in the poorest category were the smallest proportion of 15.7 percent at the time of the survey. This suggests that generally more women in the higher wealth quintiles use contraception.

Table 4-3 Distribution of respondents by household wealth quintile

Household Wealth Quintile	Frequency	Percent
Poorest	221	15.7
Poorer	263	18.7
Middle	266	18.9
Richer	312	22.2
Richest	346	24.6
Total	1408	100.0

Source: Computed from the 2014 GDHS dataset

4.3.5 Religion

The beliefs and norms of various religious groups in Ghana could be related to the type of contraceptive method used by women. Even though there are variations in the literature, previous studies have shown significant associations between Catholics and the use of modern methods of contraception, although their doctrine opposes it (Hill et al., 2014). Other religious groups such as the Protestants and Pentecostals do not oppose the use of modern methods of contraception as indicated earlier. Table 4-4 clearly shows that the religious group with the highest proportion of respondents was the Pentecostal/Charismatic group with a percentage of 43.1. The lowest percentage of respondents was those who responded to be traditionalists/other with 4.3 percent.

Table 4-4 Percent distribution of respondents by religious affiliation

Religion	Frequency	Percent
Catholic	137	9.7
Protestant	178	12.7
Pentecostal	607	43.1
Other Christian	262	18.6
Moslem	163	11.6
Traditional/Other	60	4.3
Total	1408	100.0

Source: Computed from the 2014 GDHS dataset

4.3.6 Ethnicity

Table 4-5 shows that ethnicity is categorized using the five main ethnic groups in Ghana. The classifications include Akan, Mole-Dagbani, Ewe, Ga-Dangme, and Others. Respondents in the 'Others' category are made up of smaller ethnic groups, namely Guans, Gussi, Gurma, Mande, etc. Those who reported to be Akan were more than half (52.6%) of the sample used in the study. Respondents in the "Other" category made up about 12. 2 percent of the study sample. The ethnic groups with the smallest percentage were the Ga-Dangmes.

Table 4-5 Distribution of respondents by ethnic groups

Ethnicity	Frequency	Percent
Akan	741	52.6
Ga-Dangme	99	7.0
Ewe	215	15.2
Mole Dagbani	182	12.9
Others	171	12.2
Total	1408	100.0

Source: Computed from the 2014 GDHS dataset

4.3.7 Educational Attainment

Educational attainment in this study is categorized according to the highest level of formal education a respondent has completed. From the data indicated in Table 4-6, respondents who reported to have been to junior high school (J.H.S.) had the highest percentage of 34.9 percent. Respondents who reported to have higher education had the lowest percentage of 7 percent.

Table 4-6 Distribution of respondents by educational attainment

Highest educational level	Frequency	Percent
No education	274	19.4
Primary	371	26.4
J.H.S	491	34.9
S.H.S	172	12.3
Higher	99	7.0
Total	1408	100.0

Source: Computed from the 2014 GDHS dataset

4.3.8 Region of residence

Respondents for the 2014 GDHS were interviewed from all the ten administrative regions of Ghana. Table 4-7 shows the distribution of respondents by their region of residence. The Greater Accra Region is most represented in this sample of women with 20.5 percent against a 2.6 representation of the Upper West Region, the least.

Table 4- 7 Distribution of respondents by region of residence

Region	Frequency	Percent
Western	147	10.4
Central	163	11.6
Greater Accra	289	20.5
Volta	130	9.2
Eastern	145	10.3
Ashanti	251	17.8
Brong Ahafo	132	9.4
Northern	63	4.5
Upper East	52	3.7
Upper West	37	2.6
Total	1408	100.0

Source: Computed from the 2014 GDHS dataset

4.3.9 Desire for more children

A woman's desire for more children is an important factor in relation to method of contraception used. As indicated in the literature review, the desire for more children may influence women to use less effective traditional methods while the desire for no more children could facilitate the use of modern methods. Table 4-8 shows the highest proportion of the respondents (43.6%) reporting they want no more children. Again, 37.6 percent of the respondents want children after two (2) years. On the other hand, a few of the respondents (9.4%) want children within the next two (2) years.

Table 4-8 Distribution of respondents by desire for more children

Desire for more children	Frequency	Percent
Wants within 2 years	133	9.4
Wants after 2 years	529	37.6
Wants, unsure timing/Undecided	133	9.4
Wants no more	614	43.6
Total	1408	100.0

Source: Computed from the 2014 GDHS dataset

4.3.10 Marital duration

Marital duration may influence the type of contraceptive method a spouse would likely adopt. This is because, studies have shown that couples who genuinely support each other make critical decisions together as a unit which makes their union stronger, and hence they may have a longer duration of marriage or cohabitation (Osei et al., 2014; Islam et al., 2014).

Table 4-9 Distribution of respondents by marital duration

Marital duration	Frequency	Percent
0-4	278	19.7
5-10	307	21.8
11-14	285	20.3
15+	537	38.2
Total	1408	100

Source: Computed from the 2014 GDHS dataset

The results in Table 4-9 indicate that respondents who are married for 0-4 years were the least to be recorded with 19.7 percent of the total sample. Also respondents, who were married for more than 15 years (15+), had the highest percentage of 38.2 percent of the total sample.

4.3.11 Partners' age

Partners' age was categorized as "below 35" and "35+" due to the small number of cases. This suggested that despite having adolescents in the sample, very few women had a partner below age 25 years. The results indicated in Table 4-10 show that respondents whose partners were below 35 were 33.3 percent, exactly one third of the sample while respondents whose partners were 35 years and above, were in the majority at 66.7 percent. Two (2) people in the sample did not know the ages of their husbands and hence were classified as missing.

Table 4-10 Distribution of respondents by partner's age

Partners Age	Frequency	Percent
Below 35	468	33.3
35+	938	66.7
Total	1406	100

Source: Computed from the 2014 GDHS dataset

4.3.12 Partner's highest educational level attained

Partners' educational attainment is a crucial variable in relation to the effect it could have on a woman's type of contraceptive method adopted, as indicated earlier. Table 4-11 below indicates that a high percentage of respondents' husbands/partners (61.5%) have had at least secondary level education. However, 13.4 percent of the respondents reported that their partners had no education.

Table 4-11 Distribution of respondents by partners' educational attainment

Partners education	Frequency	Percent
No education	189	13.4
Primary	150	10.7
Secondary	866	61.5
Higher	203	14.4
Total	1408	100.0

Source: Computed from the 2014 GDHS dataset

CHAPTER FIVE

RELATIONSHIPS BETWEEN SPOUSAL DECISION MAKING, SOCIO-DEMOGRAPHIC, ECONOMIC AND PARTNER CHARACTERISTICS, AND TYPE OF CONTRACEPTIVE METHOD USED

5.1 Introduction

Bivariate relationships between spousal decision making, the socio-demographic and socio-economic characteristics, and the method of contraception used among the respondents are well examined in this chapter. The relationships between the independent, control and dependent variables are analyzed. The associations between these variables are also shown using cross tabulations. A chi-square test is used to assess the significance of the association between the decision making, the type of contraception used and also the control variables.

5.2 Couple's decision making about contraception and type of contraceptive method used

Decision making on contraception in the study is significantly associated with the type of method on the respondents are well examined in this chapter. The relationships between the independent, control and dependent variables are analyzed. The associations between these variables are also shown using cross tabulations. A chi-square test is used to assess the significance of the association between the decision making, the type of contraception used and also the control variables.

of contraception used, that is, whether traditional or modern, at the 95% confidence level. The significant association in one way or the other supports findings by Namuunda and Bakibnga (2014). Table 5-1 indicates that the category that reported the highest use of modern contraception

is the decision made mainly by husbands being 87 percent, followed by the decision made by jointly (85.6%) and then mainly the wife's decision (76.8%).

Table 5-1 Percentage distribution of women's type of contraceptive method by their decision making for contraception

Decision making	Contraceptive Method Type		Percentage	Total
	Traditional	Modern		
Mainly respondent	23.2	76.8	100.0	384
Mainly husband	13.0	87.0	100.0	138
Joint decision	14.4	85.6	100.0	886
$\chi 2$=16.147		df=2		Asymp. Sig = .00

Source: Computed from the 2014 GDHS dataset

5.3 Respondent's socio-demographic, socio-economic and partner characteristics and type of contraceptive method used

Every one of the background characteristics employed in this study as control variables, with the exception of respondents' age, partners age and desire for more children, has a statistically significant association with the type of contraception method used.

5.3.1 Respondent's age and type of contraceptive method used

As shown in Table 5-2, respondents' age is only statistically significantly related to the type of contraceptive method used at the 0.10 significance level. The results show that a higher proportion of older women (19.3%) used traditional methods compared to the women in other age groups.

Table 5- 2 Percentage distribution of women's type of contraceptive method by their age group

Age group	Contraceptive Method Type		Percentage	Total
	Traditional	Modern		
15-24	15.7	84.3	100.0	198
25-34	14.5	85.5	100.0	626
35+	19.3	80.7	100.0	584
$\chi 2$=5.210	df=2			Asymp. Sig = .074

Source: Computed from the 2014 GDHS dataset

5.3.2 Respondent's type of place of residence and type of contraceptive method used

Type of place of residence in this study is an essential control variable as it can determine the respondent's ability to have access to various types of modern methods of contraception. Place of residence had a statistically significant association with the type of contraceptive method used. Results from this finding were consistent with Ochako's (2016) study which indicated that women in rural areas are more likely to use modern methods of contraception. The results presented in

Table 5-3 confirm that type of place of residence is statistically significantly related to the type of contraception method used.

Table 5-3 Percentage distribution of women's type of contraceptive method by their place of residence

place of residence	Contraceptive Method Type		Percentage	Total
	Traditional	Modern		
Urban	23.4	76.6	100.0	683
Rural	10.2	89.8	100.0	724
$\chi 2$=44.200	df=1			Asymp. Sig = .00

Source: Computed from the 2014 GDHS dataset

The results from Table 5-3 show a statistically significant (at $p<0.05$) relationship between place of residence and the type of contraceptive method used. These results show that those in the rural settings had a higher prevalence of traditional contraceptive use while urban respondents recorded a higher proportion (89.8%) of modern methods use.

5.3.3 Respondent's ethnicity and type of contraceptive method used

Ethnicity, in addition to the other control variables, has been considered an important factor in relation to the type of contraception method used. Other studies such as Addai (1996) demonstrated a statistically significant correlation between the method of contraception used and ethnicity. However, his finding indicated that Ewe women are more likely to use modern methods of contraception than the rest of the ethnic groups.

Table 5- 4 Percentage distribution of women's type of contraceptive method by their ethnicity

Ethnicity	Contraceptive Method Type		Percentage	Total
	Traditional	Modern		
Akan	19.5	80.5	100.0	740
Ga-Dangme	21.4	78.6	100.0	98
Ewe	24.2	75.8	100.0	215
Mole Dagbani	4.4	95.6	100.0	182
Others	5.2	94.8	100.0	172
$\chi 2$=50.156		df=4		Asymp. Sig = .00

Source: Computed from the 2014 GDHS dataset

The result from the chi-square test indicates that at a p-value of 0.05, there is a statistically significant relationship between religious affiliation of respondents and the type of method of contraception adopted. Respondents who reported their ethnicity as Mole-Dagbani and those classified as "Other" had the highest percentages of 95.6% and 94.8%, respectively, whilst respondents who reported to be Ewe had the lowest percentage (75.8%) using modern types of contraception.

5.3.4 Respondent's household wealth quintile and type of contraceptive method used

The household wealth quintile as a control variable has also been considered as an important variable in relation to the type of contraceptive method used. This is because women with access to adequate financial resources should have financial access to modern methods of contraception. Despite this, the literature has also identified that in Ghana women in the "elite" group in terms of

socio-economic status are using traditional methods due to a personal preference (Machiyama & Cleland, 2014). The result of the chi square test shows that there is a statistically significant difference between type of contraceptive used and the household wealth of respondents.

Table 5- 5 Percentage distribution of women's type of contraceptive method by their household wealth quintile

household wealth index	Contraceptive Method Type		Percentage	Total
	Traditional	Modern		
Poorest	4.1	95.9	100.0	222
Poorer	8.4	91.6	100.0	262
Middle	10.2	89.8	100.0	266
Richer	22.8	77.2	100.0	312
Richest	30.6	69.4	100.0	346
$\chi 2$=103.286	df=4			Asymp. Sig = .00

Source: Computed from the 2014 GDHS dataset

The results showed that as women's household wealth increased, the higher the proportions using traditional methods. The percentages using modern methods ranged from 95.9 percent among the poorest women to 69.4 percent among the poorest women. Hence, it was rather poorer women relative to their richer counterparts that used modern contraceptive methods.

5.3.5 Respondent's number of living children and type of contraceptive method used

Number of living children as a control variable has also been considered as an important variable related to the method of contraception used. This is because the more children women have, the higher the likelihood that they would resort to more effective (and hence modern) methods of contraception to limits childbearing. Other studies such as Baidoo (2013) demonstrated a statistically significant correlation between the method of contraception used and number of living children that followed the relationship stated.

Table 5-6 Percentage distribution of women's type of contraceptive method by their number of living children

Number of living children	Contraceptive Method Type		Percentage	Total
	Traditional	Modern		
None	33.8	66.2	100.0	77
1	23.3	76.7	100.0	189
2	14.3	85.7	100.0	273
3	15.2	84.8	100.0	289
4	20.7	79.3	100.0	246
5	8.8	91.2	100.0	148
6+	9.7	90.3	100.0	186
$\chi 2=39.754$		df=6		Asymp. Sig = .00

Source: Computed from the 2014 GDHS dataset

Again, the results from the chi-square test indicate that at a p-value of 0.05, there is a significant relationship between the number of living children and the type of method of contraception adopted. The results in Table 5-6 also show that respondents with five and six or more living

children had the highest percentages adopting modern methods of contraception. On the other hand, women with no living children and one child were mostly using traditional methods at 33.8 percent and 23.3 percent, respectively.

5.3.6 Respondent's religion and type of contraceptive method used

Religion has long been considered an important factor in relation to type of contraceptive method adopted. Studies have demonstrated a statistically significant correlation between the importance of religion and religious denomination in relation to the type of contraception method (Agardh et al. 2011). More specifically, the literature indicates that the Catholic and Moslem religions are generally opposed to modern methods as they connote forms of induced abortions (Avong, 2012).

Table 5-7 Percent of women by religion and type of contraceptive method used

Religion1	Contraceptive Method Type		Percentage	Total
	Traditional	Modern		
Catholic	6.6	93.4	100.0	136
Protestant	24.7	75.3	100.0	178
Pentecostal	19.3	80.7	100.0	607
Other Christian	17.1	82.9	100.0	263
Moslem	9.8	90.2	100.0	163
Traditional/Other	6.6	93.4	100.0	61
$\chi 2=31.170$		df=5		Asymp. Sig = .00

Source: Computed from the 2014 GDHS dataset

The results from the chi-square test indicate that there is a statistically significant relationship ($p<0.05$) between religious affiliation and the type of method of contraception adopted by women. Respondents who reported to be Catholic and Traditionalist or Other recorded the highest percentages of 93.4 percent each using modern methods.

5.3.7 The desire for more children and type of contraceptive method used

The relationship that exists between respondent's desire for more children and the type of contraceptive method adopted was also assessed. The results are clearly illustrated in percentage distributions in Table 5-8.

Table 5-8 Percent of women by desire for more children and type of contraceptive method used

Desire for more children	Contraceptive Method Type		Percentage	Total
	Traditional	Modern		
Wants within 2 years	21.1	78.9	100.0	133
Wants after 2 years	14.2	85.8	100.0	529
Wants/Undecided	19.7	80.3	100.0	132
Wants no more	17.3	82.7	100.0	614
$\chi 2$=5.226		df=3		Asymp. Sig = .156

Source: Computed from the 2014 GDHS dataset

The results in Table 5-8 show no statistically significant ($p<0.05$) relationship between respondents' desire for more children and their type of contraceptive method adopted. The results illustrate that respondents who wanted children after two years and those who reported to want no more had the highest proportions of 85.8% and 82.7% respectively. Respondents who reported to want children within the next two years had the lowest percentage (78.9%) using modern methods of contraception.

5.3.8 Respondent's educational level and type of Contraceptive method used

The highest educational level attained by the respondent as a control variable has also been considered as an important variable in relation to the use of modern contraception. Studies such as

Bawah (2002) demonstrated a correlation between educational level and the method of contraception used. He found that women with higher levels of education had a higher use for modern family planning methods.

Table 5- 9 Percent of women by level of education and type of contraceptive method used

Highest educational level	Contraceptive Method Type		Percentage	Total
	Traditional	Modern		
No education	6.2	93.8	100.0	247
Primary	11.3	88.7	100.0	371
J.H.S	19.1	80.9	100.0	491
S.H.S	32.0	68.0	100.0	172
Higher	26.3	73.7	100.0	99
$\chi 2$=67.104		df=4		Asymp. Sig = .00

Source: Computed from the 2014 GDHS dataset

The results from Table 5-9 display a statistically significant relationship between respondents' educational level and their type of contraceptive method adopted. The results clearly show that respondents who reported to have no education recorded the highest percentage (93.8%) using modern methods of contraception. Interestingly, respondents who reported to have S.H.S education and Higher education had comparatively lower percentages of 68% and 73.7% respectively using modern contraceptive methods. This demonstrates the relationship seen by Machiyama and Cleland (2014).

5.3.9 Respondent's partners' education and type of contraceptive method used

Partner's education, another vital variable related to method of contraception used is also considered and analysed. Islam et al.,(2014) demonstrated a significant association between the modern contraception and partner's education.

Table 5-10 Percent of women by partner's educational level and type of contraceptive method used

Partners education	contraception method type		Percentage	Total
	Traditional	Modern		
No education	2.6	97.4	100.0	189
Primary	2.7	97.3	100.0	150
Secondary	19.1	80.9	100.0	865
Higher	29.9	70.1	100.0	204
$\chi 2=77.174$	df=3			Asymp. Sig = .00

Source: Computed from the 2014 GDHS dataset

The results from Table 5-10 indicate a statistically significant relationship at $p<0.05$ between respondents' partners' education and their type of contraceptive method used. The result is quite interesting in that respondents whose partners were recorded to have no education and primary education had the highest percentages (97.4% and 97.3 %) using modern types of contraception. Also the results evidently illustrates that respondents who reported that their partners had attained higher education had a comparatively lower percentage using modern methods (70.1%).

5.3.9 Respondent's partners age and type of contraceptive method used

Partners' age is considered as an important variable in relation to method of contraception used. The result showed in Table 5-11 is consistent with some literature. Some of the reasons are often listed by the fact that partners in their younger ages (below 35) try as much as possible to use modern methods of contraception to prevent unwanted pregnancies and also to space their births (Irani,2014). This association was, however, not statistically significant at 95% confidence level. There were also three (3) missing cases within this category. This was due respondents who did not know their partners ages.

Table 5-11 Percentage distribution of women's type of contraceptive method by their respondents' partners' age.

Partners Age	Contraceptive Method Type		Percentage	Total
	Traditional	Modern		
Below 35	14.7%	85.3%	100.0%	468
35+	17.6%	82.4%	100.0%	937
$\chi 2$=1.847	df=1		Asymp. Sig = 0.99	

Source: Computed from the 2014 GDHS dataset

5.3.10 Respondent's marital duration and type of contraceptive method used

Marital duration as showed in Table 5-12 is statistically significantly related to type of contraceptive method used at the bivariate level. Couples who were married for 15 or more years reported the highest percentage (83.3%) using modern methods of contraception. Again, couples

who were married for 0-4 years had the lowest percentage (76.3%) using modern methods of contraception. The findings here were consistent with a study by Khan (2012).

Table 5- 12 Percent of women by marital duration and type of contraceptive method used

Marital duration	Contraceptive Method Type		Percentage	Total
	Traditional	Modern		
0-4	23.7%	76.3%	100.0%	278
5-9	8.5%	91.5%	100.0%	307
10-14	19.3%	80.7%	100.0%	285
15+	16.2%	83.8%	100.0%	537
$\chi 2$=14.894		df=2		Asymp. Sig = .01

Source: Computed from the 2014 GDHS dataset

5.3.11 Respondent's region and type of contraceptive method used

The respondents' region of residence can also be another determining variable in relation to the method of contraception used. Table 5-13 illustrates the proportions of women across the various regions of Ghana by their type of contraceptive method adopted.

Table 5- 13 Percentage distribution of women's type of contraceptive method by their region of residence

Region	Contraceptive Method Type		Percentage	Total
	Traditional	Modern		
Western	13.6%	86.4%	100.0%	147
Central	11.7%	88.3%	100.0%	163
Greater Accra	32.3%	67.7%	100.0%	288
Volta	8.5%	91.5%	100.0%	129
Eastern	13.1%	86.9%	100.0%	145
Ashanti	20.3%	79.7%	100.0%	251
Brong Ahafo	12.9%	87.1%	100.0%	132
Northern	3.2%	96.8%	100.0%	63
Upper East	1.9%	98.1%	100.0%	52
Upper West	2.7%	97.3%	100.0%	37
$\chi 2=87.554$		df=9		Asymp. Sig = .00

Source: Computed from the 2014 GDHS dataset

The results in Table 5-13 show a statistically significant relationship between respondents' region of residence and their type of contraceptive method adopted. The results clearly illustrate that respondents who resided in the Greater Accra Region had the lowest percentage (67.7%) whilst respondents in Upper East had the highest percentage (98.1%) using modern contraceptive methods.

In summary, the results show that at the bivariate level, decision making is statistically significantly related to the type of contraceptive method used among married women in Ghana. All other controlled variables with the exception of respondents age group and desire for more

children were statistically significantly associated with method of contraception used at the 0.05 significance level ($p<0.05$). Interesting findings were with respondents and partners education, region, and place of residence, and wealth quintile. These findings seem to corroborate results from the literature that the "elite" women are "attitudinally resistant" to modern and most hormonal methods of contraception (Machiyama & Cleland, 2014). Higher proportions of these women who want to still prevent pregnancy are using traditional contraception. For example, with respondents' educational attainment, the results show that women who report to have no education recorded the highest percentage (93.8) using modern methods of contraception. On the other hand, respondents who reported to have had S.H.S and Higher educational attainment levels had comparatively lower percentages with 68.0 percent and 73.7 percent respectively, using modern contraceptive methods. Again, with region and place of residence, we see that women who are in the Greater Accra Region reported the smallest percentages using the modern types of contraceptives. This finding is not surprising since respondents from the urban areas were also shown to have had a lower proportion (76.6%) than those in the rural areas using modern methods of contraception.

CHAPTER SIX

RELATIONSHIP BETWEEN DECISION MAKING, SOCIO-DEMOGRAPHIC AND ECONOMIC CHARACTERISTICS, AND TYPE OF CONTRACEPTIVE METHOD USED

6.1 Introduction

Results of the binary logistic regression analyses conducted to examine the association between spousal decision making and the type of contraceptive method used are presented in this section. The binary logistic regression models were conducted to examine the effect of spousal decision making on the type of method of contraception used. Two regression models were run, the first excluded the socio-demographic, socio-economic and partner characteristics, while the second model controlled for these to obtain the adjusted estimates.

6.2 Influence of women's decision making on type of contraceptive method used

This chapter is based on two models as indicated earlier. Model 1 considers the effects of spousal decision making on the type of contraceptive method used without controlling for the background and partner characteristics. However, in Model 2, decision making is included as a predictor variable while controlling for the background as well as partner characteristics. The dependent variable, method of contraception used, was coded as '0' for traditional methods and '1' as modern methods; hence, we interpret with reference to use of modern methods, the category of interest.

Table 6- 1 Binary logistic regression models showing the association between decision making and the type contraceptive method used

Model 1		
Independent Variable	**OR 95% CI**	**P-value**
Decision making		**.000**
Mainly wife (ref)	1.00	
Mainly husband	1.98 [1.15, 3.43]	.014
Joint decision	1.79 [1.32, 2.43]	.000
Constant	5.95	
Correct % Prediction	83.3%	
Nagelkerke R^2	1.80	
Model Chi-square (df)	15.29 (2)	

Source: Computed from GDHS (2014) Data

In Model 1 which is shown on Table 6-1, decision making was a statistically significant predictor of modern contraceptive use. The results indicate that when the husband mainly makes the decision to use contraception, the respondent is 0.98 times more likely to use modern methods compared to when the respondent mainly makes the decision. Consequently, the results also indicate that when joint decision making is used to decide on contraception by couples, women are 1.79 times as likely to use modern methods of contraception as when the decision is mainly by the wife.

The significance of the association between decision making and the type of contraceptive method used is so strong that it confirms the hypothesis that couples that make a joint decision are more likely to use a modern method of contraception than when the wife makes the decision alone. The Nagelkerke R^2 value of 0.018 shows that only 1.8% of the variation in type of contraceptive method used is explained by spousal decision making, indicating a poor fit.

Table 6-2 Binary logistic regression models showing the association between decision making, other control variables and the type of contraceptive method used

Model 2		
Variables	**OR 95% CI**	**P-value**
Decision Making		
Mainly wife (ref)	1.00	
Mainly husband	1.19 [0.63, 2.24]	0.586
Joint decision	1.58 [1.09, 2.28]	0.015
Age group		
15-24 (ref)	1.00	
25-34	1.27[0.69, 2.33]	0.444
35+	0.62 [0.27, 1.41]	0.250
Highest educational level		
No education(ref)	1.00	
Primary	1.24[0.62, 2.46]	0.546
J.H.S	0.62[0.31, 1.23]	0.168
S.H.S	0.42 [0.19, 0.17]	0.679
Higher	0.87 [0.53, 1.41]	0.565
Place of residence		
Urban (ref)	1.00	
Rural	1.09[0.67, 1.77]	0.743
Household wealth index		
Poorest (ref)	1.00	
Poorer	1.10[0.44, 2.74]	0.836
Middle	1.21 [0.48, 3.08]	0.686
Richer	0.70 [0.27, 1.83]	0.461
Richest	0.74[0.25, 2.16]	0.578
Region		
Western (ref)	1.00	
Central	1.66[0.79, 3.47]	0.180
Greater Accra	0.56[0.3, 1.07]	0.079
Volta	3.06 [1.15, 8.13]	0.025
Eastern	1.32 [0.63, 2.76]	0.462
Ashanti	0.80 [0.42, 1.51]	0.494
Brong Ahafo	0.87 [0.40, 1.88]	0.720
Northern	1.09 [0.20, 6.29]	0.924
Upper East	2.52 [0.23, 27.16]	0.447

Upper west	1.99 [0.14, 28.81]	0.615
Religion		
Catholic (ref)	1.00	
Protestant	0.29[0.12, 0.67]	.004
Pentecostal	0.51 [0.23, 1.12]	.093
Other Christian	0.68 [0.29, 1.57]	.364
Moslem	0.34 [0.13, 0.91]	.032
Traditional/Other	0.65 [0.17, 2.54]	.534
Ethnicity		
Akan (ref)	1.00	
Ga Dangme	1.68[0.87,3.23]	0.120
Ewe	0.41[0.24,0.69]	0.001
Mole Dagbani	2.66[1.06, 6.65]	0.037
Other	3.14[1.30, 7.61]	0.011
Number of living children		
0 (ref)	1.00	
1	1.09[0.52, 2.38]	0.806
2	2.05 [0.91, 4.65]	0.084
3	2.50[1.01, 6.19]	0.047
4	2.03 [0.79, 5.24]	0.143
5	3.93[1.28, 11.96]	0.016
6+	2.83 [0.912, 8.75]	0.070
Desire for more children		
Wants within 2 years (ref)	1.00	
Wants after 2 years	1.02[0.56, 1.85]	0.944
Wants/Undecided	0.93[0.46, 1.89]	0.839
Wants no more	1.18[0.64, 2.19]	0.601
Marital duration		
0-4 (ref)	1.00	
5-9	1.87 [0.98, 3.55]	0.058
10-14	0.67 [0.32, 1.34]	0.249
15+	0.55[0.24, 1.28]	0.165

Partners education		
No education (ref)	1.00	
Primary	1.55[0.37, 6.43]	0.545
Secondary	0.36[0.13, 1.00]	0.050
Higher	0.24 [0.078, 0.74]	0.013
Partners Age		
Below 35 (ref)	1.00	
35+	1.15 [0.071, 1.87]	0.565
Constant Correct % Prediction Nagelkerke R^2 Model Chi-square (df)	20.8 85.50% 29.50% 271.0 (47)	

The results from Table 6-2, which shows Model 2, also indicate that the type of contraceptive method used is significantly influenced by spousal decision making. This is consistent with some study findings in sub-Saharan Africa, and even in Ghana, which showed associations between decision making and some indicators of the type of contraceptive method used (DeRose, 2010). However, it is worth noting that having controlled for other variables in Model 2, the likelihood of women using a modern type of contraception by joint decision making is 58 percent more than the reference category as opposed to being 79 percent more likely in the previous model. This particular finding was statistically significant at the 95% confidence level. It means that the hypothesis that couples who make joint decisions are more likely to use modern types of contraception than wives deciding alone is once again supported by the findings at a 95% confidence level. In addition to this, husbands who make the decision alone are 0.19 times more likely as the reference category to use modern methods of contraception. However, this result is not significant once control variables are incorporated into the model. The major import of this finding is that joint decision making by couples in Ghana is more likely to result in the use of modern methods compared to sole decision making. This finding confirms that joint decision

making is the ideal means to adopt as it ensures that couples are using more effective contraception methods (Bawah, 2002; Islam et al., 2014).

In terms of women's background characteristics, ethnic groups such as Ewe, Mole-Dagbani and "Others" showed statistically significant associations with modern contraceptive usage. Ewes were 0.59 times less likely than Akans to use modern contraception. This result is not consistent with Addai's (1999) study which suggested that Ewes were more likely to use modern methods of contraception than the other ethnic groups. Again, Mole-Dagbanis were 2.66 times more likely to use modern methods of contraception than Akans who are the reference category. 'Other' ethnic groups were also 2.14 times more likely to use modern methods of contraception. These results could suggest that the efforts to target the most pronatalist ethnic groups in Ghana are working as these groups are now more likely to use modern methods than Akans.

Again, the Volta region showed statistically significant association with respect to respondents region of residence. The result indicates that, women from the Volta region were 3.06 times as likely as the reference category which is the Western Region. Also, Greater Accra showed a marginal significance of 0.079 with an odds ratio of 0.56 times as likely as the reference category in using modern methods of contraception. The Greater Accra Region holds the nation's capital city and is recognized as the most urbanized city in Ghana, therefore it was expected to have higher odds of using modern methods of contraception when controlling for other factors but this was not the case.

Religious groups also showed a statistically significant relationship with the type of modern contraceptive use at the multivariate level in this model. Protestants and Muslims were 0.29 and 0.34 times, respectively, as likely as the reference category in using modern methods of contraception. Protestants and Muslims do not have strict doctrines preventing them from using modern contraception. This indicates that they are less likely than the reference category to use

modern contraception. Catholics on the other hand, do not entertain the use of modern methods of contraception. However, the results indicate that Catholics are more likely to use modern methods than the other religious groups. This finding is consistent with studies from Hill et al., 2014 and Avong, (2012) which also suggest likewise.

From the table, women with three (3) and five (5) living children showed statistically significant associations with modern method use. Women with three living children were 2.50 times as likely as women with no children – which are the reference category – to use modern methods of contraception. Again, women with five living children were 3.93 times as likely to use modern methods of contraception. This confirms the second hypothesis that women with higher numbers of children are more likely to use modern methods of contraception. This study was consistent with literature as was stated earlier. Studies such as Oyeka (1989) and Lasee and Becker (1996) also explained this negatively related significant association between the number of living children and modern contraceptive use.

With marital duration, women who had married for 5-9 years showed statistically significant association with modern contraception used. The results showed that women who had married for 5-9 years were 0.87 times more likely than those who were married for 0-4 years which was the reference category. This confirms what Osei et al. (2014) discussed about women not using modern methods soon after marriage/union in order to have children. After having some children, they then adopt modern methods to space or limit childbearing.

Finally, partner's education showed a statistically significant association with using modern methods of contraception. The results in the Table 6-2 show that women whose partners had secondary and higher education were 0.36 and 0.24 times, respectively, as likely as partners with no education, which is the reference category, to use modern methods of contraception. This finding is consistent with Machiyama and Cleland (2014) which indicate that partners with higher

education are less likely to adopt modern methods of contraception. This suggests that higher educated partners behave like the “elite” women mentioned by Machiyama and Cleland (2014).

CHAPTER SEVEN

SUMMARY, CONCLUSION AND RECOMMENDATION

7.1 Summary of Findings

The main objective of the study was to examine the effects of spousal decision making in Ghana and its association with the type of contraceptive method used among women in Ghana. The dataset used for the study was the 2014 Ghana Demographic and Health Survey women's file and the weighted sample consisted of 1,408 married or cohabiting women who were currently using a method of contraception. Spousal decision making and the type of contraceptive method used was investigated by using cross tabulations and binary logistic regression techniques to assess their associations.

At the univariate level of analysis, the results showed that regarding decision making on the method of contraception, about 63 percent of women reported joint decision making while about 27 percent of decisions were made mainly by the wife (respondent). The remaining (9.8%) were found to be decisions made mainly by the husband/partner. The proportions using the types of contraceptive methods were 83.3 percent for those who were currently using the modern method and 16.7 percent for traditional method users. This provides evidence that the majority of Ghanaian women in union who were contracepting are current modern contraceptive users.

The bivariate stage of analysis indicated results between decision making and the type of contraceptive method used. In addition, respondents' socio-economic, demographic and partner's characteristics and type of contraceptive method used were also tested to assess their relationships. The results showed a statistically significant relationship between decision making and the type of contraceptive method used. Cross tabulation results confirmed that modern contraceptive method

use of contraception was highest among those who made the decisions jointly, followed by husband alone and lastly respondent alone.

The educational level attained by respondents' partners or husbands showed a significant relationship with the type of contraceptive method used. Modern contraceptive use is highest among women whose partners have Primary and no education and least among women whose husbands have higher educational attainment.

Type of place of residence, region of residence, ethnicity, religion, marital duration, household wealth quintile and number of living children are some of the respondents' demographic and socio-economic characteristics which were significant at the bivariate level. Respondents' age group, partners' age and the desire for more children variables showed no significance in the analysis.

At the multivariate level, two binary logistic regression models were run to determine the relationship between decision making and the type of contraceptive method used. In model 1, the effect of spousal decision making was analyzed while in model 2 the relationship was assessed but included control variables significantly associated with the type of contraceptive method used in the literature.

Findings from the analysis (model 1) indicated that decision making had a significant effect on the type of contraceptive method used, before other characteristics were controlled for. This finding confirmed the first hypothesis that spouses who make joint decisions are more likely to use modern methods of contraception than when the wives make the decision to use contraception alone. The second hypothesis stated that the higher the number of children a woman has, the more likely she is to use modern methods of contraception this hypothesis was also confirmed in the study.

Characteristics that emerged as significant predictors of the type of contraceptive method used are, religion, ethnicity, partner's educational attainment, and region of residence.

7.2 Recommendations

Based on the findings of the study, the following recommendations are proposed. First, there should be more campaigns, especially through the mass media, to encourage joint decision making between spouses/partners. In doing this, couples can agree on issues concerning their desired number of children, contraception and other related reproductive issues. This will also ensure a higher likelihood of consistent modern method use.

Secondly, educated men should be targeted with campaigns, workshops and seminars to sensitize them on the benefits of using modern methods of contraception. They can then relay this information to their partners. Most importantly, couples should be encouraged to seek reproductive health counseling from health centres together. This will help them gain more insights on the whole concept of modern contraception, its possible side effects and also benefits.

In addition, counseling efforts should be intensified for couples with more living children, especially those with more than the average of four. The results show they are adopting modern methods, however, they should be encouraged further by health professionals and birth attendants to consider using modern methods consistently to limit their births.

Finally, efforts should be intensified so that improved and appropriate educational campaigns as well as family planning services shall be made available to sensitize religious and ethnic groups on the importance of modern contraception. Couples in our various ethnic groups should readily have access to reproductive health education in their local dialects to encourage improved reproductive health care and an increased use of modern contraception. The efforts that are currently being made in the parts of Ghana with higher modern contraceptive use can also be adopted. For example, the convenience of community health nurses providing family planning

services during their outreach activities could be adopted as it may play a role in women's use of these methods.

7.3 Conclusion

It is now evident that modern contraceptive prevalence is low, and the unmet need of couples is much higher than before. The literature has established a relationship between spousal decision making and contraceptive use; however, this study sought to examine the relationship with the type of contraceptive method a couple used. Spousal decision making showed statistically significant associations with the type of contraceptive method used. Also, the number of living children, ethnicity, partners' education, religion, and region of residence were seen as statistically significant correlates of type of contraceptive method. In the light of this, policy makers should do more to improve the ability of reproductive healthcare centres to counsel couples on the need for spousal communication and decision making on modern contraception and family planning methods. There is the need to explore this in detail with further studies on spousal decision making and how it influences other reproductive health issues.

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