

**EFFECT OF HUSBAND'S EDUCATIONAL ATTAINMENT ON WIFE'S  
CONTRACEPTIVE USE IN KENYA**

**BY**

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**Q50/70984/2007**

**This research project is submitted in partial fulfillment of the requirements for the  
award of the Degree of Master of Arts in Population Studies at the Population  
Studies and Research Institute (PSRI) of the University of Nairobi.**

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**NOVEMBER 2012**

**DECLARATION**

This research project is my original work and has not been presented for a degree award in any other university.

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## **DEDICATION**

To My wife Peninah, Daughters Maureen and Rose, Mother and Late father who ensured I went to school.

## ACKNOWLEDGEMENT

The successful completion of this research project would be incomplete without expressing my gratitude and respect to all those who helped me in the completion of this project. My sincere thanks and deep sense of gratitude is to my supervisors Dr. Wanjiru Gichuhi and Mr. Andrew Mutuku for their encouragement, support and guidance to complete this project work successfully.

I express my heartiest thanks to all the entire Population Studies and Research Institute staff for their academic and moral support during the entire Master programme.

Finally, I also express my thanks to my family for their support during the entire Masters programme.

## ABSTRACT

This study sought to establish the effect of husband's educational attainment on woman's contraceptive use in Kenya. Data was obtained from the couple file of 2008-2009 KDHS. The unit of analysis is the couple. The main methods of data analysis were descriptive statistics and logistic regression. The dependent variable was contraceptive use while the key independent variables were educational attainment of both the husband and the wife. Other control variables included were; birth order, knowledge of modern method of contraception, discussion of family planning, place of residence and region of residence. The results of the bivariate analysis showed that both husband's and wife's educational attainment were significantly associated with modern contraceptive use in Kenya. They also showed that type of place of residence, region of residence, religion, birth order, and discussion about family planning are significant. The results of logistic regression analysis showed that both the husband's and wife's education were significant in adoption of modern contraception compared. When you control for socio-economic and demographic factors, the effect of husband's and wife's educational attainment on modern contraceptive use ceases to be significant. However birth order, region of residence, religion and discussion about family planning show they are significant. The study implications are that policies and programmes to increase contraceptive use should not ignore the contribution of husband's education to adoption of modern contraceptive use. Policies and programmes on family planning should also consider region of residence, religion and birth order and discussion of family planning as important factors in adoption of modern methods of contraception.

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## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background

Contraceptive use is the proximate determinant that has the greatest impact on fertility levels in modern societies (Bongaarts 1983). Contraceptive Prevalence Rates (CPRs) are critical for estimating the needs of family planning programmes and for evaluating the impact of such programs, as well as for projecting fertility levels and population change (Becker, 2001).

Formal education is one of the main avenues through which the transition from natural to deliberate fertility takes place (Kwame. 2002; Hardee 2004). Formal education gives access to information through mass media and printed materials to broaden the couple's horizon. With access to information, the educated couple is more likely to know of, and practice modern contraception to prolong birth intervals or cease childbearing when the desired number is attained. Second, formal education socializes the individual into new behavior patterns like the rejection of traditional norms of procreation. The acquisition of new values undermines traditional practices that inhibit the application of scientific knowledge which increases a woman's chance of using more effective modern contraception (Kwame. 2002; Frost, Singh et al. 2004). Also, education allows couples to get the necessary skills and qualification for engagement in high-paying jobs in the modern sectors of the economy. This provides economic incentives for them to desire smaller families and economic ability to procure more effective methods of contraception (Kwame. 2002; Frost, Singh et al. 2004).

Husband's education plays an important role in determining present occupation, the type of woman he marries (in terms of her education, her age at first marriage, and the size of his family (parity). These variables will, in their turn, influence the woman's reproductive behavior, because the decision to use contraception is, in part, based on the number of living children at the time the practice begins (Green 2000; Nyauchi 2010; Suresh 2011). In sub-Saharan Africa, 'logic dictates that individuals who have as many children as they want or more would seek a means of preventing further births and that those who have fewer than they desire, but who want their additional children at

preferred intervals (not achieved by abstinence or prolonged breastfeeding), would adopt a contraceptive' (Acsadi, 1990).

Contraceptive use is higher where women have access to decent jobs, good health care, and family planning resources-which are more available in urban areas than in rural ones. Use of family planning methods is facilitated when couples discuss and agree on the issue (KNBS, 2010; Suresh, 2011).

Government intervention can influence fertility level by making the population access contraceptive methods such as sterilization and abortion, bringing in changes in the attitudes towards perceived role of socio-economic determinants e.g. education, literacy (especially for girls), status of women, income and income equity, reproductive and child health issues (Usha, 2009).

As early as 1967, Kenya had adopted a family planning programme that was meant to solve the problem of ever increasing population size that would be costly to the countries development (Ngalinda, 1998; Nyauchi, 2010) Therefore it was expected that it would be among the first African states to witness demographic transition process that would be necessitated by increased contraceptive knowledge and use. However, due to several reasons, there was a delay in active implementation of the programme that started almost two decades after its adoption and subsequent delay in entry into demographic transition. This meant that the programme posted little success during this period with both the total fertility and population growth rates soaring to all time records of 7.9 and 3.8 percent (NCAPD/UNFPA, 2010).

In the year 2000, the government of Kenya set specific targets to increase contraceptive prevalence from 33 percent in 1993, to 53 percent and 62 percent in 2005 and 2010 respectively (NCAPD/UNFPA, 2010) even though the proportion of women who currently use contraceptive services has constantly increased over the years, thus gradual decline in fertility, the rates are still below par (Magadi et al, 2003). Educational attainment has an influence on social-economic and institutional factors such as the place and region of residence, level and source of income, education of the children and health and nutrition of the family (Gubhaju, 2009) Educational attainment is a key determinant of the lifestyle and status an individual enjoys in a society. Educational attainment has a strong effect on health behaviors and attitudes (Jane, 1996).

This study sought to examine and provide an insight into the role of educational attainment on contraceptive use within the family. Contraceptive use increases with level of education whereby use of any method increases from 14 percent among married women with no education to 60 percent among women with at least some secondary education (KNBS 2010).

## **1.2 Problem Statement**

Contraceptive Prevalence Rate (CPR) increased rapidly from 9.7 percent in 1984 to 39 percent in 2003. While the country records an increase in contraceptive prevalence (contraceptive prevalence rate in 1998 was 39 percent and in 2003 it was still 39 percent. But in 2008-09 it increased to 46 percent (KNBS, 2010; CBS et al, 2010), the change is dramatic and desirable for a country that is on her process of fertility transition. Less dramatic is the decline in population growth rate, from 2.9 percent in 2009 (CBS, et, al 1999, 2009) which is associated with a large proportion of the youth, especially in their reproductive ages, causing a population momentum.

Couples who have attained higher levels of education are more likely than others to practice contraception (Gubhaju, 2009). For example, study using data from the Vietnam DHS, education level had greater influence on contraceptive use than did wives' education level alone. In two Turkish studies couples education was strongly associated with the use of withdrawal. However, another Turkish study found no association between husbands' education and method choice after controlling for wives' education. (Gubhaju, 2009). In both 1996 and 2001 surveys, current use of any contraceptive method rose with couple's education levels. By 2006, however, there was almost no difference in contraceptive use by education. Couples who have attained higher levels of education are more likely than others to practice contraception (Gubhaju, 2009). This raises important, unexplored questions about the couple-level dynamics that influence the relationship between the education levels of husbands and wives and their choices of family planning methods (Kwame, 2002; Frost, Singh et al, 2004). For example, how does method choice vary if both the husband and the wife are uneducated, if both are educated, if the husband is more educated than the wife and if the wife is more educated than the husband? Previous studies have explored the independent and additive effects of partners' education levels on family planning; however, few have explored how the

education levels of both partners may combine to influence the types of contraceptive methods used by couples (John, 2007; Gubhaju, 2009).

Research on the relationship between husbands' education and contraceptive use has been inconclusive, as studies have found varying effects of husbands' education on both use and method choice (John, 2007; Gubhaju, 2009). The potential influence of husbands' educational attainment on their wives' contraceptive behavior, has prompted researchers to consider the role of men in family planning and the relative influence of husbands and wives on contraceptive use (Gubhaju, 2009). In most previous studies, education levels of both partners and their influence on contraceptive use have been considered separately in analytical models. Thus, the independent and additive effects of each partner's education on contraceptive behavior have been well assessed. However, the combined effects of husbands' and wives' educational attainment have not been investigated (Magadi, 2003) This research will find out how the combined husband and wife educational attainment affects contraceptive use.

Available literature (Jennifer et al, 2004; Karen et al, 2004) shows that, most studies on contraceptive use have concentrated on women leaving the role played by men in contraceptive use. Men have been known to greatly influence the fertility behaviour of their partners. Little is known about interaction of both partners educational attainment in relation with other socioeconomic and demographic factors such as age, region of residence, parity, spousal communication about family planning, knowledge about family planning and how they influence contraceptive use (Lasee. 1997; Anne, 2003). This study will therefore seek to answer the following question:

- What role does the educational attainment plays in contraceptive use of women of childbearing age?

### **1.3 Objectives of the Study**

The general objective of the study was to investigate the effect of educational attainment on women's contraceptive use in Kenya.

The specific were:

- To determine the effect husband's educational attainment has on the women's contraceptive use in Kenya.

- To determine whether the effect of husband's educational attainment is attenuated by the effect of other factors.

#### **1.4 Justification of the Study**

World population growth has being unprecedented in the last century which has been a major concern at the international level as its seen as a major impediment to contemporary efforts to alleviate poverty. The world population took millions of years to reach the first billion and only 13 years to cover the fifth billion. Likelihood of overpopulation led to a variety of responses such as public policies and programmes involving coercive control measures (forced sterilization, for example) considered as vehicles for reducing aggregate fertility and thereby population growth in the countries including China and India (Usha, 2009; Suresh, 2011).

Contraception is one of the most important measures to reduce burden of unwanted pregnancy and promote healthy living among young women(Usha, 2009). Previous efforts and research on family planning, contraception and fertility has been directed towards females. This research has insights into the role that both husbands educational attainment plays on overall contraception use and in turn an effect on levels of fertility considering that the husband is key in determining the number of children and contraceptive use within the family. The limited research in this study area creates a need in-order to have a better understanding of any relationship (Gubhaju, 2009; Suresh, 2011).

The findings of the study can help policy makers to incorporate both partners and more specifically their educational attainment as a key player in efforts to increase contraceptive use. The study will enable couples to participate in contraceptive initiatives by the government to increase contraception and reduce fertility rates. It will also give recommendations to policy makers and programme managers to integrate both partners educational attainment in population policies and development.

The fact that both husbands education plays a great role in determining many factors within the family such as income levels and sources of income, place of residence, number of children, nutrition and health status, marriage age etc necessitates this study since it may be hypothesized that it has an impact on contraceptive use. However, the relationship has not been determined and therefore the need for this study.

### **1.5 Scope and Limitations of the Study**

The study uses the 2008-09 Kenya Demographic and Health Survey (KDHS), a nationally representative sample survey of 8,444 women and 3,465 men selected from 400 sample points (clusters) throughout Kenya (KNBS, 2010). This study aimed at looking at the relationship between husband's educational attainment and contraceptive use in Kenya. It will find out how other control factors such as place and region of residence, age of wife, parity and communication have impact on wife's involvement in contraceptive use.

Limitations of the couple-level approach are it does not cover the preferences and behavior of men and women who are not in a legal or cohabiting union (Bankole, 1998) (APHRC, 2011). The data are also limited in that the DHS uses structured interviews that do not probe deeply into most topics and usually do not include open-ended questions (Bankole, 1998). Some relevant questions in some regions may be avoided due to cultural preferences or concerns which prevent deeper coverage of some of the issues examined here. Furthermore, the lack of uniformity in the ages of male respondents leads to some bias in overall comparisons. Nevertheless, KDHS is among a set of high quality data collected with technical assistance from measure DHS which has provided such assistance to developing countries to ensure the collection and data analysis meets international standards.

## CHAPTER TWO

### LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

#### 2.1 Introduction

This section looks at various studies, theories and literature from various scholars on fertility and contraceptive use more specifically the effect of partner's educational attainment on women contraception use. It highlight various studies within and outside Kenya on the influence of partner's educational attainment on family planning and more specifically contraceptive use and the interaction of various factors with partner's educational attainment to determine woman contraceptive use.

#### 2.2 Theoretical Background

Davis and Blake (1956) model start from the premise that reproduction involves three necessary steps: intercourse, conception and completion of gestation. Therefore any decision by the partners that impedes any of the steps would reduce fertility. Any deliberate practice undertaken to reduce the risk of conception is considered as contraception (Mturi, 1996). (Hennink, 1997) similarly defines contraceptive use as "the deliberate employment of a technique or devise to prevent conception. The integration of Davis and Blake (1956) and Butalao and Lee (1983) frameworks, the proportion of current contraceptive users in a population is a product of new users (adoption), continuing users (continuation) and those who have resumed use (resumption). This can be used to distinguish between pre-adoption and post-adoption stages of contraceptive use. These stages are themselves influenced by socio-economic such as education, cultural and macro factors. According to the "new home economic model" also known as micro demand theory of fertility as presented by Gary Becker (1960), it adopted a demand approach of fertility, seeing decision about the number, timing and quality of children as the outcome of rational decision making, maximizing the utility to be gained from fertility decision subject to the resources available and the rates (prices) at which they may be transformed into competing sources of utility.

In the supply demand framework, Easterlin maintains that the level of fertility in a society is determined by the following choices made by individual couples within their cultural (and household) context: the demand for a couple's ideal number of surviving



children if fertility regulation costs were costless, the biological potential supply or output of children (determined by fecundity) if parents did not consciously control fertility and lastly the regulation costs of fertility such as the costs of contraception. Decision making consists of three elements: knowledge, motivation and assessment of fertility regulation (Graziella et al, 2006). The initial step involves being aware of the alternative to influence ones cost reproductive behavior. However knowledge alone would not be sufficient to influence fertility regulation though it is a precondition. The second stage involves motivation influenced by socioeconomic, cultural and family life cycles patterns. The concept of motivation is used widely in economic models of fertility in which motivation is defined as the balance between supply and demand (Davis & Blake, 1956). The last stage is assessment which is the weighting of the positives and negatives of contraceptive adoption (Graciella et al, 2006)

## **2.3 Literature Review**

### **2.3.1. Educational Attainment**

Knowledge of contraception has increased enormously in recent decades. In most countries, women and men are fairly well informed about different methods and their costs, side effects, benefits, and sources of supply. Higher levels of education also have made users more assertive, a trend that should lead to improvements in services (Freeman 1980; Frost, Singh et al. 2004) (Bongaarts, 2002).

(Isiugo-Abanihe, 1994; Omondi, 1997) observed that when other variables such as women's age at her first marriage, current occupation, couple communication are controlled, the net effect of husband's education on current use of contraception is larger than that of wife's education. Moreover, the wives of well educated husbands are likely to have been well educated themselves. Educated husbands tend to be employed in higher-status occupations, discuss family planning with their wives, are married to women who were first married at relatively higher ages, and use more effective (44 per cent) rather than less effective methods of contraception (23 percent). Couples who have attained higher levels of education are more likely than others to practice contraception and couples who desire larger families are less likely to use contraceptives (Chung, 1980; Magadi et al, 2003). In a study conducted in turkey, although the wife's educational attainment was associated with the type of method used by the couple, the husband's

education level had more influence on the use of male sterilization and condoms. For example, men with any secondary or higher education were more likely than those with none to rely on either of these methods (relative risk ratios, 1.6-2.1). Furthermore, couples in which the husband had at least six more years of education than the wife also showed increased reliance on male sterilization or condoms (1.6-1.8). Differences in the use of any method of family planning by education level have narrowed considerably in the past decade, although differentials remain in the use of some methods (Easterlin, 1975; Dondoo, 1995; Gubhaju, 2009).

In surveys conducted in Nepal in 1996 and 2001, current use of any contraceptive method rose with education levels. By 2006, however, there was almost no difference in contraceptive use by education level (50-53% across all three levels for each spouse). Over the three surveys, use increased substantially among respondents with no education and among those with any primary education, but rose less among respondents with any secondary or higher education.

When the education difference between partners was considered, the proportion using any method in all three surveys was higher for couples in which the husband had more education than his wife than for couples in which the spouses had the same level of education or the wife had more schooling; in 1996 and 2006, for example, use was highest for couples in which the husband had at least six more years of education than the wife (39% and 57%, respectively). When the education levels of partners were combined, however, the picture was somewhat different. In 1996 and 2001, contraceptive use was highest when both partners had some secondary or higher education (48% and 58%, respectively), whereas in 2006, use was highest among couples in which the woman had no education and her husband had some secondary or higher education (58%). In the 1996 and 2001 surveys, the proportion using any method was lowest among couples in which both spouses had no education (25% and 36%, respectively), while in 2006, use was lowest among women who had more education than their husband (44%) (Gubhaju, 2009).

As family planning programs and services become more focused on involving the male population, researchers are finding that men who have knowledge about family planning are more likely to have positive attitudes regarding contraception and therefore support their partners' use of family planning methods (Sanderson 1976; Robinson.

1992). Less educated women are more likely to use injectables, and so are women whose husbands disapprove of family planning. In contrast, more educated women and women whose husbands approve of contraceptive use are more likely to use barrier methods; compared to their counterparts who are less educated or whose partners did not approve of family planning (APHRC, 2011).

### **2.3.2. Communication**

Ashraf and Becker (1997) used DHS data from married couples in Ghana and Kenya to examine spouses' influence on each other's desire for additional children and on their approval of family planning. Their study showed that there are always positive outcomes when men are involved and have knowledge about family planning. Their involvement increases communication on contraception between the partners and more knowledge on contraception. This further improves their acceptance and use and increased support of their partners as they practice contraception. This further contributes to correct use of contraception and reduces unmet need for contraception since decisions on contraception are collectively made by both partners (Becker, 2001; Levy, 2008).

Family planning initiatives which attempt to involve men do so with the belief that spousal communication about family planning will increase, and with the expectation that such an increase will likely predict higher use of contraception and lower unmet need. Indeed, recent family planning literature consistently suggests just that contraceptive use is significantly higher among couples who have discussed family planning with each other (Lasee, 1997; Levy, 2008). Lasee and Becker (1997), for example, used the 1989 Kenya Demographic and Health Survey to find a statistically significant, positive correlation between husband-wife communication about family planning and contraceptive use, even after controlling for background factors which may have been confounding.

### **2.3.3 Region of Residence**

Couples residing in urban areas are more likely to be involved in contraceptive use than their rural counterparts due to factors related to exposure to information on contraceptive use, accessibility, good infrastructure etc. (Omondi, 1997) in a study "mens participation in family planning decision" found that, Region of residence turns out to be

important and exerts a strong positive influence on current use of contraception. Couples are more likely to practice contraception if they live in a region in which conformity to traditional reproductive practices is weaker (Nairobi, Central, and Eastern regions). They are also more likely to use any form of contraception (72 per cent) than their counterparts in the Rift Valley (54 per cent), Nyanza, Coast, and Western regions (36 per cent). Place of residence (urban rather than rural) is positively related to use of contraception. Rural residents are also likely to use contraception if they routinely discuss family planning, have three or more children, do not want any additional children, and if the husband is employed in a higher-status occupation, and if the wife is well-educated and married at a relatively higher age. This suggests that factors which had affected the adoption of family planning in urban areas are now prevalent in rural areas as well. Net of all other variables, urban residents are only slightly more likely to use contraception than those who live in the rural areas (Omond,i 1997; NCAPD/UNFPA, 2010).

A Turkish study Olson (1976) found that husband-wife communication was more essential to contraceptive use in the rural than in the urban areas (Oketch, 2011). There is difficulty of obtaining contraceptives in the rural areas which requires more cooperation between the couples in order to do so (Naushin and Karin, 1996). It was also established that only a few couples in the city slums use family planning services (Oketch, 2011) which may be explained by the low living standards in the slums.

#### **2.3.4 Parity**

In particular, parity has a strong association with contraceptive use; women with at least five living children are 6.5 times more likely than those with no living children to use contraceptives (Magadi et al, 2003). The male partner may play an important role regarding contraceptive use and the timing and number of a couple's births. In some countries or social groups, the male partner has greater influence than his spouse (Magadi et al, 2003) In Ghana, the wife's attitude towards contraception is strongly influenced by her husband's attitudes and background characteristics, especially education, but the husband's views are not similarly influenced by his wife (Bankole and Singh, 1998). (Omondi, 1997) also showed that parity exerts a strong positive effect on current contraceptive use. Net of all other variables, couples who discuss family planning with

each other, have three or more living children and do not desire more are far more likely to use contraception than their counterparts who have fewer children. (NCAPD, 2000; APHRC, 2011).

### **2.3.5 Religion**

While religion appears to have a significant independent effect on the choice of contraceptives among women over 35, neither community size nor the levels of the husband's schooling attainment or income appear to be important determinants of contraceptive adoption. Fertility and birth patterns vary by religious groups as a result of the different church doctrines concerning birth control (Kwame, 2002). Some denominations like the Catholics, Mormons and Baptists maintain strong doctrinal positions against the use of contraceptives and other artificial means of controlling fertility, or promote large families in other ways. However, according to the convergence hypothesis, modernization and secularization brought about by among other factors education; has suppressed such religious differences as the religious groups interact with the wider society (Kwame, 2002).

According to (Oketch, 2011) a study on 'contraceptive use among women of reproductive age in Kenya city slums', the catholic faith discourages its members from using contraceptives as birth control measures. Faithful are instead encouraged to rely more on observation of menstruation cycles and natural safe days of a woman. This finding clearly indicates a significance difference in the use of family planning services between Catholics and other religions. Couples who are more educated are likely question the rational behind such church doctrines as education empowers them to make their own decisions regarding matters of fertility and contraception.

### **2.3.6 Knowledge about Contraception**

Exposure to family planning information is associated with increased contraceptive practice (Magadi et al, 2003). Overall, couples in Kenya are more likely to use short-term modern contraceptive methods than either long-term or traditional methods. A community's exposure to family planning media messages on the radio is generally associated with a higher probability of use of long-term and permanent methods, and a lower probability of use of short-term methods. (Magadi et al, 2003;

Levy, 2008), In a study on "Couples' Fertility and Contraceptive Decision-Making in developing countries," a substantial proportion of married men know of at least one method of family planning, but in some countries only a small proportion of those who know of a method are practicing contraception (Mahmood, 1996).

There is no notable variation in couples' knowledge of use of family planning method by age or residence; however, it does increase gradually with education and wealth quintile of the woman (KNBS, 2010). Differences by background characteristics are not large; however, men in Nairobi and men with more education are less likely to express sexist views about family planning use, being less likely to believe that women should bear the burden of dealing with contraception.

#### **2.4 Summary of the Literature Review**

The review indicates that the net effect of education on contraceptive use is larger than that of each individual partner education, therefore justifying efforts to increase the relevance of family planning programmes to couples needs and concerns regarding themselves and their families. Although education policies can be expected to influence contraceptive use only indirectly, programmes that promote family life and parenthood education could be integrated with educational and vocational training curricula to provide a vehicle for changing attitudes and spreading information about contraceptive use among young people in and out of schools. There is need to obtain collaboration of both partners in family planning in order to ensure the success of programmes.

Education has its direct and indirect effects on contraceptive use behaviour and the government must commit itself to universal education and the effort should continue at the policy level to make this a reality. For couples who have already reached reproductive age, they must be reached through adult literacy programmes, strong contraceptive supply services and educational campaigns for family planning.

The reasons identified for lack of study and lack of integration of men into the contraceptive studies include men were not considered to be major stakeholders in determining fertility and reproductive behavior since they are not child-bearers. More must be done at the general research and policy level to understand the inclinations, preferences, and behaviors of men. We must continue to consider the bases of reproductive decision-making power, as well as the determinants of men's preferences.

We may also infer from our literature that increase in the level of women's education and hence more economic opportunities and autonomy for women, as well as increased level of husband-wife communication about family planning, can be conducive to the promotion of contraceptive use among couples.

Overall, our analysis indicates that educational attainment has an influence on spousal communication, religious beliefs, place of residence and parity all of which contribute to level of contraceptive use. This suggests that a strong programme should strive to clarify the misperceptions about family planning and contraceptive use in religion through enhancing motivational campaigns as well as seeking the cooperation and support of religious and community leaders, as this has been done successfully in other Muslim countries.

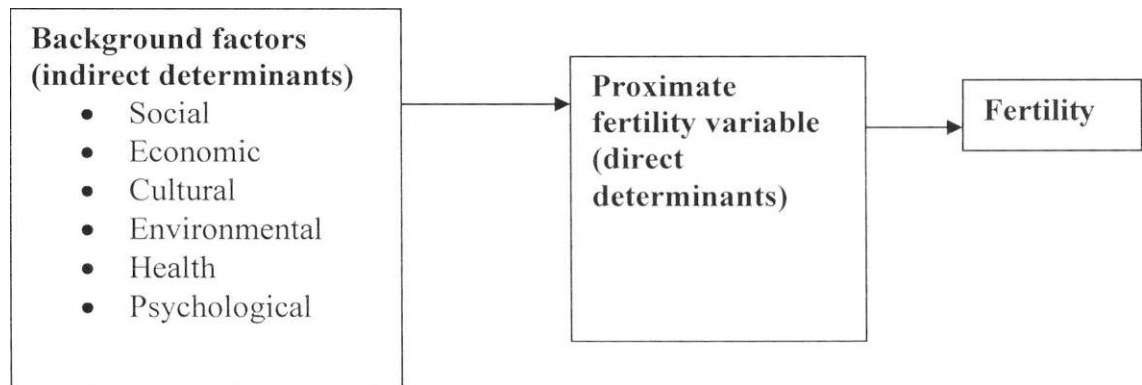
## **2.5. Conceptual Framework**

Several scholars have developed theories to explain how several factors relate to fertility and contraceptive use. This study uses the Bongaarts proximate determinants of fertility (1978) framework. According to the framework, fertility is directly influenced by a set of factors such as contraceptive use, which are referred to as the proximate determinants. These are in turn influenced by social, economic, cultural, psychological, health and environmental factors, which are referred to as the background factors. Any change in background characteristics such as social, economic, cultural, demographic and environmental variables is bound to cause corresponding changes in a set of intermediate or proximate determinants of fertility thereby causing a change in fertility or performance.

The primary characteristic of an intermediate fertility variable is its direct effect on fertility. If an intermediate variable, such as prevalence of contraception, changes, then fertility necessarily changes also (assuming the other intermediate fertility variables remain constant), while this is not necessarily the case for an indirect determinant such as education or income. Consequently, fertility differences among populations and trends in fertility overtime can always be traced to variations in one or more of the intermediate fertility variables.

In this study contraceptive use is used as the dependent variable in place of fertility. This means the background factors or indirect determinants work through a set of direct determinants influence contraceptive use.

**Figure 1: Bongaarts Proximate Determinants of Fertility (1978)**



The framework encompasses independent variables that are to be examined in this work making it more suitable compared with others.

## 2.6 Conceptual Hypothesis

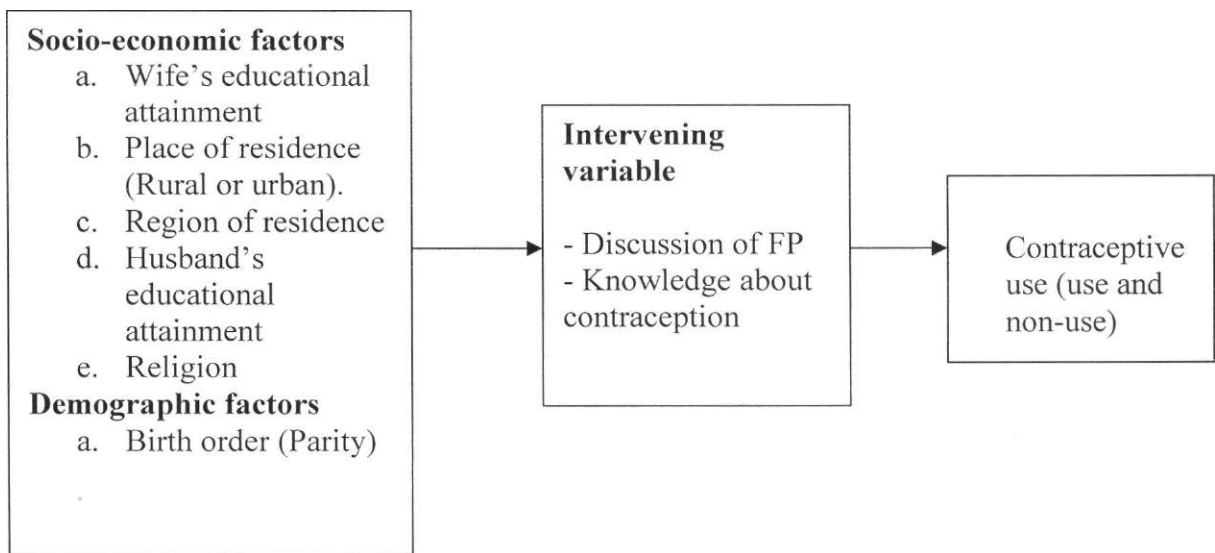
Background factors operate individually or jointly through various proximate determinants of fertility to influence fertility as a variable.

## 2.7 Operational Framework

The intervening variable considered in the operational framework is discussion about contraception and knowledge about contraception while the background factors are; educational attainment of the husband, educational attainment of the wife and region of residence for socio-economic factors: parity, and religion as demographic factors. Other factors such as knowledge about family planning, discussion on family planning are also considered.



Figure 2: Operational Framework



Educational attainment plays an important role in determining present occupation and region of residence i.e. urban or rural, marriage (in terms of each other partners education), and the size of the family (parity). This proximate variable will in-turn interact with the intermediate variable to influence the reproductive behavior because contraceptive use is, in part, based on the number of living children at the time the practice begins. Use of contraception obviously affects parity, but parity also influences the decision whether or not to use contraception.

## 2.8 Operational Hypotheses

- a) Higher educational attainment is directly correlated with a woman contraceptive use.
- b) Region of residence is likely to influence contraceptive use of a woman.
- c) Husbands/partners educational attainment is directly correlated with a woman contraceptive use.
- d) Parity is likely to influence contraceptive use of a woman.
- e) Religion is likely to influence contraceptive use.
- f) Knowledge about family planning has a positive effect on woman contraceptive use.
- g) Discussion about family planning has a positive effect on contraceptive use of a woman.

## **CHAPTER THREE**

### **DATA AND METHODS**

#### **3.1. Introduction**

This chapter describes the source of data, quality of data, methods of data analysis, variables used and definitions of variables.

#### **3.2 Source of Data**

This study uses the 2008-2009 KDHS couples data obtained after merging the respective husband and wife responses. DHS supports a range of data collection options that can be tailored to fit specific monitoring and evaluation needs of host countries. The DHS is the only major series of national surveys of reproductive behavior in developing countries that merges respective partner's response in-order to develop couples data (Bankole and Singh, 1998). The male questionnaire is shorter than female questionnaire where they are asked about their background characteristics, fertility experiences, contraceptive knowledge and use, marriage, sexual behavior and reproductive preference (Bankole and Singh, 1998). This data is a national representative survey designed to provide information on levels and trends of fertility, infant and child mortality, family planning knowledge and use, maternal and child health, nutrition and knowledge of HIV/AIDS. The survey was done by the Kenya National Bureau of Statistics (KNBS) in partnership with the National AIDS Control Council (NACC), the National AIDS/STD Control Programme (NAS COP). the Ministry of Health and Sanitation, the Kenya Medical Research Institute (KEMRI), and the National Coordinating Agency for Population and Development (NCAPD). ICF Macro provided technical assistance for the survey through the USAID-funded MEASURE DHS programme, which is designed to assist developing countries to collect data on fertility, family planning, and maternal and child health. Funding for the KDHS was received from USAID/Kenya, the United Nations Population Fund (UNFPA), the United Nations Children's Fund (UNICEF), UNAIDS, and the World Bank. The survey was done between November 2008 and February 2009.

The sample was drawn from the population residing in households in Kenya. A representative sample of 10,000 households was drawn for the 2008-09 KDHS. This sample was constructed to allow for separate estimates for key indicators for each of the eight provinces in Kenya, as well as for urban and rural areas separately. Compared with the other provinces, fewer households and clusters were surveyed in North Eastern province because of its sparse population and a deliberate attempt was made to over sample urban areas to get enough cases for analysis.

The KNBS uses master sampling frames for household-based surveys i.e. the fourth National Sample Survey and Evaluation Programme (NASSEP IV), which was developed on the platform of a two-stage sample design. The first stage involved selecting data collection points ('clusters') from the national master sample frame. A total of 400 clusters—133 urban and 267 rural—were selected from the master frame.

The second stage of selection involved the systematic sampling of households from an updated list of households. The Bureau developed the NASSEP frame in 2002 from a list of enumeration areas covered in the 1999 population and housing census. A number of clusters were updated for various surveys to provide a more accurate selection of households. All women age 15-49 years who were either usual residents or visitors present in sampled households on the night before the survey were eligible to be interviewed in the survey. In addition, in every second household selected for the survey, all men age 15-54 years were also eligible to be interviewed.

### **3.2.1. Quality of Data**

The KDHS is among a set of high quality data collected with technical assistance from measure DHS which has provided such assistance to developing countries to ensure the collection and data analysis meets international standards. DHS has earned a worldwide reputation for collecting and disseminating accurate, nationally representative data. It's funded by recognized donors and funds from participating countries. The 2008-2009 survey was done in collaboration with recognized government departments. The quality of the data is therefore authoritative.

The fieldwork yielded a response rate of 98 percent. The shortfall in the number of households was largely due to structures that were found to be vacant or destroyed and

households whose members were absent for an extended period during data collection. From the households interviewed, a response rate of 96 percent was achieved.

### **3.2.2. Methods of Data Analysis**

#### **3.2.2.1 Introduction**

The unit of analysis is the couple. The study used a number of statistical analytical techniques such as cross tabulation, chi-square and logistic regression analysis. Descriptive analysis was used to describe frequency distribution of respondents by various socio-economic and demographic characteristics.

The study adopted DHS definition of a couple as consisting of a man and a woman who are legally married or who are living together in a consensual union. In countries where polygyny is widely practiced (most of which are in Sub-Saharan Africa), this implies that the sample includes some men who have more than one wife on the basis of the husband's report of his number of wives. For this analysis, only monogamous couples were used since in polygynous situations; the husband may give different responses with reference to the different wives i.e. the analysis does not assume that number of couples in a polygynous household is the same as the number of wives since most of the questions asked of husbands that relate to their wives did not require a polygynous man to be wife-specific in his answer, we do not know to which wife or wives the responses refer.

#### **3.2.2.1 Cross Tabulations and Chi-square( $x^2$ ).**

Cross tabulation technique is used to assess the associational relationship between two variables, i.e. the independent and the dependent variable. It shows the frequency between two variables of interest and hence is useful in comparative analysis. For example, in this study it will be used to show the associational relationship between educational attainment and contraceptive use and independent and dependent variables respectively.

Chi-square( $x^2$ ) was used to test for significance of associations between each of the dependent and independent variables. It tests the hypothesis that a relationship does not exist between the two variables. Chi-square is used to test whether or not frequencies which have been empirically obtained differ significantly from those which could be

expected under the assumption of independence. For example in this study it will be used to test whether there is any significant relationship between husbands educational attainment and contraceptive use of a woman as independent and dependent variables respectively.

Chi-square is limited since it only gives us the strength of the association between the dependent and explanatory responses. It doesn't indicate the magnitude of the association and also direction of effect of the association. To establish both the magnitude and direction of effect of the explanatory variables and the dependent variable, this study will use Logistic regression. This method is discussed below.

### 3.2.2.2. Logistic Regression Model

This method is used to describe the nature of relation between dependent and a number of independent variables. It can also be used to measure or infer how changes in one or more independent variables are related to changes in the dependent variable.

The logistic regression model may be summarized as:

$$p(x) = \frac{e^{\beta_0 + \sum \beta_i x_i}}{1 + e^{\beta_0 + \sum \beta_i x_i}}$$

Where  $p(x)$  = conditional probability of  $y$  given  $x$ ,

$e$  = the inverse of the natural log,

$\beta_0$  = the constant of the regression,

$\beta_i$  = regression coefficient between the dependent and independent variables.

The model makes use of logistic coefficient. The logistic transformation of  $p(x)$  makes the coefficient of logistic regression. The transformation is given by:

$$g(x) = \ln\left(\frac{p(x)}{1 - p(x)}\right)$$

Therefore multivariate logistic regression is used to identify factors other than partners' education that affect contraceptive use.

The model is given by:

$$g(x) = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_n x_n$$

where  $\beta_0, \beta_1, \dots, \beta_n$  are parameters and  $x_1, \dots, x_n$  are explanatory variables

$$p(x) = \frac{e^{g(x)}}{1 + e^{g(x)}}$$

### **3.3 Defination of Variables**

#### **3.3.1 Dependent Variable**

Contraceptive use is measured as a dichotomous dependent variable that takes the value of 1 if the respondent is currently using a modern method of contraception; zero if otherwise. Because of the binary nature of the dependent variable, logistic regressions are used for the analysis.

#### **3.3.2 Explanatory Variables**

Number of living children, education, religion and place of residence are used as control variables for predicting use. Education attainment is measured as a four -category dummy variable, representing 'no education', 'primary', 'secondary and 'higher', with the expectation that completing a certain level of education may be critical in participating contraceptive use. Place of residence is categorised as 'urban' and 'rural'. In addition to these socio-demographic background variables, other theorized variables to explain the variations in contraception use are husband-wife discussion about family planning and knowledge about family planning. We expect that husbands who have higher education attainment will influence their wives to practice contraception.

**Table 3.1: Definitions of Variables**

<b>Variable</b>	<b>Type of variable</b>	<b>Measurement</b>
Contraceptive use	Dependent variable	1=use 2=non use
Birth order (parity)	Independent	1=parity 1-3 2=parity 4-6 3= above 7
Partners educational attainment	Independent	1 =no education 2=primary incomplete 2=primary complete 3= secondary education+
Education attainment of wife	Independent	1=no education 2=primary incomplete 2=primary complete 3= secondary education+
Place of residence	Independent	1=urban 2=rural
Region of residence	Independent	1=Nairobi 2=Central 3=Coast 4=Eastern 5=Nyanza 6=Rift Valley 7=Western 8= North Eastern
Religion	Independent	1=Christian 2=Muslim 3=Others
Woman's knowledge about family planning	Independent	1 =No 2=Yes
Discussion about family planning	Independent	1=Doesn't discusses 2=Discusses

## CHAPTER FOUR

### EFFECT OF HUSBAND'S EDUCATIONAL ATTAINMENT ON WIFE'S CONTRACEPTIVE USE IN KENYA

#### 4.1 Introduction

This chapter presents the results of the effect of education on contraceptive use in Kenya. The first section describes the distribution of the study population by key background characteristics. Second section describes the results of differentials of contraceptive use by various socio-economic and demographic factors. The last section presents results of the multivariate analysis.

#### 4.2 Distribution of Background Characteristics of Study Population

This section describes the distribution of the study population by various background characteristics. The results are presented in table 4.1 below.

The results show that over 68.1 percent of respondents were not using any method while 31.9 percent are using modern methods. Majority of the respondents were living in rural areas (70 percent) as compared to urban areas (30 percent). The results show that Nyanza (17 percent) and Rift Valley (17 percent) provinces had the highest proportion of respondents followed by Western at 12.6 percent while North Eastern province had the lowest proportion (7.0 percent), Coast and Eastern provinces had an almost equal number of respondents at 12.3 percent and 12.5 percent respectively. Majority of the respondents knew of a method of contraception at 90.3 percent compared to only 9.7 percent who didn't know any method of contraception.

Majority of the respondents were Christians (81.8 percent) compared to 14.7 percent who were Muslims and only 3.4 percent were from other religions. Furthermore, the results show that over 40 percent of the respondents had secondary and above education level compared to 14 percent who had no education. Majority of the respondents had discussed family planning with their partners in the past year (35.2%)t compared to only 7.8 percent who had not discussed family planning with their partners.



**Table 4.1: Distribution of study population by key background characteristics**

	Frequency	Percent
<b>Current use</b>		
Currently not using	975	68.1
Currently using	456	31.9
<b>Educational attainment</b>		
No education	201	14.0
Incomplete primary	422	29.5
Complete primary	383	26.8
Secondary+	425	27.7
<b>Partners educational attainment</b>		
No education	146	10.2
Incomplete primary	302	21.1
Complete primary	404	28.2
Secondary+	579	40.4
<b>Type of place of residence</b>		
Urban	435	30.4
Rural	996	69.6
<b>Region</b>		
Nairobi	162	11.3
Central	145	10.1
Coast	176	12.3
Eastern	179	12.5
Nyanza	244	17.1
Rift Valley	244	17.1
Western	181	12.6
Northeastern	100	7.0
<b>Religion</b>		
Christian	1170	81.8
Muslim	211	14.7
Other	50	3.4
<b>Knows methods</b>		
Don't know	139	9.7
Know	1292	90.3
<b>How often the partners have talked about FP in the past year</b>		
Don't discuss	112	7.8
Discuss	504	35.2
<b>Birth order</b>		
1-3	739	51.6
4-6	430	30.0
7+	163	11.4

Source: Primary analysis of KDHS 2008-2009

A very high proportion knew of a modern method of contraception (94.1%) compared to only 0.2 percent who knew only traditional methods and 5.7 percent who didn't know any method. More than half of the respondents had parity of between 1-3 (51.6%) compared to 30 percent that had a parity of between 4-6 while those who had parity above 7 were 11 percent. Over 6.5 percent of the respondents' were between the ages 15-24 years, 39.4 percent were between the ages 25-34 years while 54.1 percent were above 35 years.

Majority of the respondents were Christians (81.8 percent) compared to 14.7 percent who were Muslims and only 3.4 percent were from other religions. Furthermore, the results show that over 40 percent of the respondents had secondary and above education level compared to 14 percent who had no education. Majority of the respondents had discussed family planning with their partners in the past year (35.2%) compared to only 7.8 percent who had not discussed family planning with their partners. A very high proportion knew of a modern method of contraception (94.1%) compared to only 0.2 percent who knew only traditional methods and 5.7 percent who didn't know any method. More than half of the respondents had parity of between 1-3 (51.6%) compared to 30 percent that had a parity of between 4-6 while those who had parity above 7 were 11 percent. Over 6.5 percent of the respondents' were between the ages 15-24 years, 39.4 percent were between the ages 25-34 years while 54.1 percent were above 35 years.

#### **4.3 Differentials of contraceptive use by background characteristics among couples in Kenya**

The results showing Differentials of contraceptive use by background characteristics among couples in Kenya are presented in Table 4. 2 below.

The results show that educational attainment of a woman was significantly associated with her contraceptive use in Kenya. Over 54 percent of women with secondary and above level of education were using modern contraception while 42 percent of them with primary complete level of education were using modern contraception and 33 percent with incomplete primary education level were using modern contraception. Only about 6 percent of women with no education were using modern contraception. The results also show that partner's educational attainment was

significantly associated with women contraceptive use in Kenya. Over 45 percent of women whose partners had secondary and above educational level were using modern method of contraceptive while 41 percent of women whose partners had complete primary education level were using modern method of contraceptive. Only 6 percent of women whose partners had no education were using modern methods of contraception.

Type of place of residence of a couple was also significantly associated with contraceptive use in Kenya. Over 40 percent of couples living in urban areas were using modern methods compared to 36 percent who were living in rural areas and using modern methods of contraception.

Region of residence of a couple was also significantly associated with a women's contraceptive use in Kenya. About 61 percent of couples living in central province were using modern methods of contraception while 44 percent of couples living in Nairobi province were using modern methods of contraception, 32 percent of couples living in Coast province were using modern methods of contraception while 48 percent of those living in Eastern province were using modern methods of contraception. Over 32 percent of couples living in Nyanza province were using modern methods of contraception while 31 percent of couples living in Rift valley were using modern methods. North eastern province had the lowest proportions of couples using modern method of contraception. This implies that there is still regional imbalance in modern contraceptive use. The results also show that religion was also significantly associated with contraceptive use in Kenya. Over 43 percent of Christians were using modern methods of contraception while 12 percent Muslims were using modern methods of contraception and 16 percent of those from other religions were using modern methods of contraception. Knowledge of a method was also significantly associated with contraceptive use. About 8 percent of couples who didn't know any method were using modern method of contraception compared to 41 percent who knew of a modern method who were using modern method of contraception.

Birth order was also significantly associated with contraceptive use. Over 44 percent of those couples who had between 1-3 children were using modern method of contraception while 37 percent of those who had 4-6 children were using modern methods of contraception. 28 of those using modern method of contraception had seven and above children.

**Table 4.2: Differential of contraceptive use by background characteristic among**

<b>Characteristic</b>	<b>Not using</b>	<b>Using</b>	<b>Total</b>
<b>Education attainment</b>			
No education	190 (94.5)	11(5.5)	201
Incomplete primary	285 (67.5)	137(32.5)	422
Complete primary	224(58.5)	159(41.5)	383
Secondary+	195(45.9)	230(54.1)	425
X <sup>2</sup> = 191.15 df 15: Significance=,000			
<b>Partners educational attainment</b>			
No education	137(93.8)	9(6.2)	146
Incomplete primary	204(67.5)	98(32.5)	302
Complete primary	238(53.9)	166(41.1)	404
Secondary+	315(54.3)	264(45.6)	579
X <sup>2</sup> =119.28: df 15: Significance = .000			
<b>Type of place of residence</b>			
Urban	258(59.30)	177(40.7)	435
Rural	636(63.80)	360(36.1)	996
X <sup>2</sup> =4.145 df=3 Significance = .000			
<b>Region</b>			
Nairobi	90(55.6)	72(44.4)	162
Central	57(39.30)	88(60.7)	145
Coast	119(67.60)	57(32.4)	176
Eastern	93(52.00)	86 (48.0)	179
Nyanza	166(68.00)	78(32.0)	244
Rift Valley	169(69.30)	75(30.7)	244
Western	105(58.00)	76(42.0)	181
Northeastern	95(95)	5(5)	100
X <sup>2</sup> 138.62 df=21 Significance = .000			
<b>Religion</b>			
Christians	667(57)	503(43)	1170
Muslim	185(87.75)	26(12.3)	211
Other	33(84)	2(16)	50
<b>Knows method</b>			
No	131(94.2)	8(5.8)	139
Yes	663(59.1)	529(40.9)	1292
X <sup>2</sup> =8 1.844 df3 Significance= .000			
<b>How often the partners have talked about FP in the past year</b>			
Never discussed	12(10.7)	100(89.3)	112
Discussed	68(12.1)	436(86.5)	504
= 4.737 df4 Significance= .315			
<b>Birth order number</b>			
1-3	389(56)	308(44.1)	697
4-6	199(63.3)	100(36.7)	299
7+	306(71.2)	129(28.8)	435
X <sup>2</sup> =69.437 df 39 Significance^=.002			

**Source: Primary analysis of KDHS 2008-2009**

#### 4.4 Factors influencing contraceptive use among wife's in Kenya

This section presents the results of logistic regression analysis on the factors affecting contraceptive use among married women in Kenya.

##### 4.4.1 Effect of husband's educational attainment on wife's contraceptive use

The effect of husband's educational attainment on contraceptive use was established by performing a bivariate logistic regression. The results are shown on the table 4.3 below.

**Table 4.3 Bivariate logistic regression results of the effect of husband's educational attainment, socio-economic and demographic factors on contraceptive use**

	B	S.E.	Exp(B)
<b>Husband's educational attainment</b>			
No education			
Incomplete primary	1.990	0.365	7.313***
Complete primary	2.362	0.359	10.617***
Secondary+	2.546	0.354	12.758***
Constant	-2.723	0.344	.066

©Reference category \*p<0.05, \*\*p<0.01, \*\*\*p<0.000

The analysis shows that partner's educational attainment is an important factor influencing use of modern contraception. Women married to partner's whose with incomplete primary education are 7.313 times more likely to use modern contraception than women married to partner's without any education. Women married to partner's with complete primary education were 10.617 times more likely to use modern contraception than those without any education. Women married to husband's with secondary and above education were 12.758 more likely to use modern methods of contraception compared to those married to partner's with no education. This implies the higher the husband's education, the higher the chances of her woman partner using modern contraception. Partner's educational attainment is therefore is a significant factor in adoption of modern contraception.

##### 4.4.2 Effect of socio-economic and demographic factors on wife's contraceptive use

The study also sought to establish the effect of socio-economic and demographic factors on wife's contraceptive use. The results of the regression analysis are shown on the table 4.4 below.

**Table 4.4 Logistic regression results of the effect of socio- economic and demographic factors on contraceptive use**

Variable	Model I			Model II		
	B	SE	Exp(B)	B	SE	Exp(B)
<b>Husband's educational attainment</b>						
No education ®						
Incomplete primary	-.687	1.158	.503			
Complete primary	-.507	1.155	.602			
Secondary+	-.824	1.142	.439			
<b>Wife's educational attainment</b>						
No education ®						
Incomplete primary			.503	.569	.913	1.767
Complete primary			.602	.365	.899	1.441
Secondary+			.439	.434	.890	1.543
<b>Birth order</b>						
1-3®						
4-6	-.771	.304	.463*	-.753	.304	.471*
7+	-.061	.316	.940	-.071	.315	.932
<b>Religion</b>						
Christian®						
Muslims	.072	.305	1.075*	.085	.304	1.089*
Others	-1.262	.686	.283	-1.148	.684	.317
<b>Discusses FP</b>						
Does not discusses®						
Discusses	.412	.252	1.510*	.402	.252	1.495*
<b>Knowledge of method</b>						
Doesn't know method ®						
Knows method	.580	.816	1.786	.569	.818	1.766
<b>Place of residence</b>						
Urban®						
Rural	.050	.364	1.051	.126	.361	1.134
<b>Region</b>						
Nairobi ®						
Central	.383	.543	1.467*	.381	.542	1.463*
Coast	.741	.584	2.099	.784	.585	2.191
Eastern	.093	.545	1.097	.070	.544	1.073
Nyanza	.201	.513	1.223	.191	.512	1.211
Rift valley	-.298	.490	.742	-.305	.490	.737
Western	.773	.578	2.166	.764	.576	2.146
North Eastern	19.488	1.791E4	2.907E8	19.495	1.789E4	2.928E8
Constant	1.758	1.451	5.798	.592	1.257	1.808

©Reference category \*p=<0.05, \*\*p=<0.01, \*\*\*p=<0.000

The analysis in model I show that when other socio-economic and demographic factors are included in the model, the effect of partner's educational attainment on use of modern contraception disappears. Women married to men with incomplete primary education are 0.503 times more likely to use modern contraceptives than those with no education. While women married to men who had complete primary education were 0.602 times more likely to use modern contraception than those married to men without any education. Those married to husbands with secondary and above education were 0.453 times more likely to use modern methods of contraception compared to those married to husbands with no education.

The results in model I also indicate that couples with parity 4-6 are 0.463 times more likely to use modern contraceptives than those at parity 1-3. Couples with a parity of above 7 were 0.940 times more likely to use modern contraception than those with parity 1-3. They also indicate that women married to partners who are Muslims were 1.075 times more likely to use modern contraception than women married to partners who are Christians. Women married to partners from other religions were 0.283 times more likely to use modern contraception than those married to partners who are Christians. Couples who discuss family planning were 1.510 times more likely to use modern contraceptives than those who don't discuss while women married to husbands who know of a method were 1.786 times more likely to use modern contraceptives than those who didn't know a method.

The results in model I also indicate that when the significance level is increased to 5%, religion, birth order, discussion about family planning, and region of residence were important factors influencing contraceptive use. Couples with parity of 4-6 were 6.4 times more likely to use modern contraception than those with a parity of 1-3. Women married to partners professing other religions were 3.383 times more likely to use modern contraception compared to women whose partners were professing Christianity. Couples who discuss family planning were 2.68 times more likely to use modern contraception than couples who don't discuss family planning. Women married to partners professing Christianity and from other religions, living in Nairobi were significant factors in using modern contraception.

The analysis in model II shows that when other control variables are added into the model, the effect of educational attainment on use of modern contraception disappears. The results indicate that married women with parity 4-6 are 0.741 times more likely to use modern contraceptives than those at parity 1-3. Married women with a parity above 7 and above were 0.932 times more likely to use modern contraception than those with a parity 1-3. The results also indicate that Muslims were 1.089 times more likely to use modern contraception than Christians and married women from other religions were 0.317 times more likely to use modern contraception than married women who are Christians. The results also indicate that couples who discuss family planning were 1.495 times more likely to use modern contraception than those who don't discuss. Married women who know a method were 1.766 times more likely to use modern contraception than those who didn't know a method.

The results in model II also indicate that married women who live in rural areas 1.134 times less likely to use modern contraceptives than those who live in urban areas. Married women who live in central province were 1.463 times more likely to use modern contraception than those who live in Nairobi and married women who live in coast were 2.91 times more likely to use modern methods than those living in Nairobi.

However both models indicate that birth order, religion, discussion about family planning and region of residence are significant in adoption of modern methods of contraception among married women.



## CHAPTER FIVE

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

This section presents summary, conclusions, recommendations of the study and recommendation for further research.

#### 5.2 Summary

This study sought to establish the effect of husband's educational attainment on woman's contraceptive use in Kenya. The data was obtained from the couple file of 2008-2009 KDHS. The methods of analysis used are chi-square, cross tabulation and logistic regression. The dependent variable was contraceptive use while the key independent variables were educational attainment of both the husband and the wife. Other control variables included were; birth order, knowledge of modern method of contraception, discussion of family planning, place of residence and region of residence. The chi-square results show that educational attainment of both the husband and the wife, birth order, religion, place and region of residence, knowledge of modern methods of contraception are significantly associated with adoption of modern methods of contraception. However discussion about family planning was not significant. The results of logistic regression showed that husband's educational attainment was significantly associated with modern contraceptive use in Kenya. However birth order, region of residence, religion and discussion about family planning show they are significant.

#### 5.3 Conclusion

The results confirm that educational attainment of the husband and wife are significant factor in adoption of modern contraception by women (Isiugo-Abanihe, 1994; Magadi et al 2003). The study shows that as the educational level of husband's increase, the adoption of modern contraceptive use also increases (Gubhaju 2009). Women married to men with incomplete primary education are 0.503 times more likely to use modern methods of contraception that those without any education while women who are married to husband's with complete primary education were 0.602 time more likely to use

modern method of contraception than those without any education. However education attainment is attenuated by socio-economic and demographic factors.

The study implications are that policies and programmes to increase contraceptive use should not ignore the contribution of husband's education to adoption of modern contraceptive use. Policies and programmes on family planning should also consider region of residence, religion and birth order and discussion of family planning as important factors in adoption of modern methods of contraception.

#### **5.4 Recommendations**

Since education is directly related to adoption modern contraceptive use, it is recommended that:

- The government should intensify programmes to provide education to both genders. This will ensure that in future both genders have enough knowledge to make informed choices on adoption of modern contraceptive use. Policies that ensure the retention of children in school should also be developed.
- Family planning policies and programmes should target both men and women to motivate both genders to visit family planning clinics to get more knowledge on modern methods of contraception.
- Socio-economic and demographic factors such as religion, region of residence, party should also be considered when developing any policies and programmes meant to increase uptake of family planning services.

#### **5.5 Recommendation for Further Research**

- Factors which attenuate the effect of education should be identified since not all factors were included in the study.
- Since this was a national study, more research should also be done at county level on the effect of husband's educational attainment in order to provide information to develop policies at the counties on issues of modern contraception since different factors may have a different effect in different counties.
- A qualitative survey should also be done to provide more information on the effect of husband's educational attainment on contraceptive use.

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