

**DETERMINANTS OF FERTILITY PREFERENCES AMONG CURRENTLY
MARRIED WOMEN IN KENYA**

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ABSTRACT

Fertility preference is defined as desired family size, ideal number of children, and desire for additional children or fertility intentions. The measurements have been used to describe and/or estimate the number of children that people actually want to have. Fertility preferences are the indicators of general attitudes and possible future course of fertility. Also family planning approval is strongly dependent on fertility preferences. Measuring fertility intentions, and determining the extent to which they predict fertility behavior, is important for population policy and the implementation of family planning programs. Despite the various strategies and policies, Kenya's total fertility rate still remains high at 4.6 while contraceptive prevalence rate is limited at 46 percent. The main objective of this study is to determine factors associated with fertility preference in Kenya. The dependent variable of this study is preferred waiting time to the next birth. The study utilized secondary data from the Kenya demographic health survey 2008-09 with a study population of 4236 currently married women of child bearing age (15-49). Descriptive statistics indicated that majority of the married women, preferred short birth intervals. Cross tabulation analysis found that preferred waiting time to the next birth is significantly associated with educational attainment, current working status, region, religion, current use of any contraceptive method, age group, number of living children and sex composition. Logistic regression results indicated that education, ethnicity, current use of any contraceptive method, age group and number of living children predict preferred birth interval. In conclusion this study found that education, ethnicity, current use of any contraceptive method, age group and number of living children have a significant impact on fertility intentions. From the study results it is evident that majority of the women prefer short birth intervals which highly contributes to large family sizes resulting to high fertility in Kenya. It is therefore recommended that concerted efforts be employed with regard to family planning programs targeting ethnic groups such as Kalenjins, Maasai and Somalis. Campaigns emphasizing on longer birth intervals should be popularized in Kenya. Further qualitative and quantitative research should be conducted to explore the social cultural and religious beliefs norms and attitudes of currently married women in Kenya with regard to family planning and preferred birth intervals. Additionally men's status and approval of family planning and preferred birth intervals should also be researched further.

DECLARATION

I hereby declare that this is my original work and has not been presented in any other university.

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This Research Project has been submitted for examination with the approval of my University supervisors.

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DEDICATION

I wish to dedicate this work to Rose Nakhanu Lunani, my late mother and my entire family and to all population scientists in our Nation who carry out their work dutifully with dedication, to ensure that Kenya is a better place.

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ABBREVIATIONS

CEB-Children ever born

CPR-Contraceptive Prevalence Rate

DHS-Demographic Health Survey

GOK-Government of Kenya

KPSA-Kenya Population Situation Analysis

KDHS-Kenya Demographic Health Survey

KNBS-Kenya National Bureau of Statistics

OBSI-Optimal Birth spacing Initiative

PSRI-Population Studies Research Institute

TFR-Total Fertility Rate

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CHAPTER ONE: INTRODUCTION

1.1 Background to the study

Fertility preference studies define people's fertility preferences differently. These measurements could be termed as desired family size, ideal number of children, desire for additional children, fertility intentions and so on. They have been used to describe and/or estimate the number of children that people actually want to have. Fertility preferences are the indicators of general attitudes and possible future course of fertility. Also family planning approval is strongly dependent on fertility preferences. Measuring fertility intentions, and determining the extent to which they predict fertility behavior, is important for population policy and the implementation of family planning programs.

The demographic pattern of developing countries is characterized by the co-existence of high fertility, and high infant and child mortality. In a number of countries, studies indicate that wherever fertility is high, maternal, infant and child mortality are equally high (Fitaw et al, 2004). Kenya is in the stage of demographic transition characterized by substantial decline in mortality and persistent relatively high fertility. Currently women in Kenya have on average (TFR) 4.6 children (KDHS 2008/09) and a contraceptive prevalence (CPR) of 46%. The high TFR combined with low CPR, low death rate (14.02 deaths per 1000 women), high birth rate (39.7 births per 1000 population) and low infant mortality (estimated at 59.26 per 1000 live births) could be contributing towards high population growth in Kenya (Republic of Kenya 2009).

Between 1977 and 1993 the rate of decline in fertility increased, but by 1998 the rate of decline had begun to slow down, and by 2003 the decline in fertility had stalled as shown by the following trend in TFR: 1977 of 8.1, 1984-7.7, 1989-6.7, 1993-5.4, 1998-4.7, 2003-4.9. The rapid fertility decline between 1979 and 1999 is attributed to the national family planning program which received real support from government in the 1980s and 1990s (Muhoza et al, 2014). Evidence in the decline in national and international support for the family planning program was noted from mid to late 1990s, which explains the stall in fertility decline (Population Council). The mean ideal family size among currently married

women has declined from 4.3 to 4.0 (KDHS 2008-2009). This statistic together with low contraceptive prevalence rate (45.5%) depicts a country that still favors large families (Muhoza et al 2014). As such this study seeks to find the socio economic factors and cultural factors associated with fertility preferences among currently married women in Kenya as this will help to better understand determinants of fertility preferences. This study will use preferred waiting time to the next birth as opposed to ideal family size or desire for additional children (Tarun K, 2008) which have widely been used to assess fertility preference and have also been reported to have many drawbacks. For instance it is often difficult to obtain objective responses when collecting information on ideal family size (Tarun K, 2008).

1.2 Problem statement

There still exists wide variations and slow pace of decline in fertility levels, in spite of the decline of fertility throughout the world over the years (Munshi and Myaux, 2006). The causes of these variations and slow pace of decline in fertility levels, however, are issues to be debated. The high desired family size that prevails in most of Sub Saharan Africa, Kenya included, hinders fertility decline as desire for large families' leads to high fertility. Ideal family size has been exhaustively used in many studies as a measure of fertility preference. This study will use preferred waiting time to the next birth as a measure of fertility preference as only few studies have examined the spacing component of reproductive intentions to assess fertility (Ramrao Saumya et al, 2006).

As much as National and global initiatives have been put in place to ameliorate rapid population growth and its adversities (GOK, KPSA 2013) total fertility rate (TFR) in Kenya still remains high at 4.6, while Contraceptive Prevalence rate (CPR) for all methods is limited at 46% (Okech et al, 2011). Of worthy to note is that by 1998 the rate of fertility decline had begun to slow down, and by 2003 the decline in fertility had stalled. Desired family size was 3.8 in 2010 and actual 4.6 (KDHS). In relation to fertility desires it has been noted that for various reasons the desired family size cannot exactly be accomplished and actual fertility level exceeds the desired which is the typical nature of a developing country.

This raises the questions: What are the factors associated with fertility preference in Kenya? Can fertility preferences be influenced and if so how? Not much is known about the factors

associated with fertility preference. This study seeks to find out these factors that determine fertility preference in currently married women in Kenya. Responses to these questions should provide a better understanding of associated social, cultural, economic, political, and other factors that influence fertility dynamics in Kenya.

1.3 Main objective

The main objective of the study is to determine factors associated with fertility preference among currently married women in Kenya.

Specific objectives

- (i) To establish fertility preference differentials among currently married women in Kenya;
- (ii) To establish the socio economic factors that determines fertility preference among currently married women in Kenya; and
- (iii) To establish the socio cultural factors that determines fertility preference among currently married women in Kenya.

1.4 Justification

Fertility preferences are important measures for estimating levels of unwanted or mistimed fertility, forecasting fertility, and assessing unmet need for contraceptives. They inform and advice population policy and family planning programs and also contribute to existing literature on fertility studies.

Kenya has been experiencing a slow pace in fertility decline and variations in fertility levels in the different regions of Kenya and as such it is important to determine the drivers of these fertility preference differentials in the country as they tend to mask the national averages. Desired and actual fertility levels are rather high in Kenya with the actual fertility levels exceeding the desired. The measure of fertility intentions among women has been a question of concern among social scientists as to whether the stated intentions eventually translate into behavior and whether they can be used as an effective means of projecting future fertility behavior.

The National population policy for sustainable development has set targets for key demographic indicators such as; the total fertility rate in Kenya to reduce from 4.6 in 2009 to 2.6 by 2030 and a further reduction to 2.1 by 2050. Similarly, the natural population growth rate to be reduced from 2.5% per annum in 2009 to 1.5% per annum by 2030. With a growth rate of 2.9% percent per annum, the population is expected to double to about 77 million by 2030 (NCPD, 2012). This trend poses serious challenges for overall national development including future economic growth.

A comprehensive analysis therefore, of levels, and differentials in fertility preference and behavior as well as how and the extent to which individuals are able to actualize their fertility preferences will add to the body of knowledge on fertility and reproductive health issues in Kenya. It will also be a pointer on the role and extend to which the government and family planning programs have played in helping individuals realize their fertility preferences.

Findings from this study will help the government and family planning programs to design appropriate programs, or enrich programs that already exist to improve the levels at which people attain their fertility preferences which will in turn ensure that the country meets its set developmental goals.

1.5 Scope and limitation

This study will use secondary data from 2008/2000 Kenya Demographic Health Survey, a national-level probability sample survey. It will focus on the responses of currently married women of child bearing age (15-49 years) as administered from the woman questionnaire. Fertility preferences depend highly on a process of negotiation between both partners. However, this study will only focus on currently married women's responses on questions about fertility preferences. Depending exclusively on data collected from women may project a biased image of the joint preference function of the couple.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

In a qualitative study on attainment of fertility desires in Nigeria, Ibisomi (2007) discovered that economic factors, migration/living apart, marital disruption, infertility, ill-health (including rhesus incompatibility), occultic influence (in relation to magical power) and child mortality are some of the factors that hinder the realization of desired family size. Early/late marriage, polygamy, sex preference, societal and other third-party influences, improvement in economic conditions, lack of effective knowledge on contraception, mismatch in couples' desires (including abusive/drunard husbands) and multiple births are some of the other important factors that make it difficult to achieve desired family size.

This chapter will discuss the theoretic framework, the birth spacing component of reproductive intentions, socio economic and social cultural factors that may influence individual fertility preferences and also provide the conceptual frameworks that will guide this study.

2.2 Value of children theory

Hoffman and Hoffman (1973) reviewed four reasons for studying the value of children: to motivate fertility regulation, to anticipate compensations which might be necessary to achieve small family size, to predict fertility motivations and population trends, and to consider the value of children in the parent-child relationship. In less developed countries children have economic value, both in the present and as support in old age. In developed countries, however, children are an economic liability. Hoffman and Hoffman conceptualize the value of children in terms of psychological satisfaction such that children also provide primary group ties, stimulation, fun, and a feeling of creativity. For some parents they provide a feeling of power and a means of social comparison or competition. Their theoretical scheme helps to determine changes which would result in a decreased desire for children. It consists of 5 classes of variables: 1) the value of children, 2) alternative sources of the value, 3) costs, 4) barriers, and 5) facilitators.

Female employment as an alternative to childrearing is explored using this model. It is concluded that child-care centers would not decrease fertility because it would make it easier for women at all economic levels to have children and work. Since the educated woman is more likely to find satisfying employment, her fertility is likely to decrease but uneducated woman in a manual routine job could continue to seek fulfillment in her children. Also, the drop in children will mean a drop in the employment opportunities in fields related to children. This will make it difficult for the society to find employment for all its women. In countries where the extended family makes surrogate mothers, available employment is an adjunct to reproduction and the employment-fertility relationship may be depressed or nonexistent.

2.3 Spacing component of reproductive intentions

Birth intervals are affected by a wide range of factors, some of which are rooted in social and cultural norms, others in the reproductive histories and behaviors of individual women, utilization of reproductive health services and other background factors (Ramarao et al, 2006).

This reproductive preference for spacing instead of limiting is peculiar to sub-Saharan Africa. Few studies have examined the spacing component of reproductive intentions. Bankole and Westoff, (1995) in their study, childbearing attitudes and intentions carried out in Sub-Saharan Africa, revealed the widespread desire of women to have longer birth intervals than they are currently having in the region. Between a quarter and a third of women reported that they had recently experienced a birth sooner than they wanted. Questions have been raised if family planning program efforts, which have focused on birth spacing rather than on birth limiting in this region, have the potential for changing the dynamics of the region's population? Positive hypothetical answers to this question are given for two main reasons. First, if people prefer to avoid short birth intervals, and if these aspirations are realized, mortality and morbidity will eventually reach lower levels given the well-documented detrimental effects of short birth intervals on the lives of women and children (e.g., National Research Council, 1989). Second, the desire to lengthen birth intervals could fuel the fertility transition, initially because delaying births would lower the birth rate. The rate of population growth would be reduced as the length of the generation is

increased. The demographic mechanism is similar to increasing the age at marriage, which would normally increase the age at first birth. Moreover, some of the postponed births would never occur (Measure DHS, 2001). For years, family planning programs have promoted two year intervals between births for infant and child health and survival. There are several benefits that contribute to these outcomes including: a longer time period between births allows a mother more time to recover from pregnancy and delivery; the next pregnancy and birth are more likely to be at full gestation and growth; there is less competition between existing children for breastfeeding, nutrition, mother's time, and other resources (National Research Council, 1989). More recently, there has been a renewed interest in the effects of spacing and the optimal duration between births because new evidence suggests that three to five years may offer greater health benefits (Ramarao Saumya et al 2006). The Optimal Birth Spacing Initiative (OBSI) was created under the auspices of USAID to place optimal birth spacing on the global leadership priority agenda. The goal of Optimal Birth Spacing Initiative is to institute an optimal birth spacing recommendation of *Three to Five Years* at the policy, programmatic and behavioral levels. A range of professional and technical groups participated in this initiative including the CATALYST Consortium and Advance Africa with CATALYST acting as the secretariat for OBSI.

2.4 Social economic factors

2.4.1 Education

Highly educated women have a tendency to replace child numbers with child quality (Becker and Lewis 1973). Since childbearing and child caring are time-intensive, an increase in wage rates induces a negative substitution effect on the demand for children (Becker 1965). A woman's income is, therefore, negatively associated with childbearing, as having a higher income level implies there is higher opportunity costs associated with having children. A study in China showed that the preference for a small family was associated with younger age, urban residence, and higher level of education (Ding and Hesketh, 2006) and according to recent reports; white women had fewer number of children and a higher mean age at first birth than Hispanic and black women (NSF 2006). Another recent report indicated that men and women with low levels of education were likely to have high mean numbers of children (NSF 2006).

Dommaraju and Agadjanian (2009) explained that changes in fertility regime in Bangladesh in most cases are not due to changes in women's status, but due to changes in the reproductive behavior of illiterate women. In most of the studies, which considered the relationship between female education and fertility in Bangladesh, a significant, linear and inverse relationship was found (Akmam 2002). He mentions a study conducted by Chaudhury (1977) as showing a curvilinear relationship (meaning that with a modest level of education, fertility is likely to rise and with a higher level of education fertility tends to decline). Additionally, in 1997, Hoque and Murdock observed statistically significant and substantial differences in use of contraceptives between women with different levels of education, even after controlling for other related variables. Women with degrees from colleges/universities had three times more likelihood of using contraception than those without any education.

In Nepal, literate women have only half the numbers of children ever born (CEB) than do illiterate women (1.9 vs. 3.7 for all; 3.6 vs. 5.2 for women aged 40-49). Furthermore, Muslim women, women who had never been exposed to mass media, and poor/poorest women had significantly higher (CEB) than their comparison group. Similarly, those women who had less knowledge about family planning methods had significantly more CEB than those who had a higher level of knowledge about family planning (Adhikari 2010).

Bongaarts (2010) in his study among 30 sub-Saharan countries to analyze the causes of educational differences in fertility found out that women with secondary or higher education have on average lower fertility than women with no education (3.4 vs. 6.3 births per woman), which is also the case in desired family size (3.7 vs. 5.6 births per woman). Additionally, there are differences by level of education in the relationships between reproductive indicators. As education rises, fertility is lower at a given level of contraceptive use, contraceptive use is higher at a given level of demand and demand is higher at a given level of desired family size. The most plausible explanations for these shifting relationships are that better-educated women marry later and less often, use contraception more effectively, have more knowledge about and access to contraception, have greater autonomy in reproductive decision making, and are more motivated to implement demand because of the higher opportunity costs of unintended childbearing.

Cochrane (1978) notes in a study of fertility in Nigeria, that only 10 per cent of the women with education beyond the primary stage believed fertility to be determined by God', whereas 50 per cent of the totally uneducated women held that belief. In most research studies it has been found that desired family size becomes smaller with the increase in women's educational levels. Reference can be made to researches conducted by Jejeebhoy (1995); Cleland and Jejeebhoy (1996) and many others. From literature the general expectation is that the desire for more children should be lower for the educated women in comparison to the not educated women. Converse to this expectation, according to a study conducted by Wachira (2001) in Kenya, women with secondary education and above had a higher level of desire for more children (42.8%) compared to women with primary (41.1%) and no education (29.3%).

2.4.2 Occupation and place of residence

Sennott and Yeatman (2012) in their study conducted in Malawi discovered that events that change one's economic circumstances might alter plans for future childbearing. For instance, job loss could lead to postponement of pregnancy to allow time for a household to regain financial balance before adding another member. On the contrary, a spouse beginning a new job could hasten a woman's childbearing plans. Frequent changes in fertility preferences may also reflect the economic uncertainty that is common in developing societies (Johnson-Hanks 2005, 2007; Agadjanian, 2005) such as Malawi, where employment may be sporadic or scarce.

A significant relationship between occupation and desired fertility and fertility-related behavior is evident in several studies. A study done on the Yoruba of Nigeria reveals that desired fertility is lower for women married to husbands employed outside agriculture, compared with those in the agricultural sector (Bankole et al., 1995). Urban people prefer smaller families. Family size preference also varies regionally with variations of place of residence (Knodel et al., 1996; Singh and Casterline 1985; Mahmud and Ringheim, 1997; Ali, 2000). Regional variation exists in regard to fertility intention because of different socio-cultural pattern and practices. An analysis of survey data from 17 Arab states suggested that the fertility transition in most countries is being led by urban and literate women (Farid, 1996).

Sidze et al (ND) in their study carried out among women in both rural and urban Senegal arrived at the finding that; age at first marriage occurs early in Senegal. In urban areas, over 49 percent of women aged 40-49 years were married before age 20 and 53 percent among urban women aged 15-29 years. On the other hand, 71 percent of rural women aged 40-49 years and 82 percent of rural women aged 15-29 were married before age 20. Early ages at first marriage expose Senegalese women to a long duration of pregnancy risk and high odds to give birth to numerous children. Ayehu (1998) in his study among the Meru of Kenya discovered that women married to husbands with higher occupation status were more likely to desire to stop childbearing than those married to husbands with lower or middle status occupation hence an inverse relationship between the desire for more children and occupation.

2.4.3 Woman's status

According to a Bangladeshi study based on (DHS 1999-2000) on the impact of woman's status on fertility and contraceptive use in Bangladesh it revealed that three selected variables of woman's status namely education, occupation and discussion of family planning with partner were strongly associated with number of living children, ever use of contraception and current use of contraception. As per the findings, higher education, skilled job and discussions about family planning with partner were related with having significantly fewer numbers of children. Thailand was a frequently cited example, in places where women's status was high and fertility was lower than might be expected on the basis of developmental indicators alone (Freedman, 1979).

The degree to which women enjoy any decision-making is powerfully shaped by social institutions (Mason, 1984). The patriarchal, hierarchical and polygynous organization of many African households tends to perpetuate the low status of women in African societies. In such households, most women cannot exert much, if any, control over their lives in the families within which they live. Early marriage, patrilocal residence after marriage and polygynous unions are institutions that perpetuate women's subordinate position and make them rather voiceless and powerless in matters affecting their reproduction. At marriage a woman assumes a low status relative to all members of her husband's extended family which

is elevated usually by attainment of high fertility, and can be elevated by high educational attainment and ownership and control of substantial resources (Makinwa-Adebusoye and Ebigbola, 1992). Women are similarly disadvantaged in matters of inheritance and succession, and also suffer considerable disadvantages with respect to education and access to resources in general. In fact, the bottom line is that women and their children are legal property of the husband (Aguda, 1992).

2.5 Socio- cultural factors

John Caldwell and Pat Caldwell (1987) identified the main factors precluding fertility decline in the sub Saharan Africa to be rooted in the cultural background, which is centered on the traditional religious belief system that upholds to lineage continuation and the succession of generations. Alex Ezeh et al (2009) identified high fertility to be the by-product or residue of cultural, economic and social factors. Sociocultural factors or circumstances have been pinpointed to play pivotal role for the relatively high fertility rates prevailing in the region. This ranged from high infant and child mortality, early and universal marriage, low contraceptive use and the high value placed on child rearing. Thomas Merrick (2002:41) highlighted that sub- Saharan Africa has the lowest level of contraceptive use in the world. In this circumstance of subordinate position, fertility is seen by women as a medium of attaining higher status within the family. As a result women generally indulge in giving birth to many children, whereby the number of children a woman gives birth to, is viewed as a determinant factor that helps to ascertain and increase her status in the family.

Cheihk Mbacke (1994) explained that sub Saharan Africa societies have set up an efficient system that strives to promote high fertility that encompass practices like early marriages, polygamy, rapid remarriage of widows. The prevalence of high child and infant mortality has contributed to the practice of high fertility rates in sub Saharan African countries as well. In the face of high infant mortality rates, high fertility rate is viewed as a medium of increasing the chances of precluding lineage extinction as well as a means of raising the survival rate of the lineage (Makinwa - adebusoye 2001). The importance attached to lineage continuation from John Caldwell and Pat Caldwell (1987) comprehension is the main reason behind the high fertility levels in the region and also for the reluctance that surrounds fertility decline. In essence, Caldwell and Caldwell (1987) mentioned that African societies are built in a

manner wherein high fertility and large families are often economically as well as socially rewarding.

2.5.1 Religion and ethnicity

Cultural factors, defined as language, religion, customs and values have been shown to have an impact on fertility behaviors. The fertility patterns are similar in culturally homogenous groups suggesting the importance of diffusion across such groups (Cleland and Wilson 1987). The National Health Statistics Reports in the United States revealed that the fertility intention of men and women differed across races and religions. With regard to religion, Catholic women tended to have fewer children than Protestant women; however, fertility intention was high among Mormons and Hispanics, regardless of their religion, and was lowest among Jewish women and those with no religion.

Munshi and Myaux (2006) found that local changes in reproductive behavior occur within religious groups; and assumed that social interactions among the women cannot be substituted with other interventions. Entwisle et al, (1996) and Rogers and Kincaid (1981) showed homogeneity of choices in villages in the contraceptive preferences. It must be as a result of the diffusion of contraceptive information through interpersonal networks (Rogers et al, 1999). Since individuals locate within the social networks, their child bearing attitudes, preferences, decisions, and behavior may arise from the social learning and influence with the interactions of kin, relatives, peers (Bernardi et al, 2007).

A case study of Kenya indicated that Muslims had the highest level of desire for more children (56.6%) whereas Catholics and Protestants were 42% and 43.4% respectively (Wachira, 2001) In terms of ethnicity Luos, Luhyas, Kisii had the highest desire for more children followed by the Kalenjin community and last but not least the Kamba, Kikuyu, Embu and Meru with the following percentages respectively (46%), (44.4%), and (38.1%).

2.5.2 Sex composition

Pramila et al (2014) in their study conducted in Tharu, Rural of Nepal discovered high sex ratio at last birth and shorter birth spacing following female children. Plan for next birth was

strongly affected by sex composition; women having only female children in family were more likely to want another birth compared to others. Age and education of the women, number of current living children were significantly associated with current contraceptive practices. This high sex ratio at last birth for those who decided to stop child bearing or used permanent contraceptives suggests the childbirth-stopping behavior was driven by son preference and can be inferred that the son preference behavior exists in Tharu community. Higher sex ratio indicating son preference behavior has also been found in analysis of data from Nepal demographic and health survey 1996, 2001, 2006, and 2011.

In Kenya majority of women who reported having more daughters than sons (47.2%) had more desire to have more children compared to women who had more sons or those who had an equal number of sons and daughters (Wachira, 2001).

2.5.3 Child mortality

According to Easterlin (1975) infant mortality play a major impact on fertility decline via the impact on the supply of children and ultimately on the motivation for fertility control. Evidence indicated that African countries follow a classic pattern of demographic transition in which fertility decline is correlated with fall in infant mortality, which is linked to modernization (socioeconomic development and improved health facilities). On the evidence of earlier literatures, a decrease in infant mortality is expected to decrease demand for more children increases the expected return of investment in child quality, which may lead to further decline in fertility. In Kenya Wachira (2001) found high desire for more children among women who have experienced child loss (43.6%) in comparison to women who have not had a child loss experience (35.1 %), therefore desire for more children being significantly related to child loss.

2.6 Inter spousal communication

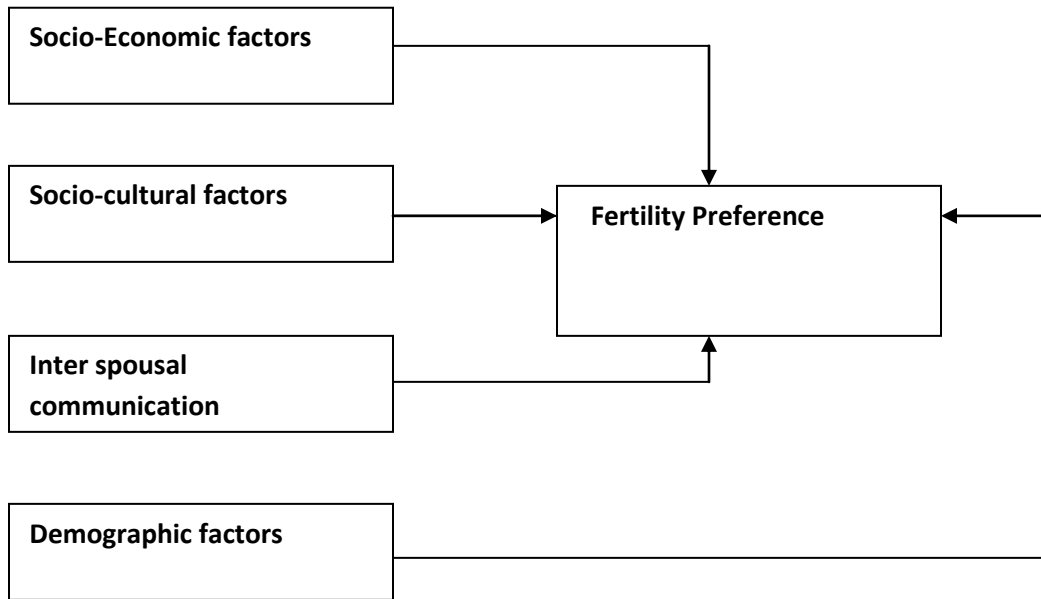
Studies conclude that communication between husband and wives is the first step in a rational process of fertility decision-making, and precursor of lower desired family size (Becker, 1996; Mason et al., 1987; Mahmud and Ringheim 1997; Mai, 1996). Couples' agreement, conjugal closeness or spousal communication is a strong predictor of intended fertility (Bankole et al., 1998). Another study (Coombs and Fernandez, 1978) suggests that

communication is associated with lower fertility preference of couples. From the review of the literature on selected interventions in Africa, Toure (1996), found that low level of contraceptive use was due to lack of communication between spouses regarding family size. Karen et al, (1987) found that communication factors affect husband's attitude towards family size. Uche and Isiugo (1994) found inter spousal discussion of family size and current use of contraceptives are expected to have an inverse effect on family size. Mahmud and Ringheim's study (1997) conducted in Pakistan detected 'inter spousal communication' as a significant covariate of the desire to have no more children, although their findings did not undermine the influence of other socio-economic, religious and health factors, which produce a mutual set of interest even in the absence of overt communication.

2.7 Conceptual framework and operational framework

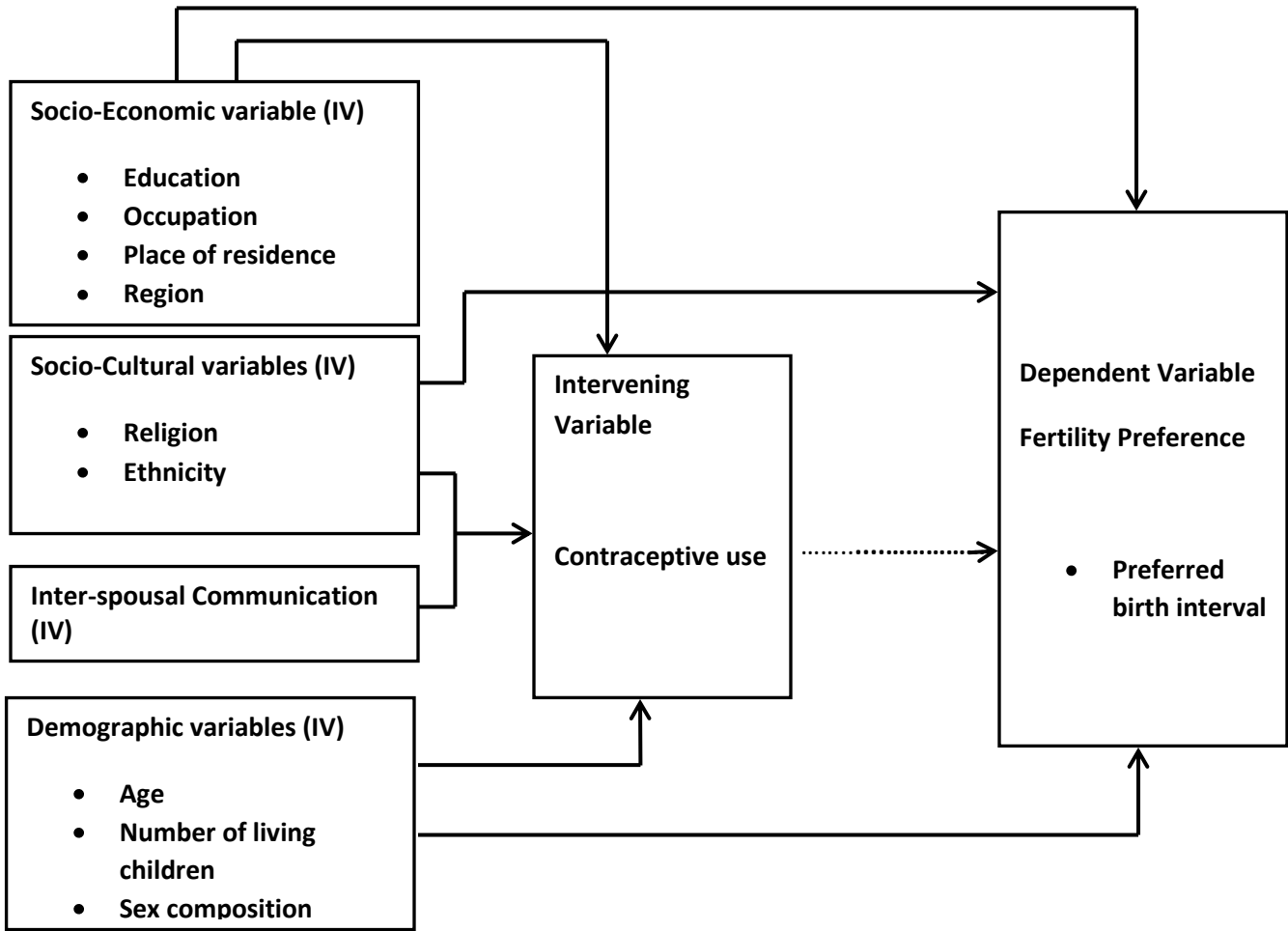
According to literature reviewed socio-economic, social cultural and demographic factors as well as programmatic factors such as contraceptive use and inter spousal communication may be conceptualized as factors that shape fertility preferences of Kenyan women. It is anticipated that socio-economic and demographic factors like education, residence, occupation and age have influence on human attitudes and behavior; cultural factors like religion and sex composition also can predict the fertility preference and factors like inter spousal communication can influence the attitude towards family size. Similarly mass media exposure can predict the variation of attitudes in regard to fertility preference. Below are a conceptual framework and an operational framework adapted for this study.

Figure 2.1: Conceptual framework



Source: Pullum (1980).

**Figure 2.2: Operational Framework
Independent
Variables- (IV)**



Source: Adapted from Pullum (1980).

CHAPTER THREE: METHODOLOGY

3.1 Introduction

This chapter discusses the source of data and methods of data analysis. Variables used in the analysis are also presented together with their respective definitions.

3.2 Data source

The study will use secondary data from the 2008-09 Kenya Demographic and Health Survey (KDHS). KDHS is a national survey conducted by the Kenya National Bureau of Statistics (KNBS) in partnership with other government agencies. KDHS uses several questionnaires to collect data such as the household questionnaire, the woman's questionnaire, and man's questionnaire. The main objective of the survey is to provide up to date demographic and health information including fertility preference. The information is meant to assist policy makers and administrators in evaluating and designing programmes and strategies for improving health and family planning services in Kenya.

This study will use data from the woman questionnaire.

Sample size - In this study responses from a total of 4236 currently married women of reproductive age (15-49) will be analyzed to establish the factors influencing their fertility preference. Marital status will be recorded such that the categories married and living together will be combined into one category to represent current married women. Sterilized and infertile women were not considered for analysis.

3.3 The dependent and independent variables

This study used preferred waiting time for the next birth as the dependent variable to measure fertility preference. Most studies have concentrated on ideal family size as a measure for fertility preference as much as it has its flaws. Collecting information on ideal family size as a measure of fertility preference can be relatively complex. Often it is difficult to get objective responses as questions on ideal family size are hypothetical in nature. Respondents, especially those illiterate or with little education may find it difficult to understand these questions. This study uses preferred waiting time for the next birth as it is direct, and focuses

on the topic of interest. In addition, few studies have examined the spacing component of reproductive intentions.

The independent variables of the study are Socio economic factors, socio cultural factors, demographic factors, contraceptive use and inter spousal communication.

3.3.1 Dependent variable

Fertility preference will be measured by preferred waiting time for the next birth. Respondents who are not pregnant or unsure were asked how long they would like to wait from now before the birth of another child. Pregnant respondents were asked after the birth of the child they are expecting now, how long would they like to wait before the birth of another child? Given that sterilized women and women who state that they are in fecund (declared in fecund) have no impact on future fertility because their potential contribution to fertility has been curtailed they have not been considered for analysis in this study.

A dichotomous variable will be created and coded as Short term waiting (less than 3 years) = 0 Long term waiting (3 years and above) = 1. According to literature, for a long time family planning programs promoted two year intervals between births for infant and child health and survival (National Research Council, 1989). However, evidence suggests that three to five years may offer greater health benefits (Ramarao Saumya et al 2006). The Optimal Birth Spacing Initiative (OBSI) was created under the auspices of USAID to place optimal birth spacing on the global leadership priority agenda. The goal of OBSI is to institute an optimal birth spacing recommendation of *Three to Five Years* at the policy, programmatic and behavioral levels. World Health Organization, recommendation for birth spacing after a live birth is at least 24 months before attempting the next pregnancy in order to reduce the risk of adverse maternal, peri natal and infant outcomes (WHO Report, 2007).

3.3.2 Independent variables

Education

This variable is a measure of the highest level of school that the respondent has attended. The variable will be categorized into four groups namely: No education Primary incomplete, Primary complete, Secondary and Higher Education.

Type of place of residence:

This is a dichotomous variable categorized as rural and urban.

Region of residence

Regional refers to part of the country the respondent's reside. Formerly known as provinces.

Religion

This variable identifies the respondent's religious affiliation. It is grouped into Catholics, Protestants and Muslim.

Gender distribution of living children-

This variable seeks to measure the distribution of sons and daughters alive and further find out the effect gender distribution has on preferred waiting time.

Age

This variable measures respondent's age in complete years and it will be recorded into 3 categories. The variable seeks to measure the effect age has on preferred waiting time for next birth.

Contraceptive use

The variable will measure if the respondent is currently using or not using a method of contraceptive. This is to find out how contraceptive use affects preferred waiting time for next birth.

Inter spousal communication

This variable measures respondent's level of communication with their spouses regarding family planning.

Work status

This variable measures the respondent's current working status in relation to preferred waiting time for next birth.

3.4 Method of Analysis

Frequency distributions and percentages will be used to describe the characteristics of the target population. Cross tabulations with chi square test will be carried out to test for association between the dependent and independent variables. Since the dependent variable of the study is dichotomous, binary logistic regression will be used to further analyze the data to assess the effect of the independent variables on fertility preference.

Table 3.1: Definition of key analysis variables

Variable	Definition
Dependent Variable	
Fertility preferences Preferred waiting time for next birth	Short term waiting(less than 3years)=0 Long term waiting(3 years and above)=1 NB: WHO recommendation of birth spacing after a live birth is at least 24 months before attempting the next birth.
Independent Variable	
Educational Attainment	No education=0, Primary incomplete=1, Primary Complete=2 Secondary + = 3
Type of place of residence	Urban =1, Rural =2
Region	Nairobi=1, Central=2, Coast=3, Eastern=4, Nyanza=5, Rift valley=6, Western=7, Northeastern=8
Religion	Roman catholic =1 Protestant/other Christian =2 Muslim =3
Age groups	<24 = 1, 25-34 = 2, 35+ = 3
Contraceptive use	Current use by method type No method =0, Traditional method=1, Modern method=3

Variable	Definition
Inter spousal communication	How often have you talked to your husband/partner about family planning in the past year? Never Discussed=1, Discussed once or twice=2, Discuss more often=3
Number of living children	0 = 1, 1-2 = 2, 3-4 = 3, 5+ = 4
Work status	No=1, Yes=2
Ethnicity	Embu, Kamba, Kikuyu, Meru =1, Luhya, Luo, Kisii =2, Kalenjin, Maasai =3 Mijikenda/Swahili/Taita-taveta=4 Somalis =5, Others =6 Ethnic groups were combined based on the region they come from.
Sex Composition	Boys=Girls=1 Boys<Girls=2 Boys>Girls=3

CHAPTER FOUR: FACTORS AFFECTING PREFERRED BIRTH INTERVALS

4.1 Introduction

As earlier noted wide variations and slow pace of fertility decline has persisted in Kenya. As much as National and Global initiatives have been put in place to curb rapid population growth and its adversities, TFR in Kenya still remains high at 4.6 while CPR for all methods is at 46%. In addition fertility decline has stalled since the year 2003. Further, actual fertility levels exceed the desired for various reasons. As such this study examined selected socio economic, cultural and demographic variables including inter spousal communication and contraceptive use and how they influence fertility preference among currently married women in Kenya.

The objective of this study was firstly to establish fertility preference differentials among currently married women in Kenya. Secondly, to establish the socio economic factors that determine fertility preference among currently married women in Kenya; and lastly to establish the socio cultural factors that determines fertility preference among currently married women in Kenya.

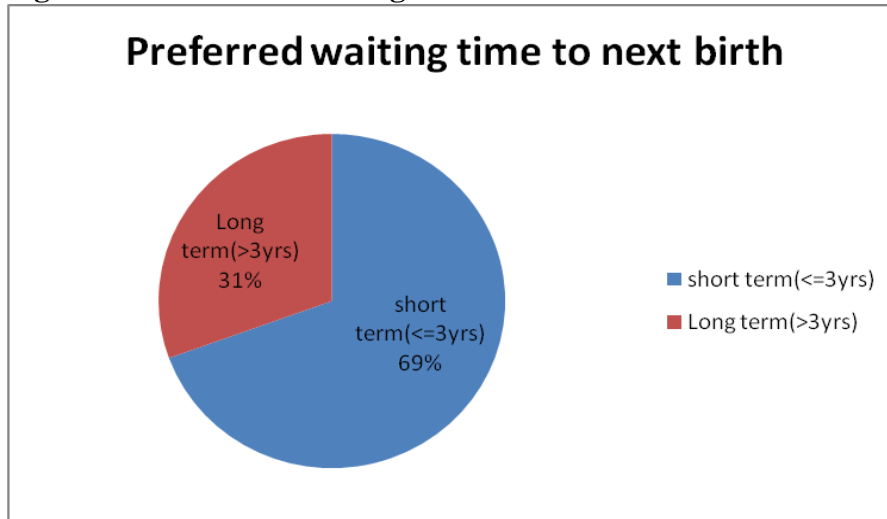
This chapter discusses results of the study showing how selected socio economic, cultural and demographic variables including inter spousal communication and contraceptive use affect fertility preference among currently married women in Kenya.

4.2 Socio economic, cultural and demographic characteristics of currently married women in Kenya

Preferred waiting time to the next birth

Out of the 4236 married women who were surveyed, only 2076 of the married women responded to the question on preferred waiting time to the next birth. As shown in the Figure 4.1 below out of 2076 married women who participated in the 2008/2009 KDHS survey, 69 percent preferred to wait for a short period of time to their next birth(< than 3 years) while 31 percent preferred to wait for a long period of time. Generally most women in Kenya prefer short birth intervals.

Figure 4.1: Preferred waiting time to next birth



Socio economic characteristics of the respondents

In respect to educational attainment women with incomplete primary education were 28.0 percent while 25.5 percent had completed primary level of education. Women with secondary education and above were 28.9 percent and 17.7 percent had no education (Table 4.1).

This study found that close to half, (41.5%) of the women was not working, while those working were 58.5 percent.

Majority, (70.8%) of the respondents were from rural areas while regionally, Nyanza had the highest number of respondents followed by Rift Valley with a percentage of 16.3 and 15.5 respectively. The least number of respondents were from North Eastern at 7.7 percent.

Socio cultural characteristics of the respondents

Most, (60%) of the women in this study were Protestants/other Christians, followed by Muslims and Roman Catholics who were 20.7 percent and 18.2 percent respectively.

As far as ethnicity is concerned women from Luhya, Luo and Kisii combined were the majority, (33.1%) followed by Kikuyu, Kamba, Embu and Meru, (31.9%). Kalenjins and Maasai were 10.7 percent, Mijikenda/Swahili and Taita-Taveta were 10.6 percent and Somalis were 8.7 percent. All other tribes combined were 7.3 percent.

Socio demographic characteristics of the respondent

With regard to age group most (43.1%) of the married women were in the age bracket 25-34 years. Married women with less than 24 years and more than 35 years were 28.9 percent and 28 percent respectively.

Looking at number of living children most (38.9%) of the women had 1-2 living children followed by 3-4 living children at 30.5 percent. Women with 5 and above living children were 23.5 percent and women with no living children were 7 percent.

Women with number of boys more than girls were 37.3 percent followed by women with number of boys less than girls at 34.1percent and lastly, women with number of boys equal to girls were 28.6percent.

Other characteristics of respondents

Majority (63.1%) of the women had ever used any method of contraception, while 31.9 percent had not used. Women using any traditional method were only 5 percent.

With regard to how often partners talked about family planning, only 40 percent of the women responded to this question. Married women who discussed family planning more often were 19 percent, 15.1 percent said that they discussed once or twice while 5.9 percent said they never discussed family planning.

Table 4.1: Socio economic, cultural and demographic, characteristics of currently married women in Kenya

	Variable	Frequency	Percent
1	Educational Attainment	Frequency	Percent
	No education	749	17.7
	Primary incomplete	1184	28.0
	Primary complete	1079	25.5
	Secondary +	1224	28.9
	Total	4236	100.0
2	Currently working	Frequency	Percent
	No	1757	41.5
	Yes	2467	58.2
	Missing	12	.3
	Total	4236	100.0

	Variable	Frequency	Percent
3	Type of place of residence	Frequency	Percent
	Urban	1235	29.2
	Rural	3001	70.8
	Total	4236	100.0
4	Region	Frequency	Percent
	Nairobi	412	9.7
	Central	459	10.8
	Coast	616	14.5
	Eastern	582	13.7
	Nyanza	689	16.3
	Rift Valley	656	15.5
	Western	494	11.7
	Northeastern	328	7.7
	Total	4236	100.0
5	Religion	Frequency	Percent
	Roman Catholic	771	18.2
	Protestant/other Christians	2543	60.0
	Muslims	877	20.7
	Missing	45	1.1
	Total	4236	100.0
6	Ethnicity	Frequency	Percent
	Kikuyu, Kamba, Embu, Meru	1255	29.6
	Luhya, Luo, Kisii	1402	33.1
	Kalenjin, Maasai	453	10.7
	Mijikenda/Swahili, Taita-Taveta	447	10.6
	Somali	370	8.7
	Others	309	7.3
	Total	4236	100.0
7	Current use of any method	Frequency	Percent
	No method	1351	31.9
	Modern method	2673	63.1
	Traditional method	212	5.0
8	Discussed FP	Frequency	Percent
	Never	252	5.9
	Once or twice	640	15.1

	Variable	Frequency	Percent
	More often	803	19.0
	Missing	2541	60.0
	Total	4236	100.0
9	Age group	Frequency	Percent
	<24 years	1224	28.9
	25-34 years	1826	43.1
	35 above	1186	28.0
	Total	4236	100.0
10	Number of living children	Frequency	Percent
	0	297	7.0
	1-2	1649	38.9
	3-4	1294	30.5
	5 above	996	23.5
	Total	4236	100.0
11	Sex composition	Frequency	Percent
	Boys=Girls	1211	28.6
	Boys<Girls	1446	34.1
	Boys>Girls	1579	37.3
	Total	4236	100.0
12	Preferred waiting time	Frequency	Percent
	Short term waiting <3yrs	1442	34.0
	Long term waiting \geq 3yrs	634	15.0
	Missing	2160	51.0
	Total	4236	100.0

4.3 Socio economic, cultural and demographic characteristics against preferred waiting time to next birth

Cross tabulations and chi square test were performed between preferred waiting time to the next birth and other covariates. Out of 4236 married women who were surveyed only 2076 were included in the analysis. As shown in Table 4.2 below out of the eleven independent variables used in the analysis, nine of them were significant namely region, working status, age group, religion, number of living children, ethnicity, sex composition, current use of any contraceptive method and educational attainment. Type of place of residence and inter spousal communication about family planning were however not significant.

The study found that educational attainment was a significant factor influencing preferred birth interval ($\chi^2= 121.109$, $p<0.01$). Approximately 89 percent of married women with no education preferred to wait for a short period of time to their next birth while those with incomplete primary education were 64.9 percent. Married women with secondary education and above were 64.5 percent and lastly married women with completed primary education were 60.2 percent.

The analysis indicates that current working status of the women was a significant factor affecting preferred waiting to the next birth ($\chi^2=17.801$, $p<0.01$). Out of 2076 women that were surveyed, 73.8 percent of the married women not currently working preferred to wait a shorter period of time for their next birth while 65.3 percent of currently working women preferred to wait for a short period of time to their next birth.

Type of place of residence was an insignificant factor to preferred waiting time ($\chi^2= 2.071$, $p=0.150$). Majority, (70.5%) of the women from the rural preferred short birth intervals while 67.3 percent of women from urban preferred short birth intervals. Region on the other hand emerged as significant factor influencing preferred waiting time ($\chi^2=117.807$, $p<0.01$). North eastern had 98.0 percent of the married women preferring short birth intervals followed by Rift valley region at 70.1 percent. Western had the least percentage at 62.1.

Religion was another significant factor affecting preferred birth intervals ($\chi^2=69.540$, $p<0.01$). Most (82.3%) of Muslim women prefer short birth intervals. Protestants/other Christians and Roman Catholics followed with 64.3 percent and 62.3 percent respectively.

Preferred birth interval was significantly influenced by ethnicity ($\chi^2=151.501$, $p<0.01$). As such, 97.8 percent of married Somali women and 77.8 percent of married women from the Kalenjin and Maasai communities preferred short birth intervals. Mijikenda/Swahili and Taita-Taveta were 61.5 percent while 61.4 percent were Luhya, Luo and Kisii followed. Kikuyu, Kamba, Embu and Meru were 60.7 percent.

Current use of any method was also a significant factor influencing preferred birth interval ($\chi^2=123.401$, $p<0.01$). The results of the cross-tabulation between preferred waiting time and current use of any contraceptive method indicate that among those who preferred to wait for

a short period of time to their next birth, 82.3 percent we're not using any method of contraception while 59.3 percent were using a modern method.

The analysis shows that inter spousal communication was not a significant factor influencing preferred birth interval ($\chi^2=0.287$, $P=0.866$).

Age group was a significant factor to preferred birth interval ($\chi^2=36.670$, $P<0.01$). Eighty six point one percent (86.1%) of married women in the age group 35> preferred short birth intervals while 68.8 percent were in the age group 25-34. Married women in the age group ≤ 24 were 65.9 percent who preferred short birth intervals.

Number of living children is another significant factor influencing preferred waiting time ($\chi^2=54.172$, $p<0.01$). As such, 84.6 percent of women with no living children and 80.5 percent of women with more than 5 living children preferred short birth intervals while 66.2 percent of women with 3-4 living children preferred short birth intervals and 65.1 percent of women with 1-2 living children preferred short birth interval.

Sex composition was also a significant factor influencing preferred birth intervals ($\chi^2=8.434$, $P=0.015$). Married women with the number of boys equal to girls were 73.8 percent who preferred short birth intervals while 68.2 percent of married women with number of boys less than girls preferred short birth intervals and lastly 66.9 percent of women with the number of boys more than girls preferred short birth intervals.

Table 4.2: Cross Tabulation between preferred waiting time and its covariates for currently married women in Kenya

Variables	Preferred waiting time		X ²	N
	< 3 yrs-short term N (%)	≥3 yrs-long term N (%)		
Educational attainment				
No education	447(88.9)	56(11.1)	121.109**	2076
Primary incomplete	335(64.9)	181(35.1)		
Primary complete	301(60.2)	199(39.8)		
Secondary +	359(64.5)	198(35.5)		
Currently working				
No	751(73.8)	266(26.2)	17.801**	2072
Yes	689(65.3)	366(34.7)		
Type of place of residence				
Urban	443(67.3)	215(32.7)	2.071	2076
Rural	999(70.5)	419(29.5)		
Region				
Nairobi	132(68.8)	60(31.2)	117.807**	2076
Central	104(62.3)	63(37.7)		
Coast	227(63.2)	132(36.8)		
Eastern	163(68.5)	75(31.5)		
Nyanza	225(64.1)	12(35.9)		
Rift Valley	206(70.1)	88(29.9)		
Western	139(62.1)	85(37.9)		
North Eastern	246(98.0)	5(2.0)		
Ethnicity				
Kikuyu, Kamba, Embu and Meru	286(60.7)	185(39.3)	171.350**	2076
Luhya, Luo and Kisii	418(61.4)	263(38.6)		
Kalenjin and Maasai	147(77.8)	42(22.2)		

Variables	Preferred waiting time		X ²	N
	< 3 yrs-short term N (%)	≥3 yrs-long term N (%)		
Ethnicity continued Mijikenda/Swahili and Taita-Taveta Somalis Others	168(61.5) 271(97.8) 152(82.2)	105(38.5) 6(2.2) 33(17.8)		
Current use of any method No method Modern method Traditional method	738(82.3) 647(59.3) 57(64.8)	159(17.7) 444(40.7) 31(35.2)	123.401**	2076
Discussed FP Never discussed Discussed once or twice Discussed more often	49(57.6) 154(54.4) 167(54.8)	36(42.4) 129(45.6) 138(45.2)	0.287	673
Age group ≤24yrs 25-34 35>	616(65.9) 622(68.8) 204(86.1)	319(34.1) 282(31.2) 33(13.9)	36.670**	2076
Number of living children 0 1-2 3-4 5 and above	226(84.6) 730(65.1) 309(66.2) 177(80.5)	41(15.4) 392(34.9) 158(33.8) 43(19.5)	54.172**	2076

Variables	Preferred waiting time		X ²	N
	< 3 yrs-short term N (%)	≥3 yrs-long term N (%)		
Sex composition				
Boys=Girls	475(73.8)	169(26.2)	8.434*	2076
Boys<Girls	489(68.2)	228(31.8)		
Boys>Girls	478(66.9)	237(33.1)		

*p-value<0.05; **p-value<0.01

4.4 Factors influencing long term waiting period to the next birth

Given that the dependent variable, preferred waiting time to the next birth was dichotomous binary logistic regression model was used to examine factors found to significantly influence it. Out of 4236 women surveyed only 2061 were included in the logistic regression analysis. Table 4.3 below indicates that out of the nine variables entered into the binary logistic regression model, five variables were significantly associated with preferred waiting time to the next birth. The factors are educational attainment, ethnicity, current use of any method, age group and number of living children. Region, current working status, religion and sex composition were not significant.

Educational attainment was a predictor and had a positive significant relationship with preferred waiting time to the next birth. Women with primary incomplete education were 1.753 times more likely to wait for a longer period of time to their next birth in comparison to women with no education. Women with completed primary education and Secondary education and above were 2.255 and 2.226 times more likely to wait for a longer period of time to their next birth as compared to women with no education.

Ethnicity was a significant factor determining preferred waiting time. The results indicate that Somalis had 0.131 odds less likely to wait for a longer period of time to their next birth while Kalenjin/Maasai had 0.319 odds less likely to wait for a longer period of time to their

next birth as compared to the Kikuyu, Kamba, Embu and Meru. Somali ($p=0.003$ 95% CI 0.034-0.510) and Kalenjin/Maasai ($p<0.01$ 95% CI 0.179-0.569) were statistically significant and had negative association with preferred waiting time.

Another significant factor was current use of any contraceptive method. Findings of this study indicated that women who currently use modern method of family planning were 1.572 times more likely to wait for a longer period of time to their next birth compared to women who are currently not using any method. Modern method is highly significant to preferred waiting time. ($P< 0.01$, 95% CI 1.209-2.045).

Age group was a highly significant factor to preferred waiting time to the next birth. According to the analysis, women in the age groups 24-34 and 35> were 0.574 and 0.198 times less likely to wait for a longer period of time to their next birth compared to women in the age group ≤ 24 . (OR 0.574 and 0.198 respectively, 95% CI 0.447-0.736 and 0.124-0.317 respectively). The age groups 25-34 and 35> are both significant ($p< 0.01$) and have a negative association to preferred waiting time to the next birth.

Number of living children was also a predictor ($p< 0.01$) and had a positive association to preferred waiting time to the next birth. Women with 1-2 living children have a 3.433 times higher odds and women with 3-4 living children have a 6.513 times higher odds of waiting for a longer period of time to their next birth as compared to women with no living children. (95% CI 2.220-5.279 and 3.890-10.904 respectively).

Table 4.3: Logistic regression coefficients, significance and odds ratio for currently married women preference to preferred waiting time to their next birth

Variables	B	S.E.	Exp(B) (Odds ratio)	95% C.I.for EXP(B)	
				Lower	Upper
Educational attainment (Reference-No Education)					
Primary Incomplete	.56**	.22	1.75	1.15	2.68
Primary Complete	.81**	.23	2.26	1.44	3.55
Secondary +	.80**	.24	2.23	1.39	3.57
Currently Working (Reference-No)					
Yes	.02	.11	1.02	.82	1.27
Region (Reference –Nairobi)					
Central	.06	.25	1.06	.65	1.73
Coast	.10	.29	1.10	.63	1.94
Eastern	.21	.24	1.24	.77	1.99
Nyanza	-.19	.25	.83	.51	1.34
Rift Valley	.35	.26	1.41	.84	2.37
Western	-.02	.26	.98	.59	1.62
North Eastern	-1.10	.73	.33	.08	1.40
Religion (Reference-Roman Catholics)					
Protestants/Other Christians	-.14	.14	.87	.66	1.14
Muslims	-.03	.22	.97	.63	1.49
Ethnicity (Reference-Kikuyu, Kamba, Embu and Meru)					
Luhya, Luo and Kisii	.01	.21	1.01	.67	1.52
Kalenjin and Maasai	-1.14**	.30	.31	.18	.57
Mijikenda/Swahili and Taita Taveta	-.00	.30	.10	.56	1.79

Variables	B	S.E.	Exp(B) (Odds ratio)	95% C.I.for EXP(B)	
				Lower	Upper
Somalis	-2.03**	.69	.13	.03	.51
Others	-.83**	.28	.44	.25	.75
Current use of any method (Reference-No Method)					
Modern Method	.45**	.13	1.57	1.21	2.05
Traditional Method	.32	.26	1.38	.83	2.29
Age group Reference-≤24Yrs					
25-34	-.56**	.13	.57	.45	.74
35>	-1.62**	.24	.20	.12	.32
Number of living children (Reference-0)					
1-2	1.23**	.22	3.42	2.22	5.28
3-4	1.87**	.26	6.51	3.89	10.90
5>	2.23**	.34	9.30	4.79	18.07
Sex composition (Reference-Boys=Girls)					
Boys<Girls	-.26	.15	.77	.57	1.03
Girls>Boys	-.06	.15	.94	.70	1.26

*p-value<0.05; ** p-value<0.01

4.5 Discussion

This study found that educational attainment was a predictor of preferred birth interval. The more education a married woman had the more likely she was to prefer longer birth intervals. This concurs with studies conducted earlier such as Becker and Lewis (1973) who found out that highly educated women tend to replace child numbers with child quality. In the same breadth, Ding and Hesketh (2006) in their study conducted in China found out that preference for a small family was associated with high level of education. In a study in Nigeria, Cochrane (1978) found out that only 10 percent of women with education beyond primary education believed fertility to be determined by God while 50 percent of the totally uneducated women believed fertility to be determined by God. In the case of Mozambique, at the national level, women who read easily are the least likely to have short intervals (Ramarao et al, 2006). Setty-Venugopal, and Upadhyay (2002) in 38 of 51 countries with DHS data, found out that women with no education were more likely than educated women to have shorter birth intervals. Contrary to the general expectation Wachira (2001) found out that women with secondary education and above had a higher level of desire for more children (42.8%) compared to women with primary (41.1%) and no education (29.3%). This study however found out that women with no education (88.9%) preferred shorter birth interval as compared to women with secondary education and above (64.5%), implying that increased level of education among married women leads to preference of longer birth intervals. The two measures of fertility preference; desire for more children and preferred birth interval were rather inconsistent. Bumpass et, al (1986) also reported short second birth interval for women with higher education in some settings in Korea. Kamal and Khalid (2012) named the reason for the short birth interval for highly educated women in Korea as compressing the child bearing.

Ethnicity was a predictor of preferred birth interval. Kalenjin, Maasai and Somalis are less likely to wait for a longer period of time to their next birth. The results of this study concur with the findings of a study carried out by Anyara and Hinde (2006) which found out that increases in fertility levels were more pronounced in Narok/Kajiado and Baringo regions which are mainly inhabited by Maasai and Kalenjin ethnic groups in the Rift valley region of Kenya. Early marriages are common in Somali culture. This exposes the young married

women to the risk of getting pregnant many times. In a previous study by Wachira (2001) Luos, Luhyas and Kisii had the highest desire for more children followed by the Kalenjin community as opposed to this study which found out that Somalis followed by the Kalenjin/Maasai community were less likely to prefer longer birth intervals. A point to note is that in Wachiras study North eastern region of Kenya was not included in the survey which is majorly inhabited by the Somalis.

Current use of any modern method was also a predictor of preferred birth interval. Women who use modern method of family planning are more likely to prefer longer birth intervals. Findings in other studies reveal that women are more likely to use contraceptives if both spouses desire fewer children (Irani et al 2014). If both spouses desire fewer children the likelihood of a married woman to use contraceptives would be high hence increasing the uptake of contraceptive use possibly because the spouses would have discussed the use of contraceptives to avoid unwanted fertility

Age group was also a predictor of preferred birth interval. According to a study by Seannot and Yeatman (2012) the desire to stop childbearing is rare among younger women which coincide with the results of this study that younger women are less likely to prefer longer birth intervals. In addition this finding also corresponds with Ramarao et al (2006) finding in a Mozambique study, *Correlates of Inter-birth Intervals*: whereby younger women were found to be more likely to have a birth interval less than three years than those older.

Number of living children was also a predictor of preferred birth interval. This study found that women with fewer children were less likely to wait for a longer period of time to their next birth. This is consistent with findings in Gaza, Nampula and Zambezia of Mozambique where women who have few currently living children (none or one) or over five children more likely to have short intervals than those who have between two and four children. In addition literature has often suggested that those who have suffered a pregnancy or child loss are more likely to replace that pregnancy/child and hence the interval between births is short. Wachira (2001) found high desire for more children among women who had experienced child loss in comparison to those who had not. The prevalence of high child and infant mortality has contributed to the practice of high fertility rates in Sub Saharan African

countries. With high infant mortality rates, high fertility is viewed a medium of increasing the chances of precluding lineage extinction(Makinwa –Adebusoye,2001) A second explanation is related to the fecundity factors where women who conceive easily and quickly are also those who are more likely to have more children. Thirdly, the death of the index child in infancy or early childhood has also been found to be associated with short subsequent intervals in settings as separate as Bangladesh and Tanzania (Chakraborty, Sharmin and Islam, 1996; Mturi, 1997). Sometimes, parents consciously plan a new pregnancy to replace a lost child. There are unintentional reasons for short spacing too—the death of a child cuts short nursing durations which results in earlier resumption of menses and ovulation.

Interestingly enough, current working status, region, religion, sex composition, type of place of residence and inter spousal communication were not significant in this study. This is inconsistent with earlier studies such as the impact of woman’s status on fertility and contraceptive use in Bangladesh, DHS 1999-2000 whose finding was that skilled job and discussion about family planning with partner were some of the factors found to be related with having significant fewer numbers of children. Additionally Mahmud and Rhinheims (1997) detected inter spousal communication as a significant factor to have no more children. According to Cleland and Wilson (1987) cultural factors such as language religion customs and values have been shown to have an impact on fertility behaviors. In this study however religion was found to be insignificant to fertility preference. In terms of sex composition the findings of this study were inconsistent with earlier studies like the study by Pramila et,al (2014) conducted in Tharu, rural of Nepal which found out high sex ratio at last birth and shorter birth spacing following female children. Their plan for next birth was strongly affected by sex composition unlike this study. Likewise Wachira (2001), found out those women who reported having more daughters than sons had more desire to have more children compared to women who had more sons or those who had an equal number of sons and daughters. Regarding type of place of residence, this study found it not to be significant to fertility preference; yet earlier studies reveal that urban people prefer smaller families (Knodel et al., 1996; Singh and Casterline1985; Mahmud and Ringheim, 1997; Ali, 2000). Similarly the analysis of this study found region to be insignificant. This was inconsistent with other studies that found regional variations existing with regard to fertility intentions (Farid 1996).

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The main objective of this study was to determine factors associated with fertility preference among currently married women in Kenya. This project attempted to examine the effects of some selected socio economic, cultural and demographic variables on fertility preference among currently married women in Kenya. This study provided further knowledge and revealed important information on the factors influencing preferred birth intervals among currently married women in Kenya. This section will be presented in three parts namely summary, conclusion and recommendations.

5.2 Summary of findings

The study found that education was positively associated with preferred birth interval of currently married women in Kenya. The more education a woman has the more likely she is to wait for a longer time before the next birth. This could be due to employment status, use of contraceptives and reproductive health awareness. Inconsistencies with earlier results were also noted like in the case of highly educated women in Korea having short birth intervals (Bumpass et, al 1986). The reason for such diversity is uncertain, although Kamal and Khalid (2012) named it as compressing the child bearing, meaning better educated women wish to compress child bearing into fewer years so that they can participate in other activities and hence have shorter spacing.

Ethnicity was another factor influencing preferred birth intervals. This study found out that Somalis, Kalenjins and Maasai are less likely to prefer longer birth intervals. Family planning and education policies/programs need to be considered among Somalis, Kalenjins and Maasai. In a paper by Khasakhala (2011) entitled ethnic fertility differentials and their proximate determinants in Kenya: the highest level of fertility were experienced among the Maasai, Somali, Kalenjin and Turkana. This is consistent with the findings of this study. Kalenjins, Maasai and Somalis need to be targeted and conveyed with optimal birth spacing messages.

Current use of any Family Planning method was another significant factor on preferred birth interval among currently married women in Kenya. This study found out that women who

use modern method of family planning preferred longer waiting time to their next birth. Family planning programs have the potential to change the dynamics of fertility in Kenya and as such fertility regulation programs should continue integrating family health issues with contraceptive services empowering women's reproductive decision making capabilities. Further, in Kenya, there is a need to orient family planning campaign towards specific communities that are still in a pre-transitional phase of fertility transition. Without a reduction of desired fertility, family planning programs will not be effective (Muhoza et,al 2014).

Age group was another significant predictor of preferred birth interval. The results conclude that younger women were less likely to wait for a longer period of time to their next birth. This makes intuitive sense because younger women are more likely to have children for a variety of reasons such as higher fecundity and having a few children yet not completed child bearing.

Preferred waiting time is predicted by the number of living children a woman has. The more the number of living children a married woman has the more likely she is to prefer longer birth interval. This makes logical sense because a woman without a child is more eager to get one compared with a woman who has several children.

5.3 Conclusions

This study intended to find out the influence of selected socioeconomic, cultural, demographic, factors, inter spousal communication and contraceptive use on currently married women's fertility preference in Kenyan. Younger women, women with incomplete primary or no education, women with fewer numbers of living children, women not using any method of contraception were significantly more likely to prefer shorter birth intervals. With majority of Kenyan women preferring short birth intervals, it is clear that fertility levels in Kenya will still remain high reflecting pronatalistic cultural imperatives in Kenya and if Kenya's Fertility transition is to continue and even go lower than where it has currently stalled, more research and policy work needs to be done to enhance family planning uptake in Kenya and better understand the benefits that come along with birth spacing.

5.4 Recommendations

Recommendations for further research

Further studies, both qualitative, quantitative or mix qualitative and quantitative approaches need to be carried out to explore the social cultural and religious beliefs norms and attitudes of currently married women in Kenya with regard to family planning and birth interval as this could help understand better what needs to be done to improve uptake of family planning in women across the country and better understand the component of birth interval.

Qualitative analysis may be a basis for more in-depth research especially on traditional religious systems which operate in a negative way to suppress impulses (Molnos, 1973) that might lead to a lowering of the overall level of fertility.

Men's status and approval of family planning and birth interval should also be researched further as some women tend to make decisions about family planning or even birth spacing based on what their male partner's advice.

Recommendations for policy

Family planning program should be more intensified among the Somalis, Kalenjins and Maasai. Longer birth interval norm should be made more popular among the Somalis, Kalenjins and Maasai, as a short birth interval causes many health risks for a woman and her newborn child, and the desire to lengthen birth intervals results to the achievement of small families.

The importance of education as a weapon to health and socio-economic independence should also be emphasized. Programs should also be designed to improve women's economic independence in general. Strategies should be undertaken to ensure that women with no education contribute to a significant change in women's fertility preference. Programs to this effect should include those that will sensitize the girls to the consequences of early sexual debut, marriage and childbearing.

Interventions promoting specific birth spacing messages may be successful the closer they are to women's own preferences and desires. Additionally, women who are more likely to

have shorter birth intervals should be targeted with information on having optimal birth interval.

For many years, birth spacing has been largely studied and promoted for its demographic, rather than health, effects because longer spacing can lower birth rates. Projections of the estimated impact of birth spacing on maternal and child health should be emphasized as well so that both the demographic and health effects are achieved. Chances are if health benefits are achieved, demographic targets too will be achieved.

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