MATERNAL EDUCATION AND FAMILY SIZE: A CASE STUDY OF MUGUGA LOCATION, KIAMBU DISTRICT.

BY

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DECLARATION

This thesis is my original work and has not been presented for a degree in any other University.

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This thesis has been submitted for examination with my approval as the University Supervisor.

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DEDICATION

To my dearest parents Justin Wanyoike and Miriam Muthoni for their unfailing love, inspiration and support, and my child George Wanyoike.

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ABSTRACT

This study entitled "Maternal education and family size: a case study of Muguga Location, Kiambu District" was carried out between 0ctober and December 2001. The broad objective of the study was to investigate the impact of women's formal education on the family size. The second objective was to find out the other factors that have led to the decrease in family size in the research area. The main hypothesis of this study was that maternal education is the key determinant of the family size. It was therefore hypothesized that the higher the mother's education the more likely for her to have a small family, the higher the mother's education the more likely she is to use contraceptive and that formal education is positively related to decrease in family size.

The study was directed towards the contribution of the scholarship understanding of the impact of maternal formal education on the family size.

This work was grounded on two theories- the demographic transition theory and the demographic regulation theory.

The scope of the study was limited to the study of women's education and how it influences the family size through some intervening variables such as age at first marriage, knowledge of contraceptives, change of values and norms e.t.c.

A sample size 150 women aged between 15-49 years was selected from the four sub-locations making up Muguga location using the random sampling technique that incorporated the purposive method. The District of the study was selected purposively whereas the location of the study was selected using the multi-stage sampling design.

Most of the data was collected through personal interviews in which the key instrument was a questionnaire with both open and close-ended questions. Other

data was gathered through a focus group discussion. Two case studies were also undertaken. One of the two had many children while the other had few children. Secondary data on the study theme and variables was also used.

Data presentation was based on percentages, frequencies and cross- tabulation following the SPSS computer package. Some of the data was presented in tables, to allow good interpretation of the relationships between the dependent and independent variables.

The findings indicate that women's education in Muguga location has been a key factor in the decline of the family size in the area. However, although education was found to be very significant in the decline of family size there were other factors such as peer pressure and change of attitudes that were found to contribute towards this phenomenon.

The population was found to be fairly well educated –63% had secondary school and above education. Those with no education were only 3%. Most of the respondents (78%) had ever used some contraceptive. However, knowledge of contraceptives superceded user practice. A small family of 1- 2 children was preferred by the majority (60%)

This study recommends that any effort directed at population control and reduction of family size must focus on improving the education status of women. It also recommends that family planning programmes should aim at changing traditional views and attitudes that hinder the practice of family planning.

There is need to carry out a similar research in other parts of Kenya for comparison purposes and future policy development. There is also need to carry out a research in the same area to find out how the decline of family size has affected the lives of the people holistically.

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C.B.S – central bureau of statistics

K.D.H.S -Kenya demographic health survey.

CHAPTER ONE

PROBLEM STATEMENT, OBJECTIVES AND STUDY JUSTIFICATION

1.1 Introduction

One of the most important issues for nations where population growth is impeding economic development is the relation between education and fertility. Interest is motivated by the belief that western fertility declines have been caused by advances in education for the general population. As a consequence of this belief, modernizing countries sometimes argue that direct programs to induce fertility control are unnecessary since educational advances will take care of the problem. Others justify heavy outlays in population education, especially at the primary levels, partly in terms of the presumed effects on fertility (J. Moyone Stycos 1967:177-180)

Since the end of the World War II, population problems have engaged the attention of human kind on an unprecedented scale (Philip M. Hauser 1979:1). The population of Sub-Saharan Africa is growing at the rate of 3.2% per year, the result of declined death rates and high fertility per woman (Van de Walle and Foster 1968). Kenya has for a long time experienced a rapid population growth rate due to better health and reduced mortality (Boserep 1985:390). Rapid population growth rate in Kenya has been viewed with a lot of concern because it is seen as a threat to development (Ominde 1968:266). Currently however, the Kenyan population growth rate is one of the forerunners of the trend of fertility decline in Sub-Saharan Africa (Egero 1994:3)

The findings of the demographic health survey (1989) provided evidence of a major decline of family size to 6.7 children per woman in Kenya. Further evidence of a continued acceleration of fertility decline was reviewed by the

K.D.H.S of 1993 when the rate was reported to be 5.4 children per woman in Kiambu District from 7.4 children per woman in Kenya (C.B.S 1979). The 1999 population census put the Kenyan population at 28.7 million an increase of 34% over the 1989 enumerated population of 21.4m. In Kenya, the decline in fertility is specifically pronounced in the Central Province (C.B.S 1998,1999) A major cause in decline in fertility is increased use of family planning methods (C.B.S 1999, Gini 1940:84). This study seeks to examine the relationship between maternal formal education and family size.

Population studies (No. 17 1953:79) argue that education of women has been advanced as a reason for the decline in family size. Plodnost Manzeltri (1938) in the studies of fertility in relation to the education of the wife showed generally that the higher the education, the fewer the number of children. (John Beur 1997:21) Laundry (19954: 367-369) argues that a decline in fertility is often characterized by a reduction in family size. Ayayo (1991:172) states that studies have registered findings where education levels appear to be significantly related to smaller family size.

1.2 PROBLEM STATEMENT

This study addresses itself to the relationship between a woman's formal education and her family size in Muguga Location Kiambu District.

In less developed countries the extension of formal education especially for females has been identified as an important determinant of the onset and the speed of fertility reduction (Lesthaeghe et al 1983:15) This work set out to examine the role of women's education on family size in Muguga Location, Kiambu District: to examine the part that maternal education has played in the decline of the family size.

Interest in this study emanated primarily from the fact that the study area is in a District with one of the leading declines in fertility in Kenya –5.4 children compared to 7.5 children for Nyanza and 6.7 children for the Nation per woman (KDHS 1989).

The intercensal growth rates have significantly declined since 1969. Whereas the population growth rates for the study area were 3.4%, 2.8% and 1.8% in the period 1969,1989 and 1999, the National rates were 2.9%, 3.4% and 3.4% for the same period. Other regions experienced higher growth rates e.g. the Rift valley had 3.8%, 4.2% and 3.5%, the highest growth rates for the same period. Increases of population in Nairobi, Rift Valley and the Coast Provinces were due to increase in rural-urban migration. For the Western, Eastern and Nyanza the population declines were attributed to out-migration and increased mortality possibly arising from HIV related deaths. Kenya's future demographic trend is mainly going to be determined by trends in fertility than by trends in mortality (C.B.S 1989)

The fertility decline that was experienced during the 1989-1999 intercensal period was a major contributing factor to the decline in the percentage of the population aged below 15 years. Younger women aged between 20-39 years had lower fertility than older women. According to the C.B.S (1999) the decline of the population in the study area is a combination of out-migration and the **declining fertility rates**. My study interest is in the declining fertility rates. Bogue (1969:693) argues that throughout the world, there seems to be a strong inverse co-relation between the amount of education attainment and the level of fertility. It was against this background that I set out to find out the relationship between a woman's level of education and her family size in the study area. Is the woman's level of education related to the decline in fertility in the area? What other factors have contributed to this decline?

The preferred family size is associated with many factors such as cultural, religious and social – economic variables, which have been researched on extensively in Kenya and elsewhere in the world (Anangwe 1995, Bahemuka 1990,Caldwell 1982 and others). Specifically, this study examines the implications of maternal formal education on the preferred family size among women aged 15-49 years of Muguga Location, Kiambu District in Kenya.

1.3 STUDY OBJECTIVES

Broad Objective

The broad objective of this study was to investigate the impact of women's formal education on the preferred family size.

Specific Objectives

1. To study the relationship between women's education and family size.
2. To identify other factors that influence family size among the women in the study area.

1.4 SCOPE OF THE STUDY

This research was limited to the study of women's education and how it influences the family size among women of ages 15-49 years. This is referred as the productive life span. It is the period in which a woman is at the greatest risk of conceiving. The study was also limited to Muguga Location Kiambu District.

1.5 STUDY JUSTIFICATION

Since the district under study is in an area with a marked decline in population growth (C.B.S 1989,C.B.S 1999), it is important to investigate how far maternal formal education has contributed to this decline. Most demographic studies in Kenya have concentrated on other aspects of population phenomena such as child survival, migration, and breast-feeding e.t.c. (Gachuhi 1997, Njogu 1992, Maleche 1990 etc) But very few studies have been done on how maternal education affect the preferred family size in the region. Most studies of fertility have concentrated largely in urban areas with very little emphasis on the rural population. This study will be carried out in a rural area.

This study therefore hopes to contribute to the scholarship understanding of the impact of maternal formal education the family size.

1.6 HYPOTHESES

This study had one key guiding hypothesis that maternal education is the key determinant of the family size.

For the purpose of this study it was hypothesized that: -

1. The higher the mother's education the more likely that she will have a small family.
2. The higher the mother's education the more likely she is to use contraception

3. Formal education is positively related to decrease in family size.

1.7 OPERATIONAL DEFINITIONS OF CONCEPTS AND VARIABLES.

Concepts

Child bearing age.

This will refer to the productive period 15-49 years for women.

Age

This will refer to the number of years of the respondent at first birth or at first marriage

Contraceptives use:

This will refer to the number of years spent in school by the respondents.

Variables

Independent variable

Maternal education

This will refer to a woman's formal education. It will be measured as follows:

None

Primary School Std. 1-4

Primary School Std 5-8

Secondary School Form 1-2

Secondary School Form 3-4

Secondary School Form 5-6

University

Other (specify)

Other important study concepts (at the **dependent** variable level) include:

1. **Preferred family size.**

   This will refer to the number of children a woman would like to have at the end of her reproductive period. This will be measured in terms of the number of children a woman would like to have at the end of her reproductive years.

2. **Actual family size**

   This will refer to the actual number of children a woman has at the end of her reproductive years. The variable will be measured by the actual number of children a woman has.

3. **Use of contraception**

   This means the application of family planning methods such as pills in order to control birth.

Contraceptive use will be measured through such indicators as knowledge, practice and attitudes regarding contraception amongst the respondents.

4. **Values and attitude changes**

These will refer to the old and new beliefs and practices associated with family size. The indictors here will be new outlooks towards the preference of a small family size, women taking part in decision making, women finding alternative fulfillment in careers etc.

CHAPTER TWO

LITERATURE REVIEW AND THEORETICAL FRAME WORK

2.0 INTRODUCTION

This chapter presents a review of literature and theoretical framework upon which this study is grounded. According to Singleton et al (1988:475) literature review must make clear the theoretical context of the study problem. The literature review indicates that women education is closely related to a small family. It also links fertility reduction to age at first marriage, child mortality, cost of raising a child, knowledge of the contraceptive and change of attitudes.

LITERATURE REVIEW

2.1 Reduced Fertility

According to Bernard Barelson (1969:67) family planning is the first step taken on the road to population control. The 1960's witnessed a substantial increase of awareness and concern with population matters throughout the world and of efforts to do something about it, particularly in the developing countries (Bernard Barelson 1969:67) Cleveland (1987:7) argues that the highest marital fertility is found among women with little schooling. Other studies (Nag 1982:40; Henin 1979:9) have supported the fact that there is a strong

relationship between women's education and family size in many societies. Nkanata (1984:92) in a research in Meru found that a primary level of education did not greatly influence decisions on the desired number of children.

Education is a pre requisite to the adoption of family planning (Gachuhi 1971:3). Immerwahr (1981) considers wives education as one of the socio-economic variables that affect the use of contraceptives. Mburugu and Oluoch (1985:29) considered illiteracy in private sector institutions as an obstacle to family planning, while Maleche (1990:27) found that primary level of education has negative effects on the family size preferences. Similarly Keraka (1991:1931) found that women with lower primary level of education tended to prefer large family size as contrasted with those women who are more educated.

Duncan and John (1995) concluded that education has a direct impact on fertility. In their studies on education and fertility and contraceptive use (Ainsworth, Beegle and Nyamete 1994) found that women's schooling is associated with higher contraceptive use and lower cumulative fertility. Education further discourages high fertility by reducing the economic utility of children. This is because education creates aspiration for upward mobility for women. Educated women can work outside the household where they can earn as high income as their husbands.

2.2 AGE AT FIRST MARRIAGE

Women's education has a positive statistical relationship to age at first marriage in the developing countries (Cochrane 1979) Education tends to negatively correlate with arranged marriages and according to many authors (Caldwell 1982, Dyson and More 1984) arranged marriages tend to go along with a young age at marriage. Thus a young female who undergoes an arranged marriage will

also be one with little or no education and hence there is a high likely hood for her to have a large family. This is contrasted to the case whereby an educated woman will typically be older, free to make her decisions concerning marriage and will most likely have a small family.

Bernard Barelson (1969) argues that education postpones the age at first marriage. Education opportunities for women particularly secondary and vocational education tend to raise the age at first marriage thus resulting into a small family size. If delay in marriage occurred as a result of prolonged education, it is quite probable that daughters will never catch up with their mothers in the number of children born. Thus the daughters' family sizes will be smaller than the mothers (Caldwell 1976).

The East Asian economic miracle resulted in accesses to high quality basic education. The corresponding facts of the demographic miracles were increases in the median age at marriage and a decline in fertility (Dennis A. Ahlburg and Erick. R. Jensen 1997). Increase in the age at first marriage dramatically reduces fertility (John Bauer 1997). Education is thought to increase women's commitment to work, which may in turn lead to a postponement of marriage in order to provide an opportunity to work. This will automatically lead to a small family size, which will suit her interest better than when she is having a large family.

2.3CHANGES IN VALUES AND ATTITUDES

The least traditional views and actions, the belief that fertility may be too high, the discussion of family size, the recognition that people can successfully plan

their families and so on, are most strongly associated with extended education (Caldwell 1966). Economic and social development resulting from education tends towards a reduction in fertility (Caldwell 1968). Dyson and Moore (1983) argue that an educated woman plans her family size through her knowledge and greater participation in domestic decision-making. A woman will want a small family that will suite her inters better.

Cochrane (1979, 1983) argues that education tends to reduce the demand for children by shifting values and tastes in a manner unfavourable to children. Anker and Knowles (1978:11) in studies on women's educational achievement have shown that education increases communication between husband and wife. This encourages attempt to control childbearing. Education helps to change the values, beliefs and attitudes of people towards a small family in contrast to norms and values that favour large families (Caldwell 1980:228) Formal education is viewed as fundamental to the psychological will to adopt contraceptive (Gage 1995).

Education reduces the in status and respect associated with high fertility (Caldwell 1980, 1987, Cochrane 1979, Gage 1995, Mason 1984). Education also reduces the demand for children by exposing women to new ideas and tastes, which mitigate against the tastes of children (John Beur 1997) Ngala (1975:20) argues that the more educated a woman the more likely her attitudes are positive to the family planning campaigns. An educated woman can engage in gainful employment, which can be an alternative to child bearing. (Population Studies No. 17 1953:79). In most cases children of educated mothers are not viewed by their parents as being of economic value to the family, thus they will have fewer children (Kutzner 1935). It's often assumed that a decline in religious interest has been conducive to the decline in family size (Cogan 1976: 19 – 22).

2.4 INFORMATION ON FAMILY PLANNING METHODS

M. Croley (1969: 118) says that lack of knowledge about family planning methods often prevents application by those who would wish to do so. Educated women of 7 or more years have fewer children than women who have had little or no education at all. This is because educated women have greater access to information and communications media (Coale 1973). Better-educated women are argued to be more willing to engage in innovative behaviours than less educated women and in many third world countries, the use of contraceptive remains an innovation (Caldwell 1979, Dayson and Moore 1983) Better educated women are also argued to have more knowledge of contraceptive methods and how to acquire them than are less educated women because of their literacy, greater familiarity with modern institutions and greater likelihood of rejecting a fatalistic attitude towards life (Cochrane 1979).

Education influences the willingness of spouses to accept new methods of contraception and their ability to use contraceptives appropriately (Gupta 1994:112). Women with formal education frequent family planning clinics more than those women with no education (Lesthaeghe et al 1983:41). An increase in education produces an increase in the user-efficiency of contraceptives. Education makes it possible for women to have a wide range of contraceptives (Anker and Knowles 1978:11). The school system acts not only to transmit information but also as a powerful normative influence implanting concepts that will influence adult living patterns (United Nations report on human fertility 1968:75). Education makes it possible for a woman to understand use of contraceptives more effectively thereby resulting into a small family size (Rutenberg and Watkins 1987). Duncan and Mallucio (1975:13) argue that in Zimbabwe women who have O'level education are twice as likely to use contraceptives as those with less years of schooling. Dramatic increase in education is associated with substantial declines in fertility.

2.5 COST OF RAISING A CHILD

Education reduces fertility through its influence and effects on the cost of child rearing (M. Croley 1969:188) A small family makes it easier to provide education and social mobility for children. Educational costs to the parents lead to smaller desired family size. Educated parents perceive their interests are better served by having fewer children (Cohen 1995). Educated women find it far easier to keep the family small and thus have more to spend per child on education (Thompson and Lewis). Education may lead to higher standards of living with regard to child care and rearing, creating greater emphasize on the 'quality' of children at expense of numbers (Cochrane 1979, 1983)

Cochrane (1979) argues that education increases the subjective attractiveness of expenditures competitive with having more children and thus the demand for children goes down. Education brings about a style of rearing children that is costly to the parents in terms of time and money (Easterlin (1978:67). Aries (1948:471 – 493) has pointed out that with the increasing orientation of parents to the concern and welfare of their children, the family size has decreased. Similarly, Cochrane (1983:314 – 316) argued that with improved education there comes a general rational mentality, which fosters the desires for a small family. Improved status is sought. When people are maintained at subsistence levels incentives for smaller families are lacking.

2.6 REDUCED CHILD MORTALITY

Child mortality has been associated with large families. With better nutrition and better childcare methods infant and child mortality has fallen steeply, more so among families with educated mothers. High fertility has been seen as an insurance against the in-roads of high mortality in the family (Caldwell

1976:10-18). Evidence from previous studies on developing countries suggested that maternal education has a positive effect on the use of health care services in Africa (Mbacke and Van de Walle 1987). The fact is that education changes the mother's knowledge and perception of the importance of modern medicine in the care of their children (Barrera 1990). According to Schultz (1984) an educated mother is in a better position to take care of her children who therefore have much higher chances of surviving than children of uneducated mother.

In his interpretation of a Nigerian data, Caldwell (1979; 1994) suggested that educated mothers tend to be less fatalistic about illness and seek medical assistance. They are willing to adopt improved childcare practices such as boiling water etc. According to Van de Walle (1987) improved mother's education raises child survival. It raises her skills and confidence in child rearing methods. Education allows women to reduce t heir children's mortality and reduces their unwanted childbearing (Schultz 1981). When mothers are sure that their children are going to survive, they may lower their fertility (Anker and Knowles 1978:181) Education may reduce fertility through the reduction of mortality. Anker and Knowles (1978:181) further argue that education brings about better hygienic ways of raising children, better nutrition and better health care. Educated women are more aware of preventive and curative health that benefits the child. Education breaks traditional family raising habits.

THEORETICAL FRAMEWORK

For the purposes of grounding this work on theoretical framework, the demographic transition theory and the demographic regulation theory are discussed. However the demographic transition theory is better in explaining this work.

2.7 DEMOGRAPHIC TRANSITION THEORY:

The demographic transition theory is a description of the actual demographic transition from high fertility –high mortality via high fertility –declining mortality, via declining fertility – low mortality to a stage of low fertility -low mortality, which took place in Europe and North America.

When Third World countries after 1945 experienced a rapid decline in mortality and thus an increase in population growth, the supporters of this theory interpreted this as the 1st stage fulfilled in the transition and expected the fertility to decline as well.

According to Nostestein (1953:18) the decline in fertility in Western countries can be attributed to economic and social transformation, which was accompanied, by industrialization and the spread of education. The theory provides us with a framework that we can use to analyze changes in fertility. Similar conditions are now taking place in many less developed nations including Kenya. As the society undergoes socio – economic transformation, we should expect to see the preferred family size get smaller.

Before independence, the Kenyan population growth rate was characterized by high mortality. In the 1960's the population was described as high fertility low mortality (C.B.S 1989). In recent times the demographic positions of various places in Kenya have shifted from high fertility – low mortality towards low fertility – low mortality (C.B.S 1989). According to the 1989 Census report sharp declines of the average number of children ever born in Kiambu District was reported. Total fertility Rate of the District stood at 5.4.

2.8 THE THEORY OF DEMOGRAPHIC REGULATION

According to this theory every society tends to keep its vital process in a state of balance such that population will replenish losses from death and grow to the extent deemed desirable, flexible and readjust rather promptly to changes according to the ability of the economy to support the population (Bogue 1969:51 – 53). Almost every where, this adjustment takes the form of first minimizing death rates to the greatest possible extent under the given states of technology and then regulating birth rates in such a way that the desired balance or rate of growth is accomplished.

Where the death rates are high, the fertility rate is also high. In technologically developed countries high birthrates are viewed as dysfunctional. During the period of adjustment of fertility, to reduce mortality is an entire process of social change (Bogue 1969). The theory of demographic regulation is premised on the assertion that every society has a set of norms that guide population growth. The effort required to achieve a particular average size of desired completed family size varies with the mortality condition existing. This theory is a positive assertion that Nations, when faced with serious over population, will undergo adaptive social change to lower fertility rates and adopt a technology of contraception.

The family size in developed countries has fallen to the point where most women can expect to bear only two or three children in lifetime (Coale, 1966). This trend is quickly being adopted in Kenya especially amongst the educated. According to the demographic regulation theory, readjustment from a situation of high fertility is necessary through the use of contraception. According to Easterlin (1978:67) education may change the values, beliefs and attitudes of people towards a small family norm. In Kenya, the decline in fertility is specially pronounced in urban areas, Central and Eastern (K.D.H.S 1993:36)

According to the C.B.S of 1989, in Kenya, women with secondary and above level of education have the lowest fertility. Part of the explanation for lower fertility of better-educated woman is that it not only delays marriage but also the first birth. Thus it is within the framework of both the demographic transition and the demographic regulation theories that I embarked on examining how women's education has affected the preferred family size in Muguga location, Kiambu District.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 INTRODUCTION

This chapter deals with research methodology, including site description, the sampling design, techniques of data collection, data processing and analysis, units of analysis and the problems encountered during the data collection process and how I dealt with them.

3.1 SITE DESCRIPTION

This study was carried out in Muguga Location of Kiambu District, 25 KM west of Nairobi. Geographically, the area covers the sub-locations of Kahuho, Muguga, Gitaru and Kanyariri.

This area, mainly inhabited by the Kikuyu, is within the sub-tropical climatic region, highly populated with a high potential agricultural output.

This area has reliable rainfall coming in the long and short rains. Most of the land is sub-divided into small potions and although coffee can do well, there is no room for it. The people here engage in small-scale agricultural farming, poultry and dairy activities, and small-scale businesses while some are employed in the formal sector.

The District was selected purposely since no study of this kind has ever been carried out in this area.

3.2 Sampling techniques

Muguga Location of Kiambu District was selected through the multi-stage sampling technique, whereby all the divisions of Kiambu District were listed on separate pieces of paper and Kabete Division was picked randomly. From Kabete Division, a list was drawn separately for each location and using simple random sampling, Muguga Location was picked.

To constitute the sample size of 150 women from the four sub-locations of Muguga Location, the 1989 population data on women was used. The cases were then selected using the purposive technique incorporating the random sampling method to pick those women who fell in the age-bracket of 15-49 years.

3.3 TECHNIQUES OF DATA COLLECTION

The following are the methodological approaches for this study:

1. Social survey – this is face-to-face personal interview. It was undertaken using a questionnaire with both open- and close-ended questions to a sample size of 150 women aged between 15 – 49 years randomly selected.
2. Focus Group Discussions (F.G.D). The instrument that was used in this method was guided questions. Here, key informants such as women group leaders and community leaders constituted the focus group discussion forum.
3. 2 case Studies were also used as a technique of data collection. The data collection instrument for this method was guided questions. Two case studies, one of a woman with a large family and another one with a small family were carried out.

4. Document Perusal was another technique of data collection that I used. The data collection instrument that was used in this case was documentation perusal on secondary data on the study theme and variables.

3.4 DATA PROCESSING

The S.P.S.S. computer package was used in data processing to give the frequencies and percentages for descriptive statistical analysis regarding the effect of maternal education on family size.

3.5 DATA ANALYSIS

The data was presented on tables to interpret the relationships between the independent and the dependent variables. Frequencies and percentages were also used to give descriptive statistical analysis of the study theme and variables.

Both the qualitative and quantitative methods of data analysis were used.

3.6 UNITS OF ANALYSIS

The units of analysis were:

1. 150 women of the productive age-bracket of 15-49 years. To these, a standard questionnaire was administered.
2. 2 women – one with a large family and another with a small family constituted case studies.
3. 15 key informants consisting of group women leaders such as chiefs, school leaders, and church leaders. These formed the focus group discussion forum that yielded relevant and useful information about family size determinants in the area.

3.7 PROBLEMS ENCOUNTERED DURING DATA COLLECTION

During the data collection process I encountered the following problems: -

People were very suspicious of my intentions since the time I was collecting data coincided with the period when there was a strong rumour that children were being stolen in the country. In fact I also at one time though that it was very risky since anybody who found me asking children where their mother was could suspect me of attempting to steal children and raise an alarm. To solve this problem, I employed a research assistant who was familiar with the people to walk with me.

I also encountered a problem with the weather. Sometimes it was very hot and at other times it was very cold when the rainy season set in. I could only work when the weather was fair.

Some of places were very far in to the interior where public vehicles do not reach. For so I had to do a lot of walking which was very taxing.

CHAPTER FOUR

DATA PRESENTATION

4.0 INTRODUCTION

This chapter gives a simple description of the socio-demographic and personal characteristics of the respondents. The data is presented using simple descriptive statistics. The respondents' personal characteristics are also related to the study theme.

4.1 INDIVIDUAL CHARACTERISTICS OF THE RESPONDENTS

4.1 RESPONDENTS BY AGE GROUPS

Age group	Frequency	Percentage
15-19	9	6
20-24	19	12
25-29	41	27
30-34	26	17
35-39	29	19
40-44	6	4
45-49	21	14
Total	**150**	**100**

As table 4.1 shows, the ages of the respondents ranged between 15-49 years. This is the age at which a woman is most likely to get pregnant. The youngest and the oldest women were aged 15 and 49 years respectively with a range of 34 years. Most of respondents were quite fairly young. 6% of the respondents were aged between 15-20, which is evidence of early parenthood. 12% of the women were aged 21-25, the majority 27% aged 26-30, 17% aged 31-35 years, 9% aged 36-40 years, 4% aged 41-50 while only 7% aged between 51-55 years. Early marriages are related to large families especially where family planning is not practiced. Women who marry early also happen to have a low education, hold

traditional views about family and they are almost very likely to be ineffective practitioners of family planning. This is a view that has been held by many scholars including Caldwell (1968). Although most of the respondents were young, they were knowledgeable about the contraceptive. 82% of them started using the contraceptive before they were 25 years old.

4.2 Distribution of respondents by marital status

Marital status	**Frequency**	**percentage**
Married	110	73
Single	28	19
Divorced	6	4
Separated	3	2
Widowed	3	2
Total	**150**	**100**

The above data shows five broad categories of marital status. 73% of the respondents were married while 19% were single. 4% were divorced, 3% separated while 3% were widowed. Marital status is crucial as far as family size is concerned. Married women are more likely to have more children because they are more exposed to sexual intercourse than their counterparts.

4.3 Age at first marriage

Age group	**Frequency**	**Percentage**
15-19	57	38
20-24	62	41
25-29	27	18
30+	4	3
Total	150	100

The majority of the respondents (41%) had their first marriage while they were in the age bracket of 21-25 years. 38% of the respondents married quite young (15-20 years). 18% of the respondents married while aged 26-30 years. Only 3% of the respondents married while they were 30 years and above.

According to John Bauer (1997) increases in age at marriage dramatically reduces fertility. The women who married young happened to be the same women with a little education. This concurs with the fact that the more schooling a woman has the later she tends to marry and as a result the fewer the years she has left for child bearing. Many years of formal education thus enhance marriage postponement. In Kenya, fertility varies with educational levels. Women with primary education seem to have higher fertility than women with no education. With higher education fertility for all age cohorts declines dramatically. Additional education beyond secondary level reduces fertility further (Schultz, 1970). Millicent Odera (1979) did not find postponement of marriage an important factor affecting fertility in rural Nyanza since 70% of her respondents married at the age 14-16 years. These were the same women who were illiterate, did not use contraceptives and ended up having 9+ children.

In contrast although 79% of the respondents in this study were married by the time they were 25 years, none of them had as many children as the women of rural Nyanza. The woman's educational status, knowledge and practice of contraceptives made this difference.

4.4 Is the respondent currently staying with the husband?

CURRENTLY	FREQUENCY	PERCENTAGE
Staying with husband	101	67
Staying away from husband	9	6
Others	40	27
Total	150	100

Most of the respondents (67%) were currently staying with their husbands. 6% were staying away from their husbands while 27% consists of those who were either divorced, single or widowed.

4.2 EDUCATIONAL LEVELS

4.5 RESPONDENTS BY LEVELS OF EDUCATION

Level of education	Frequency	Percentage
O	5	3
Primary class 1-4	4	3
Primary class 5-8	46	31
Sec form 1-2	18	12
Sec form 3-4	62	41
Sec form 5-6	7	5
University	6	4
Others	2	1
Total	**150**	**100**

The above table indicates a fairly well educated community. 40% had secondary form 3-4 education while 1%, 31%, 13.5%, 4.5%, had primary class 1-4, primary class 5-8, secondary form 1-2 secondary form 5-6 and university education respectively.

Only 3% were illiterate while 1% (represented by others) had college education. The education of women has always been associated with a proportional increase in the use of family planning methods and therefore fertility regulation. Education is envisaged as providing momentum towards the acceptance of new ideas such as the use of contraceptives. Education further helps in evolving a culturally constructive and critical awareness. Education aims at equipping individuals with skills necessary for them to take their place in the society, evolve critical constructive attitude and develop appreciation of socio-cultural and moral achievements of humanity. Thus educated women are individuals with capacities to analyze and rationalize problems especially if they are related to quality of life (Draper: 1965:129)

4.6 Satisfied with level of education

Satisfied	Frequency	Percentage
Yes	80	53
No	70	47
Total	**150**	**100**

On the question of satisfaction with one current level of education, 53% of the respondents said that they were satisfied while 47% said they were not satisfied with their current levels of education. Educated women are removed from their traditional values and often identify more with foreign cultural values, which advocate for a small family. The major implication from the data in this category is that given chance, 70 of the 150 respondents would have wanted to have a better education.

4.7 why satisfied with level of education

Reason	Frequency	Percentage
Has benefited from it	32	40
Attained the best	26	32
Has no problem	22	27
Total	**80**	**100**

The major reasons given by the respondents (as shown on the above table) for their satisfaction with their current levels of education were: had benefited from education (40%), attained the best so far (32%) and 27% said they were experiencing no problem arising from their current levels of education.

4.8 why not satisfied with level of education

Reason	Frequency	Percentage
Wanted to continue	8	69
Life would be better	17	25
Does not help me	4	6
TOTAL	**70**	**100**

Table 4.8 indicates the reasons given by the respondents as to while they were dissatisfied with their current levels of education. 69% said they wanted to continue with education at the time it stopped, 25% thought life would be better if they had more education while 6% said that their current level of education does not help them. This shows that education is highly thought of by the respondents.

4.9 respondents intention of furthering education

Intention	Frequency	Percentage
Yes	43	29
No	107	71
Total	**150**	**100**

The data in table 4.9 above indicates that only 29% of the respondents had the intention of going back to school while 71% had no intention of furthering education. However, the women who said that they had intentions of going back to school meant doing courses such as tailoring, secretarial, computer, driving etc. Increasing levels of education for women reduces fertility. This study found that it is very difficult for a woman to go back to school after she has started a family. Bahemuka et al (1990:31) states that well educated women are more likely than their uneducated counterparts to have contacts with international values, which include the adaptation of the contraceptive without hesitation. In the west this is an example of the liberalisation of women.

4.10 reasons for intending to further education

Reason	Frequency	Percentage
Love for education	10	23
Education benefits	28	65
Alternative	5	12
Total	**43**	**100**

23% of the respondents gave their reason of intending to further education as love for education, while 65% wanted to further education because of its benefits. The rest 12% wanted to further education as an alternative to what they were doing with

their lives. Education of a woman is very important because it affects fertility through some intervening variables such as the use of contraceptives and marriage postponement.

4.11 Reasons for not intending to further education

Reason	Frequency	Percentage
Family commitments	58	54
Financial problems	30	28
Too old	13	12
Satisfied	6	6
Total	**107**	**100**

Table 4.11 indicates that 107 respondents had no intention of furthering education. Out of these 54% said that family commitments could not allow them to further education, 28% cited financial constrains, 12% said they were too old to go back to school while 6% said they were already satisfied by their current levels of education. Kabwegyere T.B (1977; 156) recognizes the value of educating a woman for he says that the more we educate women, the more we are likely to precondition the decline in fertility. Most women find it hard to go back to school after they are married. This is why women postpone marriage in order to get an education first. Thus the higher the woman's education the further the postponement of marriage. This in turn delays the first birth and such a woman is likely to have few children.

4.3 KNOWLEDGE, PRACTICE AND ATTITUDES OF CONTRACEPTIVE

4.12 Source of first information about contraceptive

Source	Frequency	Percentage
Family	7	5
Books	11	7
Friends	64	42
Teacher	7	5
Radio	7	5
Doctor	53	35
Total	**150**	**100**

The above data indicates that the majority of the respondents (42%) first heard about contraceptives from friends. The second largest source of information is the doctor (35%). This is normally done after the delivery of the first child or when the women are taking their babies to the antenatal clinic. The other sources of first information about contraceptives were the books (7%), family (5%), teacher (5%) and the radio 5%. Source of information about contraceptive is very important because misinformation could lead to unwanted fears of the contraceptive. Most of the myths concerning family planning originate from family and friends.

4.13 Ever used contraceptives

Response	Frequency	Percentage
Yes	118	78
No	32	22
TOTAL	**150**	**100**

The majority of the respondents (78%) had ever used contraceptives compared to 22% who had never used contraceptives in their lives. The first step to fertility decline is the practice of family planning. This finding is contrasted with the findings of Oyosi S. O (M.A. thesis 1996) that the acceptance rate of family planning in Vihiga District was only 25%. He attributed this to negative attitudes and fear of the side effects of the contraceptives. Ayayo (1987:2) notes that even though Kenya initiated family planning programmes as early as 1967 she has since made no progress. This finding is refuted by this study in that the Muguga women have embraced the contraceptive with 78% of respondents having ever used a contraceptive.

4.14 Attitude towards women's education

Attitude	Frequency	Percentage
Very necessary	97	64
Necessary	53	36
unnecessary	0	0
Undesirable	0	0
Total	**150**	**100**

In Muguga Location women's education is regarded as of great importance. 64% of the respondent said that education is very necessary while 36% said that it is just necessary. Nobody said women's education is unnecessary or undesirable meaning that the respondents really understand how necessary it is for a woman to be educated. The dominant impression from the data is that the respondents thought very highly of women education judging by the large number of responses 64% (97) in this category. Education is a process of learning and it has great influence on attitudinal change. It enhances change in people's behaviour. Exposure to different parts of the world makes it possible for people to meet and exchange ideas. This modifies people's values Caldwell (1968). Therefore this study found a woman's education to be a very important factor in the reduction of fertility. Education is associated with the desire to have smaller families. There is a tendency for family size to increase as education decreases. Thus the lower the education levels the larger the family size.

4.15 Description of contraceptives

Description	Frequency	Percentage
Right	150	100
Wrong	0	0
Total	**150**	**100**

All respondents correctly defined contraceptives. They all knew what it is and what it is for even those who have never gone to school or ever used contraceptives. It is then not a surprise that 78% (118) of the respondents had ever used a contraceptive. 82.5%(97) of the women in this category had used a contraceptive before they were 25 years. Anangwe (M.A. thesis 1996) says that Ikamari (1985:16) quotes Ejiogu (1972) as stating that of the women in his study 25% had no education and 49% had not even completed primary school,

yet all of them had some knowledge of a contraceptive. This is a sure sign that even the uneducated women know and use contraceptives. For Muguga women 42% of them first heard about contraceptives from friends.

4.16 Reasons for not using contraceptives

Reasons	Frequency	Percentage
Health reasons	9	27
No husband	10	30
Religion	7	25
Husband refused	5	15
Wants to have a child	1	3
Total	**32**	**100**

30% of the respondents did not use contraceptives because they were single and therefore did not feel the need to use it for they did not have a regular sexual partner. 27% cited health problems, which included spotting, loss/ increase of weight, headaches, high blood pressure, dizziness, nausea etc. 25% indicated religious reasons, 15% had been refused by husbands while 3% wanted a child. The 1984 Kenya contraceptive prevalence survey implies that the vast majority of the Kenya women are not using the contraceptive for reasons other than disapproval. Caldwell (1968) states that contraceptive users have been identified to be different from non-users in the sense that the latter tend to be less educated and they have bigger families.

4.17 Knowledge of different types of contraceptives

Contraceptive	Frequency	Percentage
Pill	148	98
Norplant	60	40
Injection	146	97
Coil	146	97
Condom	70	46
Tubaligation	70	46
Vasectomy	20	13
Tablets	27	18
Natural	146	97
Diaphragm	15	10
None	1	1

The above table indicates that the most known type of contraceptive is the pill (98%) followed by the injection (97%), natural (97%) and the coil (97%). The condom and tubaligation followed (46%) for both. 40% of the respondents knew about the Norplant. Contraceptives such as vasectomy, diaphragm and tablets were little known. Only 1% of the respondents said she did not know any types of contraceptive. Correct knowledge of contraceptives is very important for effective use. The data in this category is only limited to the names of different types of contraceptives. When prodded further, most of the women in this study did not know about the contraceptives in detail as in the likely side effects or the make up of the same. They only got to know about the side effects once they or their friends experienced them. According to the 1989 Kenya health demographic survey knowledge supercedes user rate. This was also true of the respondents because although only 1% of them did not know any method of family planning, only 78% had ever used a contraceptive. Of the latter 18% of them had dropped the contraceptive mainly because they had no husband or for health reasons.

4.18Respondents by age groups at which they started usvoman, heceptives

Age – group	Frequency	Percentage
15 – 19	37	31
20 – 24	60	51.5
25 – 29	16	14
30 – 34	4	3
35 +	1	0.5
Total	**118**	**100**

Table 4.18 indicates that most of the respondents started using contraceptives when they were young. 51.5% started using contraceptives when they were in the age group of 20 – 24 years. This corresponds well with the fact that 79% of the women had married before year 25. Of the 118 women who had ever used a contraceptive, 82.5% were below 25 years. 31% of the respondents started using contraceptives in the age bracket of 15 – 19 years while 14%, 3% and 0.5% were in the age groups of 25 – 29 years, 30 – 34 years and 35 plus years respectively. Age at first use of contraceptive is an important variable because it is strongly related to fertility reduction.

Child bearing is a highly consequential activity that is responsive to both economic and social structural changes affecting the costs and benefits of children. 82.5% of the respondents had used a contraceptive before they were 25 years old. This is a good indicator of the fact that fertility is well controlled from an early age by the women. As a result there is a high likelihood for such women to have small families. Even though the majority of the women in the area married young (79% had married by the age of 25), they were not expected to bear many children for they practiced family planning. Early marriages are associated with high fertility but this is not the case for Muguga division.

There is a consistently positive relationship between a woman, her level of education and the use of contraceptive.63% of the women had secondary and above education. While more women were well educated, the use of family planning methods had increased especially in Muguga Location. This contrasts sharply with the findings of the Kenya Demographic Health Survey of 1989 whereby only 27% of the then currently married women used some method of family planning leaving 73% not using anything.

4.19 Respondents currently on contraceptives

Are you on contraceptive	**Frequency**	**Percentage**
Yes	78	59
No	72	41
Total	**150**	**100**

Most of the respondents (59%) were currently on contraceptive compared to 41% who were not currently on contraceptives. The use of contraceptives has been identified as the first step towards the reduction of fertility.

4.20Reasons for not being on contraceptives currently

Reason	**Frequency**	**Percentage**
Health problems	34	47
No husband	26	39
Pregnant	2	2.5
Religion	8	9
Menopause	2	2.5
Total	**72**	**100**

Those respondents who were not currently on contraceptives gave the following reasons; 47% had health problems, 39% were single, 2.5% were currently pregnant, 9% cited religious reasons while 2.5% had already reached menopause.

4.21 which contraceptive are you currently using?

Contraceptive	Frequency	Percentage
Pill	30	38
Injection	10	12
Coil	13	16
Natural	6	8
Condom	0	0
Norplant	0	0
Vasectomy	0	0
Tablets	0	0
Tubaligation	9	11
Diaphragm	0	0
Total	**78**	**100**

The pill emerged as the most popular method of contraceptive (38%) followed by the coil (16%) and injection (12%). While 8% of the respondents were using the natural method, 11% of the interviewees had undergone the tubaligation. This category was made up of mainly older women of 40+ years who also happened to have 5+ children in most cases and did not want any more children. To undergo the operation they first had to agree with their husbands. This method was not popular with the younger women for they reckoned that if one of their children died, they would want to replace it. Therefore they preferred methods of family planning that are not irreversible. No woman was found to be using condoms, tablets and the diaphragm as a contraceptive currently. This was because while the respondents said that men did not like using condoms, the rest of the contraceptives in this category were little understood in this area.

4.22 Have you always used this contraceptive?

Response	Frequency	Percentage
Yes	31	40
No	47	60
Total	**78**	**100**

Table 4.22 indicate that the majority of the respondents using contraceptives had changed from one type of contraceptive to another – 60% while 40% had always used the same type of contraceptive. An educated woman is more likely to consult a doctor in case of ill health because of a certain contraceptive. The doctor can advice her accordingly and give her an alternative. On the contrary a woman who is not educated is less likely to consult a doctor in this case.

4.23 Which contraceptive were you using before?

Contraceptive	Frequency	Percentage
Pill	10	21
Injection	16	34
Coil	10	21
Natural	5	11
Tablets	1	2
Condom	5	11
Total	**47**	**100**

Previously 34% of the respondents were using the injection, 11% the natural method 21% the pill, 11% condom had 2% had used the tablets. Pill, injection and coil were the alternatives used mostly by the respondents e.g. if one experienced side affects from the pill, she would switch to the coil or the injection.

4.24 Reasons for changing contraceptive

Reason	Frequency	Percentage
Health problems	36	78
To breastfeed	3	6
Became pg. While on contraceptive	2	4
Curiosity	2	8
Wanted more efficient method	4	8
Total	**49**	**100**

The majority (78%) of the respondents who had changed their contraceptive did so because of the side effects of the previous contraceptive they were using. The rest 6%, 4%, 4% changed in order to breastfeed, became pregnant while on that contraceptive, curiosity reasons while 8% wanted a more permanent contraceptive, respectively.

4.25 Source of contraceptives

Source	Frequency	Percentage
Hospital	114	97
Chemist	0	0
Other-village agent	4	3
Total	**118**	**100**

Table 4.25 indicates that are majority of the respondents (97%) acquired their contraceptives from hospitals (represented health centers, clinics, etc) where they

are most likely to get correct information on contraceptive and to also have their health evaluated more often than the women who got their contraceptives from the village agents. Only 3% of the respondents got their contraceptives from the village agents of family planning. The latter are the women who happened to have an education of primary STD 1-4. The data in this category indicate that the majority of the respondents who used family planning methods have reliable sources as far as their health is concerned. The success rate of the methods used is therefore, most likely to be high.

4.4 FAMILY SIZE

4.26 Respondents' opinion on how many children a woman should have

No. of children	Frequency	Percentage
1-2	90	60
3-4	36	24
5+	17	11
individual decision	7	5
Total	**150**	**100**

60% of the respondents said that a woman ought to have 1-2 children while 24% thought that she should have 3-4 children. Those who were in favour of 5+ children were 11% and they happened to be mainly older women of 40 years especially those with children of the same sex. All the women who had undergone tubaligation as a method of family planning also came from this category. 5% said that this is an individual decision. However, the general indication here is that the majority of the respondents were in favour of a small family.

From the interviews and the focus group discussions it was apparent that the cost of raising a child was an important factor when it came to deciding how

many children a woman should have. According to Caldwell (1968a: 604), increases in school costs may be critical in motivating parents to desire and attain small family size since for African parents education for their children is increasingly taking a high value. So the majority – 60% of the respondents said that the ideal number of children a woman should have is 1-2 which is quite small compared with the Nigerian data whereby women with secondary school education had an average ideal of 5.4 children while those with pry education had 6.4 children and those who never went to school had an average of 7.5 children (Caldwell J. C, 1968:379).

The above findings further contradict Mirza (1980), who noted that in Africa and India where mortality has significantly declined in response to the introduction of modern medical techniques, fertility has not declined in response but on the contrary, families have become larger since more children are able to survive to adulthood. I concur that while these findings could have been true then, this is not the case today especially when we analyze the Muguga situation whereby the fertility has declined sharply.

The same findings are further contrasted with Millicent Odera's study (M.A. thesis 1979), whereby she found family sizes to be on the higher side (9+) in rural Nyanza. She concluded that the majority of the respondents favoured large families and where small families were encountered, this was due to other reasons other than the practice of family planning. Millicent concluded that any socio-economic changes, which are favourable to high fertility behaviour, were likely to inflate the average fertility in the area. For the Muguga woman such changes have not served as a catalyst to the inflation of the fertility since 97% of the respondents said that they would not have more children given favourable economic conditions. Kathleen Anangwe (M.A. thesis 1995) found the mean number of children desired to be relatively low-3.8, a number larger than the

recorded for the actual family size in Nairobi. A small family is associated with an educated woman. In 1979, Henin wrote on female education in Kenya and noted that women with primary education had the highest number of children.

4.27 Does this also apply to the respondent?

Response	Frequency	Percentage
Yes	85	57
No	65	43
Total	**150**	**100**

57% of the respondents said the answer in table 4.27 also applied to them while 43% said that this answer did not apply to them – either they wanted fewer of more children than indicated. 60% of the respondents favoured a small family not exceeding 2 children.

4.28 Respondents completed family sizes

Response	Frequency	Percentage
Yes	91	61
No	59	39
Total	**150**	**100**

While 61% of the respondents had completed their family size, 39% of them had not. This shows that the majority of the respondents had no intention of having more children. Most of these women had 2-3 children. According to Ayayo (1991:101) and Caldwell (1976:24) children are valuable economically, psychologically, socio- culturally and religiously to women, both to parents and to the society. The 39% who had not completed their family size consisted of the respondents who had 1child in most cases or 2 children in a few cases. These are the women who felt that they still needed to add 1or 2 children to their family so that the child they already have may get a playmate.

4.29 No. Of girl children Respondents would want to add

No. of girls	Frequency	Percentage
1	20	71
2	7	25
3	1	4
Total	**28**	**100**

71% of the respondent wanted to add one girl child to their family while 25% and 4% wanted to add 2 and 3 more girl children to their families respectively. Bahemuka (1990:8) argues that son preference is more common than daughter preference. Gender bias leads to more children among couples who do not have both male and female children.

4.30 No. Of boy children respondents would want to add

No. of girls	**Frequency**	**Percentage**
1	20	71
2	7	25
3	1	4
Total	**28**	**100**

Table 4.30 indicates that 71% of the respondents wanted to add just one boy child to their families while 25% and 4% wanted to add 2 and 3 more boy children to their families respectively. This shows that as in the case with the data on table 4.29, most of the respondents did not want to add a lot of children to their families. The number of boy children the respondents would like to add to their families tarry with the number of girl children they would like to add. This points out that to the respondents a girl is as important as a boy. This change of attitude has been as a result of formal education and western values. This came out clearly during the interviews. In contrast Alan Berg (1973) states that in many countries, the villager commonly expresses his need for sons to

take care of him in old age. He thus supports the fact that African families need children for social functions within the family.

Tsui (1978:27) states that gender preference is still evident in many parts of the world. Bogue (1975:115) reiterates this view by stating that male preference in child bearing is paramount. In many third world countries interested in reducing birth rates, couples a have a pronounced preference for sons and a definite tendency more frequently to go on to additional children after the birth of a daughter than after the birth of a son. Traditionally people preferred male children so that they could depend on them for socio-economic support in old age, after the daughters married away from home. In the African tradition, girls were regarded almost as passers-by for sooner or later they would get married and leave. In Muguga Location there are many cases whereby girls do not move away from home. Many of them inherit land from their parents and live there with their families. Parents even say that girls are better than boys when it comes to looking after them in old age. So they do no really care whether a child is a boy or a girl.

In contrast, Arnold et al (1970), in their study on the value of children in six countries in Asia and the Pacific, family size was almost always influenced by son preference. Ayayo (1991:57) says that for both the Kenyan and Chinese parents, having sons is the surest way to guarantee a comfortable and prosperous old age. To have a son is a great investment but to have many sons is an even greater investment.

4.31 Respondents age groups at their first child

Age groups	Frequency	Percentage
15-19	58	40
20-24	61	31
25-29	26	18
30+	2	1
Total	**147**	**100**

The data in table 4.31 indicates that 40% respondents had their first child while they were young. Only 1% had their first child while they were 30 years plus. 31% and 18% had their first child while they were in the age groups of 20 – 24 years and 25 – 29 years respectively. The rest 3% represents those without children. There is an indication of early motherhood but is not an indication of large families in this area because the women here use contraceptive from an early stage in order to control fertility. While it is true that postponement of marriage contributes to fertility decline, it is also true to say that an early marriage and therefore early motherhood does not automatically lead to a large family if the woman in question correctly practices family planning. This is where education plays an important role in that a woman's schooling is associated with higher contraceptive use and lower cumulative fertility (Nyamete 1994).

4.32 Who decides how many children the respondents will have?

Who makes decision	Frequency	Percentage
Respondent	74	50
Husband	25	18
Relatives	2	1
Husband & wife	42	28
God	5	3
Total	**150**	**100**

Half (50%) of the respondents were in control over how many children to have while 28% made this decision jointly with their husbands. For the husbands solely controlled 18% of the respondent's decision, relatives controlled 1% while 3% left this decision to God. The latter are the ones who held fatalistic attitudes towards fertility, mortality and success. In the United States the hypothesis was tested that the greater the interest in religion, the lower the proportion practicing contraception effectively and the larger the family size. Where religious interest was highest and lowest, the family size was largest and smallest respectively (Coogan 1946:19-22). 28% of the respondents made a joint decision about the family size with their husbands. The utilization of family planning methods succeeds best when couples are democratic in decision making on the number of children they want (Republic of Kenya 1989:4-12).

4.33 Who decides the spacing of the childbirths?

Who makes decision	Frequency	Percentage
Respondent	80	53
Husband	24	16
Relatives	1	1
Husband & wife	37	25
God	8	5
Total	**150**	**100**

Table 4.33 indicates that most of the respondents (53%) decided the spacing of the children while 25% of them made this decision together with their husbands. For the rest 16%, 1% and 5% the decision on the spacing of the children was left to the husband, relatives and God respectively. Hurton and Hunt (1968:418) concur that the successful adaptation of contraceptive increased with the levels of husband- wife communication. In a Hong Kong study on family planning, Mitchell (1972:139-146) demonstrates that the greater the influence a wife has over family affairs the more likely she is to practice family planning.

4.5 ATTITUDES TO BIG AND SMALL FAMILIES

4.34 What do people in this area think about a big family?

Response	Frequency	Percentage
Problematic	140	93
Alright if rich	6	4
Do not know	4	3
Total	**150**	**100**

The majority of the people in Muguga location thought that a big family is a problem 93%. 4% thought that it is all right if somebody was rich while 3% did not know what people in this area think of a big family either because they were new here or because they did not interact with other people. 60% of the respondents thought the ideal family size is 1-2 children. In Muguga Location farms are very small and hence child labour is not needed a lot. According to Myrdal (1970:144), attempts to reduce fertility rate without making alterations in the socio-economic conditions, which encourage high fertility, might not make any change towards decreasing the family sizes.

4.35 What do people here think about a small family?

Response	Frequency	Percentage
Very good	143	95
Bad	3	2
Do not know	4	3
Total	**150**	**100**

The majority of the respondents (95%) said that the people of Muguga location think that a small family is good because it is manageable. 2% of the respondents say it is bad because of high mortality level as a result of HIV/AIDS while 3% said that they did not know what the people here think about a small family. This contrasts Caldwell (1977:24) who found that in West Africa, there is an overwhelming preference for children who were they equated to wealth. Looking at child rearing costs, traditional costs of child bearing were much lower than at present. Economically, returns from a large family were higher than the cost of maintaining such a family (Ayayo, 1991:168). Educational costs are quite high and impose a great burden on the budget of a large family. If investment in education of a child is to be realised, family size limitation has to be put in consideration according to Caldwell (1968:8). Knodel

(1991:119) notes that family size exerts a negative effect on child education attainment. It is no wonder that 95% of the respondents said that a small family is ideal.

4.36 The respondent's education helped her achieve her family size?

Response	Frequency	Percentage
Yes	116	77
NO	34	23
Total	**150**	**100**

The above data in table 4.36 indicate that 77% of the respondents said that their education had helped them achieve their family size while 23% said that their education had not helped them achieve their family sizes. The latter could not connect education with family size while some said since their husbands were the sole decision-makers, their education was not relevant to their family sizes. Many scholars including Caldwell, Millicent, Ayayo and Anangwe have concluded that education helps a woman to achieve her family size as evidenced by 77% of the respondents in this study.

4.37 What did people think about a big family in this area in the 1960's and 1970's?

Response	Frequency	Percentage
Very much desired	90	60
Prestigious	30	20
A blessing	25	17
Brought hardships	5	3
Total	**150**	**100**

In the 1960's and 1970's the people of Muguga location thought that a big family was very much desired (60%) and 3% thought that a big family brought hardships. This is to be supported by Millicent Odera (1979) who found that large families of 9+ children were preferred in rural Nyanza.

4.38 What did people think about a big family in this area in the 1980's?

Response	Frequency	Percentage
Prestigious	50	33
Problematic	40	27
A blessing	60	40
Total	**150**	**100**

The people in this area thought that a big family in the 1980's was prestigious (33%), problematic (27%) and a blessing (40%). Education can affect the norms and values of persons so as to make them question traditional morality and practices. The reasons identified as contributing to large families are child labour within the family, old age security, it is a yardstick of success of woman

by the husband and the community and children were also looked at as wealth and therefore a sign of prestige. Religious reason were also important in the case whereby attempting to plan childbirths implied interfering with God's wish, plan and blessings to couples.

4.39 What did people think about a big family in this area in the 1990's and now?

Response	Frequency	Percentage
Problematic	145	97
Good	5	3
Total	**150**	**100**

Contrary to the 1960's, 1970's and 1980's the people of this area thought that a big family in the 1990's and now is problematic (97%) while 3% said that it is good as long as one can look after it properly. According to Millicent Odera (1979) attempt to improve socio- economic conditions in rural area by modernizing the traditional type of farming resulted in fertility inflation rather than decline contrary to the experience in Europe. In contrast although the socio- economic conditions of the Muguga women is much better than ever, the respondents did not favour large families saying that it is problematic. This view has contributed to the small family preference in the area. It is important therefore to instill new values and modify old ones by educating the population on various aspects of population problems so as to reduce fertility. This does not seem to be a problem with the respondents since they already know the disadvantages of having a large family.

4.40Reasons for big family preference in the 1960's, 1970's and 1980's

Response	Frequency	Percentage
Prestigious	50	34
Provided labour	30	20
Land was available	20	13
Food was plenty	26	17
Cost of living less	24	16
Total	**150**	**100**

A big family in the 1960's, 1970's and 1980's was desired because it was prestigious (34%), provided labour 20% and was available 13%, food was plenty 17% and the cost of living was less 16%. The desire to have as many children as ability allows is rooted in traditional and social motives. Ayayo (1991:85) to have a larger number of children was a blessing and was in line with all ethics and customs. To have children was a responsibility and an obligation.

4.41Reasons for small family preference in the 1990's and now

Reasons	Frequency	Percentage
Fashionable	24	16
Education expensive	50	34
Food scarce	45	30
Land not plenty	31	20
Total	**150**	**100**

In Muguga location, a small family in the 1990's and now is preferred because it is fashionable (16%) cost of education a child is high (34%), food is scarce (30%) and land is not plenty (20%). Attitudinal change is very important if family planning is to be accepted. Women are not likely to accept it just because planners told them it is good for them. Before they can accept it, they have to view it as a felt need, then make decisions as individuals whether to accept it or not. The respondents seemed to have positive attitudes toward a small family norm and this is why the majority of them could make correct judgments about family planning. The respondents saw that it was in their interest to regulate their births.

4.42 If the economy was much better and the cost of living up to your required standard, would you have more children

Response	Frequency	Percentage
No	145	97
Yes	5	3
Total	**150**	**100**

Table 4.41 indicates that 97% of the respondents said they would not have more children even if the economy was much better and the cost of living low. Only 3% said that they would have more children if economic conditions were better. While education seems to have significant influence on fertility reduction, 97% of the respondents would not have more children given conducive economic conditions. This is regardless of whether they are educated or not. In Muguga Location having many children is equated with being foolish. This is contrasted with the case whereby attempts to improve socio-economic conditions in rural Sudan Gezira region resulted in fertility inflation (Hawthorn 1970). In Muguga Location there is no demand for large families. In his Ghanaian and Nigerian studies, Caldwell (1977:8) found an overwhelming demand for children who were equated to wealth.

4.43 reasons why the respondents would not have more children even if the economy were to improve.

Reason	Frequency	Percentage
unreasonable	75	50
foolish	45	30
Do other things instead	30	20
Total	**150**	**100**

While 50% 0f the respondents said that it is unreasonable to have more children even though the circumstances were all right, 30% said doing so would be a foolish thing. 20% of the respondents would rather do other things other than give birth to more children. This shows clearly that big families are not preferred in Muguga Location.

CHAPTER FIVE: THE EFFECTS OF WOMEN'S EDUCATION ON FAMILY SIZE

5.0 INTRODUCTION

This chapter discusses the effects of women's education on family size. It examines and interprets various relationships between the key variables of the study. This was done by cross-tabulating the dependent and independent variables and interpreting the percentages. This was supplemented by data from the focus group discussion, the case studies and document perusal.

This chapter also discusses other factors affecting the family size among women in Muguga location as well as looking at the significance of family size limitation.

The study objectives as well as the hypotheses are tested using the data.

5.1Educational levels and family size

family size	education levels													
	0 edu		pry1-4		pry5-8		sec1-2		sec3-4		sec5-8		varsity		other	
	no	%	no	%	no	%	no	%	no	%	no	%	no	%	no	%
0	0	0	0	0	2	4	0	0	1	2	0	0	0	0	0	0
1	0	0	0	0	2	4	5	28	5	8	0	0	0	0	2	100
2	1	20	0	0	9	19	5	28	25	40	3	43	5	83	0	0
3	2	40	0	0	6	13	5	28	20	32	4	57	1	17	0	0
4	1	20	3	75	14	31	3	16	10	16	0	0	0	0	0	0
5+	1	20	1	25	13	29	0	0	1	2	0	0	0	0	0	0
Total	**5**	**100**	**4**	**100**	**44**	**100**	**18**	**100**	**61**	**100**	**7**	**100**	**6**	**100**	**2**	**100**

The above table summarizes different education levels and family sizes. It indicates very clearly that the more educated the woman, the smaller her family size. Most studies cited in the literature review stressed that education influences fertility by exerting direct pressure on fertility, by changing attitudes, values and beliefs about family size, and bringing a totally new set of values, new aspirations and a new outlook to life

The less educated women had larger families than the more educated women. While 20% of women with no education, 25% of those with primary 1-4 education, 29% of those with primary 5-8 education have 5 plus children, those with secondary form 3-4 with 5 + children were only 2% and those with post secondary education had only up to three children. Overall, women with University and college education had the highest percentage of the smallest family size i.e. 1-2 children. Such women have greater access to information and communication media. They have alternatives to child bearing available to them in the form of jobs.

While only 19% of those with primary 5-8 education had a family size of 2 children, those with the same family size with an education of secondary form 1-2, secondary form 3-4, secondary 5-6 and university were 28% 40% 43% and 83% respectively. For a family size of 3 children, the same trend was noted with those with zero education, primary 1-4, primary 5-8, Sec 1-2, Sec 5-6, university and college recording 40%, 0%, 13%, 28%, 32% 57% 17 and 0% respectively.

None of the women with secondary 5-6 and above education had more than 3 children. This confirms that a woman's level of education does determine her family size in that the more educated she is, the lesser her family size. This confirms the hypothesis that the more education a woman has, the smaller her family. Education therefore contributes a great deal to the limitation of the family size. Plodonost (1938) argued that the low fertility of college or

University graduates has been particularly stressed. He found that those women from this category marry at a later age. From the literature review, an educated woman is also an effective user of the contraceptive hence she is better positioned to control the number of her children unlike the case of the woman with less education. She is also likely to be a career woman whose interests are served better by a small family. Ayayo (1991:172) states that Studies have registered findings where education levels are said to be significantly related to smaller family size. The low fertility of college and University graduates is particularly stressed. Not only is the proportion that never marries larger for this group than for the general population, but also those who do so marry at a later age (Plodnost 1938).

Education affects the family size through some intervening variables such as age at first marriage and use of contraceptive. The longer the duration of education, the later a woman tends to marry. As a result she will have fewer years of having babies. Such a woman is also likely to be a career woman whose best interests are served by a small family. 60% of the respondents said that a woman should only have 1-2 children in her lifetime. 97 (64%) of the respondents said that a woman's education is very necessary. This indicates that the women themselves know that it is very important to educate a girl. An educated woman is in a better position to make correct decisions concerning her fertility. She is therefore more likely to be an effective user of contraceptives than a less educated woman. She is more exposed to the western influence that favours a small family norm. She is less traditional and more in control of her life. Traditional values tend to promote a large family.61% of the respondents had completed their family size at the time of the interview. 95% of the women said that a small family is easy to manage while 93% said that a big family is problematic.

A big family is no longer viewed as a sign of wealth. The family size has grown smaller through the influence of education. 97% of the respondents said that they wouldn't have more children even if the economy were to improve. Education has thus changed attitudes towards a small family norm. 50% of the respondents said that it is unreasonable to have a big family, 30% said it is foolish while 20% would rather do other things instead of having more children. Decline in fertility is often characterized by a reduction of family size (Landry 1945:367-369).

In Ghana and Cote D'Ivore, urban women with 1-4 years of schooling have about 13% lower fertility than those with no schooling. This is in contrast to the findings of this study whereby there was no difference at all in fertility in women with fewer or more years of primary education. 5-10 years of schooling is associated with a major decline in fertility. In rural Ghana, there is little difference in parity between women with 1-4 years of schooling and those with none. Additional schooling to between 5-10 years brings about a 6% decline in fertility (kofi Darkwa Benefo and T. Paul Schultz 1994:20). This was found to be true for Muguga women in that fertility decline was noted after 9 years of education. Additional years of post secondary education indicated a sharp decline in fertility. M.Croley (1969:118) regarded education as one of the socio-economic factors affecting the size of the family.

5.2 Educational levels and age at first marriage

Age first marriage	0 ed 1 no %	Pry 1-4 No %	Pry 5-8 no %	Sec1-2 no %	sec3-4 no %	sec5-6 no %	Varsity no %	other no %
15-19	3 60	2 50	14 40	12 70	11 23	1 20	0 0	0 0
20-24	0 20	2 50	20 57	3 17	33 67	1 20	1 20	2 100
25-29	1 20	0 0	1 3	1 6.5	5 10	3 60	4 80	0 0
30+	1 20	0 0	0 0	1 6.5	0 0	0 0	0 0	0 0
Totals	5 100	4 100	35 100	17 100	49 100	5 100	5 100	2 100

Age at first marriage is an important variable because it is strongly associated with fertility and it depends on a woman's educational attainment (Ayayo, 1991:72) The above table shows clearly that education levels are related to age at first marriage. M. Croley (1969:118) says that education itself reduces fertility through its effects on the age at marriage. Women who marry later tend to have small families. They have fewer years of getting children than those women who marry earlier in their lives.

Likewise Cochrane (1979) found education of women to have a positive statistical relationship to age at first marriage in the developing countries. Caldwell (1982) argued that arranged marriages tend to go along with a young age at marriage. Thus a young female who undergoes an arranged marriage is also one who possesses little or no education at all. Hence there is a high likelihood for her to have a large family. This is contrasted to the case whereby an educated woman will typically be older, free to make her decisions concerning marriage and will most likely have a small family.

100% of those with primary education 1-4, 65% of those with pry education 5-8, 55% of those with secondary education form 1-2, 35% of those with secondary education form 5-6 married while they were in the age group 15-19

years. No woman with university and other (college) education married at this age. 60% of those with no education married at this age group.

Of those women who married in the age group of 20-24 years 20%, 57% 17%, 67%, 14%, 20% and 100% had zero, pry 5-8, Sec 1-2, Sec 3-4, Sec 5-6, University and college education respectively. 20%, 3%, 6.5%, 10%, 60 and 80% of the women with O, primary 5-8, Secondary 1-2, Sec 3-4 sec 5-6 and University education respectively married within the age group 25-29years. This corresponds with the fact that women who married early also tended to have more children. They also have low education levels.

Those who married in the age group of 30 years had at least ten years of formal education. According to Bernard Barelson (1969) educational opportunities for women particularly secondary and vocational education tend to rise the age at first marriage thus resulting into a small family size. This is the case with Muguga women.

5.3 Educational levels and age at first birth

Age	**education levels**															
	0 educ		**Pry1-4**		**pry5-8**		**sec1-2**		**sec3-4**		**sec5-6**		**Varsity**		**other**	
	no	**%**	**no**	**%**	**no**	**%**	**no**	**%**	**no**	**%**	**no**	**%**	**no**	**%**	**no**	**%**
15-19	3	60	4	100	27	61	4	22	21	33	0	0	0	0	0	0
20-24	1	20	0	0	13	30	14	78	30	7	2	28	1	33	1	50
25-29	0	0	0	0	4	9	0	0	12	47	4	57	1	67	1	50
30+	1	20	0	0	0	0	0	0	0	0	1	14	0	0	0	0
Total	**5**	**100**	**4**	**100**	**44**	**100**	**18**	**100**	**61**	**100**	**6**	**100**	**6**	**100**	**2**	**100**

The above table demonstrates that educational levels are related to age at first birth. The lower the education of woman the lesser her age at first child. While 60%, 100%, 61%, 22% and 33% of the women with zero, Pry 1-4, 508, sec 1-2 and secondary 3-4 respectively, had their first birth at the early age of 15-19. None of the women with sec 5-6 and above education had their first birth at this age. Education delays age at first birth, which in turn affects the family size. The women with high education levels tended to have smaller families. A woman who gives birth early is also likely to have a little education. For instance, while all the women who had an education level of zero, pry1-4, and sec 1-2 had already had a child by the time they were 24 years, over 50% of the women with education levels of sec form 3 and above had not had a child by this age. Education therefore is seen as contributing towards a small family norm.

5.4 Educational levels and who decides how many children there will be in the family.

who decid	**education levels**													
	0 edu		**pry1-4**		**pry5-8**		**sec1-2**		**Sec3-4**		**sec5-6**		**Varsity**		**other**	
	no	**%**	**no**	**%**	**no**	**%**	**no**	**%**	**no**	**%**	**no**	**%**	**no**	**%**	**no**	**%**
Respondent	2	40	2	5	23	50	10	56	34	55	4	58	4	67	1	50
Husband	1	20	1	25	9	20	4	22	9	14	0	0	0	0	0	0
Relatives	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0
Husband & wife	1	20	0	0	9	20	4	22	18	29	2	28	2	33	1	50
God	1	20	0	0	4	8	0	0	1	2	1	14	0	0	0	0
Total	**5**	**100**	**4**	**100**	**46**	**100**	**18**	**100**	**62**	**100**	**7**	**100**	**6**	**100**	**2**	**100**

The above table shows that women education levels are related to who decides how many children a woman will have. 20% of the women with no education, 25% with primary 1-4 education, 20% of the women with an education level of primary 5-8, 22% of the women with secondary form 1-2 education and 14% of the women with secondary form 3-4 education had the husband making this decision. This indicates that despite the elevation of women's status in the society, men still have a say in so much more and they may solely decide on the number of children, a demand that the wife must comply. The data also shows that the more the education a woman has, the more she is likely to make this decision jointly with her husband. Haile Mariam (1999) literate women are more than 2 ½ times more likely to discuss family size with their husbands. 20%, 20%, 22%, 29%, 28%, 33% and 50% of those women which no education, primary 5-8, sec 1-2, sec 3-4, sec 5-6, university and college education decided how many children there will be in the family with their husbands. None of the women with education levels of sec form 5-6 and above had their family sizes solely controlled by their husbands. Neither were they controlled by relatives who in most cases tend to impose traditional values that encourage large families. In South India, some younger women yield to their mother in-laws' demand to continue having children even when they themselves want to stop doing so (Sharon Stash 1999) A highly educated woman will resist domination from her in-laws and make up her own decisions concerning her family size. Nevertheless, relatives were found not to be an important decisive factor of family size as only one respondent had her family size determined by her relatives. It is important to note that she happened to have a primary level of education.

Over 50% of the respondents controlled their family size. After marriage, decision-making in a patrilineal society is usually done by the male head. However, with the changes occurring in the society giving women a higher

status and increasing their say in certain and indeed most matters affecting the society, it is not surprising to find as this study did, that the female is also making important decisions. This points that the women in the study area are powerful decision makers. The fact that most of the women in this region fend for their families could have contributed towards this. When a woman is in control of her fertility, she tends to make wiser decisions and is more confident in the use of contraceptives than a woman whose fertility is controlled by either the husband or the relatives.

None of the women with post secondary education left this important decision to fate in contrast to women with lower educational status particularly primary education. This is an indication that better educated women are less fatalistic about their family size and therefore, they take care to plan them by the use of a contraceptive.

The less educated women tended to be more controlled by their husbands in this important decision than the more educated women of secondary school and above levels. The implication is that the existence of men who will veto their wive's decision to use a contraceptive because of their own personal biases is a stumbling block to the efforts made to reduce fertility. Educated women are conceded more authority in the household even when they are young brides and their views are taken more seriously by their husbands and others (Caldwell 1983).

5.5 Educational levels and who decides the spacing of children.

Who decid	Education Levels													
	0 educa		Pry 1-4		Pry 5-8		Sec 1-2		Sec 3-4		Sec 5-6		Versity	Other
	No.	%	No.	%	No	%	No	%	No	%	No	%	No %	No %
Responden	2	40	2	50	23	50	10	56	34	55	4	57	4 67	1 50
Husband	1	20	1	25	9	20	4	22	9	14	0	0	0 0	0 0
Relatives	0	0	0	0	1	2	0	0	0	0	0	0	0 0	0 0
Husband and wife	0	0	0	0	9	20	4	22	18	29	2	28	2 33	1 50
God	1	20	1	25	4	8	0	0	1	2	1	14	0 0	0 0
Total	**5**	**100**	**4**	**100**	**46**	**100**	**18**	**100**	**62**	**100**	**7**	**100**	**6 100**	**2 100**

While over 50% of the women interviewed decided the spacing of children themselves, for those women with 0 to secondary form 3-4 education, the husband emerged as the important decision maker on the spacing of the children unlike those with secondary form 5-6 and above education levels. Over 50% of the women with secondary form 5-6, university and college education did not have their husbands wholly deciding on the spacing of the children. This implies that with higher educational levels women have more say in important issues such as child spacing unlike their counterparts. This could be a contributing factor towards the small family norm observed in the more educated categories of post-secondary and above education.

For the women with education levels of secondary form 3-4, secondary form 5-6, university and college 29%, 28% 33% and 50% respectively decided the

spacing of their children with their husbands. None of the women with University and college educational levels left this important decision to fate unlike the case with women of lower education. (Denis P. Hogan, Better Mariam Berhanu and Assetfa Haile Mariam (1999) say that literate women are more likely to discuss family planning with their husbands. Caldwell et al (1983) suggested that educated women break the traditional balance of power within the family leading to changes in decision-making within the family. The least traditional views and actions about fertility, the discussion of family size and the recognition that people can successfully plan family members are most strongly associated with extended education.

5.6 Level of education and complete family size

Level of education	Complete family size				Total	
	Yes		No			
	No	%	No	%	No	%
0	4	80	1	20	5	100
Primary class 1-4	3	75	1	25	4	100
Primary class 5-8	22	48	24	52	46	100
Secondary form 1-2	10	56	8	44	18	100
Secondary form 3-4	42	68	20	32	62	100
Secondary form 5-6	6	86	1	14	7	100
University	4	67	2	33	6	100
Other (College)	0	0	2	100	2	100
Total	**91**	**61**	**59**	**39**	**150**	**100**

The above data shows different education levels compared to complete and incomplete family sizes. 80% and 75% of those women with zero and primary 1-4 education respectively had already completed their family size. This is to be explained by the fact that most of these women married early (15-19 years) and had enough children already. Socio- economic factors were forcing them to say no to more children. This was unlikely to happen because over 70% of them were not currently on contraceptive. 20% of the women in this category were also leaving the spacing of their children and family sizes to fate. So their family sizes were most likely to grow larger.

The number of children a woman has depends on her and her husband's demand for children, conditioned on their biological ability to produce them (Duncan and John 1995:10). For contraceptive use to rise and fertility to decline, the demand for children must go down. Educational expansion (Bernard Barelson 1969) means that many parents have been spending more to improve the education and skills of their children. This investment may be taking place at the expense of savings by households. In the more poorly paid white-collar groups the desire to have their children move up the socio-economic ladder is a very powerful motive for restricting the size of the family. Most of these people find it easier to keep the family small and thus have more to spend per child on education.

5.7 Educational levels and age at first use of contraceptive.

Age	education levels													
	0 edu		Pry 1-4		Pry 5-8		Sec 1-2		Sec 3-4		Sec 5-6		Varsity		Other	
	no	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
15-19	2	20	0	0	16	53	2	13	16	28	1	14	0	0	1	50
20-24	3	60	1	100	14	47	13	8	31	54	1	14	2	33	1	50
25-29	0	0	0	0	0	0	0	0	9	16	5	72	2	33	0	0
30-34	1	20	0	0	0	0	1	6	1	2	0	0	1	17	0	0
35+	0	0	0	0	0	0	0	0	0	0	0	0	1	17	0	0
Totals	5	100	1	100	30	100	16	100	57	100	7	100	6	100	2	100

To test the second hypothesis, educational levels were cross-tabulated with the use of contraceptives

The majority of the respondents started using contraceptives at an early age regardless of their educational levels. . It would be expected that women with

little education started to use contraceptives at later ages than their counterparts but this was not the case. Therefore, the relationship between educational levels and age at first use of contraceptive is weak. Other factors such as peer pressure, societal expectations, the spread of the spirit of reflection and calculation could explain this.

While the majority of the respondents with an education level of primary to secondary form four had used a contraceptive by the time they were 24 years, 72% and 33% of those with an education level of secondary 5-6 and university respectively first used a contraceptive at the age of 25-29 years. This indicates that the Muguga community where the contraceptive is well known, if a woman does not continue with education to high levels, she is more likely to start using a contraceptive early especially with marriage. Women with University level of education were not early users of the contraceptive. This is due to the fact that they may have been pursuing education and career goals. Therefore they married late and therefore were more likely to have a small family. In contrast, the women who married early-15-19 years also tended to be early users of the contraceptive. This contrasts findings by Dow (1981:17) who found that in most cases women with formal education start to use contraceptives at earlier stages in their childbearing period.

Contraceptives are readily available here from the village agents and clinics at the many shopping centres in the study area. In the course of the study, it also emerged that mothers encourage their daughters to make use of contraceptives. This explains why the contraceptive is widely used in this area even among women with low education. Contraceptive use is positively related to a small family.

5.8Educational levels and knowledge of contraceptives

Contracep ve	Educational levels													
	0 edu		pry1-4		Pry 5-8		Sec 1-2		Sec 3-4		Sec 5-6		University		Other	
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
Pill	5	100	2	50	46	100	18	100	62	100	7	100	6	100	2	100
Norplant	0	0	0	0	6	13	6	33	40	64	7	100	6	100	2	100
Injection	1	20	3	75	46	100	18	100	62	100	7	100	6	100	2	100
Coil	1	20	4	100	40	86	18	100	62	100	7	100	6	100	2	100
Condom	0	0	0	50	0	0	18	100	31	50	7	100	6	100	2	100
Tubaligai	1	0	2	0	3	6	9	50	40	64	7	100	6	100	2	100
Vasectom	0	0	0	0	0	0	2	11	5	8	7	100	6	100	2	100
Tablets	0	0	0	0	0	0	18	100	10	16	7	100	6	100	2	100
Natural	1	20	3	75	46	100	0	0	62	16	7	100	5	100	2	100
Diaphragi	0	0	0	0	0	0	0	0	0	100	7	100	6	100	2	100
None	1	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Cochrane (1979) says that better educated women have more knowledge of contraceptive methods and how to acquire them than less educated women. Due to their literacy, greater familiarity with modern institutions and greater likelihood of rejecting a fatalistic attitude towards life, better-educated women therefore tend to have smaller families than less educated women.

100%, 97%, 97% and 97% of the respondents knew about the pill, injection, coil and the natural methods of family planning, despite the different levels of education. This was because these are the family planning methods most commonly, promoted, talked about and therefore, used in this area. The norplant was little known to those with lower education. Those with secondary school and above education knew virtually all types of contraceptives except for

natural, and diaphragm, which were little known to those with secondary form 1-2 education. Those with 0 – primary STD 8 education had very little knowledge of condoms, tubaligation, vasectomy, tablets and diaphragms as contraceptives illiterate women and those with a little education are often ignorant of their bodies and are less likely to try such methods of family planning unlike the more educated women who are more innovative and receptive due to their exposure which is attributed to extended education. It emerged that the more the educated a women was, the more her knowledge of contraceptives she had. This gives the more educated woman a wider choice of the contraceptives. She is also more likely to be an effective user of the contraceptive as was confirmed by the case studies.

Duncan Thomas and John Maluccio (1995: 13) note that in Zimbabwe women who have O'level education are twice as likely to use contraceptives as those who has less years of schooling and only half as likely to be adapters than women with more schooling. While education does have a positive impact on the probability of adopting modern methods of family planning, the effect is only significant after women have completed several years of primary school. In Zimbabwe, dramatic increase in education is associated with substantial declines in fertility.

An educated woman has more access to information on contraceptives and is therefore more likely to try newer and more effective methods than a woman who is less educated. For example, while the women who had no education knew only 6 methods of family planning between them, 100% of the women with sec form5-6 and above education knew all of them. The most recent methods of family planning such as the norplant and vasectomy were little known to the women with only a primary education. M. Croley (1969:118)

argues that lack of knowledge about family planning methods often prevents application by those who would wish to do so. Education is one area of economic planning in which a reduction in fertility would bring great economies. Education itself reduces fertility through its influence on education patterns and its effects on the costs of child- rearing and on the age at marriage. There has been impressive improvement in educational systems in many developing countries especially in pupil enrolment particularly at the primary level. Education lowers the contraceptive costs by reducing the information costs raising effectiveness and aiding in best selection and use and by raising the margin product of contraceptive use in conjunction with any contraceptive device (Michael Makuza 1994:120). Lesthaeghe et al (1983:41) found that an increase in education produces an increase in the user efficiency of family planning methods by increasing the usage levels of contraceptives and by giving a large preponderance to the more efficient methods. Education makes it possible for a woman to understand and use contraceptives effectively therefore resulting in a small family. Rutenberg and Watkings (1997) on a study in Kenya found a lot of misinformation about contraceptives. Women were found to believe that contraceptives make some people thin and others dry up. Such beliefs are associated with ignorance. Education helps in giving people the right information about contraceptives.

5.9 Educational levels and current use of contraceptives

Curren use	Education levels							
	0 edu	pry 1-4	Pry 5-8	Sec1- 2	Sec 3-4	Sec 5-6	University	other
	No %	No %	No. %	No %	No. %	No %	No. %	No %
Yes	1 20	1 25	18 39	12 67	40 65	4 57	4 57	1 50
No	4 80	3 75	28 61	6 33	22 35	3 43	2 33	1 50
Total	5 100	4 100	46 100	18 100	62 100	7 100	6 100	2 100

Most of the women with no education were not currently on contraceptive compared to the more educated women. Out of those with primary education over 6o% were not currently on contraceptive. This means that the majority of the women with no education to primary level education were not protected against pregnancy. They also happened to be the women with little knowledge of contraceptive, married early, had larger families etc. So there was a high likelihood that their families would continue to continue to grow. The data in this category agrees with Onguti (1987:55) who using data collected by Kenya contraceptive prevalence survey of 1984 found no great difference between women with no education and the women who had 1-4 years of education.

This is to be contrasted with the case of the women with education levels of secondary school and above. These women had fewer children and were also effective users of the family planning methods. Only 39% of the women with primary 5-8 education were currently on contraceptive. Current Over 50% of the women with secondary education and above were currently on contraceptive. This confirms hypothesis number two that the higher the mother's education the more likely she is to use contraceptives. Gachuhi (1971:3) considered education as a prerequisite to the adoption of family planning. Lesthaeghe et al (1983: 41) argues that women with formal education frequent family planning clinics more than those women with no education. Education influences fertility through the acquisition of family planning information.

Out of the women (32) who had never used a contraceptive only 5 did not do so because their husbands refused them. The rest cited health problems, religion and the need to have a child. Male control over reproduction is maintained by

the power men have over women and this can have a significant effect on the practice of family planning by women.

It is important to note that none of the women currently not on contraceptive was refused by her husband from using. The reasons cited were mainly health problems (47%), no husband (39), pregnancy (2.5%), religion (9%) and menopause (2.5%) indicating that these women were currently not on contraceptive for other reasons other than disapproval. More women would be users of contraceptives if they did not experience side effects, if they had husbands and if they were able to overcome religious barriers. Anangwe (1995) says that the Ministry of health annual report of 1989 found that side effects is one of the reasons for none use of contraceptives. Women who suffer from side effects are more likely to stop using a contraceptive, and may be instrumental in discouraging potential users. Further probing during the interviews indicated that for most of the respondents knowledge of a contraceptive did not include knowledge of possible side effects of the same, information which should have been made available to them at the onset to enable them to make informed choices.

In addition, this study found that the most popular source of first information about contraceptive was friends (42%). So it is likely that wrong information filled with bias and prejudice was in circulation thereby hindering the use of contraceptives. Thus a woman may refrain from using any form of a contraceptive or use an ineffective method and end up having a larger number of children than desired.

Nonetheless, this study found that 60% of the women currently on contraceptive had changed from one contraceptive to another because of the negative effects of the previous one (78%), to breastfeed (6%), need for a more efficient method (8%) while pregnancy and curiosity accounted for 4% each.

This indicates that the respondents were willing to try an n alternative contraceptive other than stop using any altogether and risk getting an additional child. This was particularly important because 60% of the respondents wanted a family size of 1-2 children while 61% had already completed their desired family size. It should also be noted that the women with uncompleted

family sizes were those with one or two children and they only wanted to add two and one children respectively to achieve their desired family sizes. This study therefore, concludes that the decline in family size in Muguga Location has been brought by the use of contraceptives.

78% of the respondents have ever used contraceptives compared to 22% who have never used contraceptives. This shows a good acceptability of the contraceptive in this area by the women. However, it emerged from the study that the more effective users of the contraceptive tended to be more educated. From the focus group discussion it was clear that the majority of women knew about contraceptives and used them. The use of the contraceptive is the first step toward the decline of the family size. This is because from a broad political standpoint it is the most acceptable one (Bernard Barelson 1969:67). The rising expectations of the family as opportunities for a more rewarding life are unveiled, will call for planning not only in relation to the number and spacing of children but also for all aspects of family life (M. Croley 1969:117)

Education reduces the potential gain in status and respect associated with high fertility throughout the society. This outcome weakens norms and values supporting the motivation to bear a large number of children and promotes contraceptives use (Caldwell 1980, and Conchrane 1979).

5.2 OTHER FACTORS INFLUENCING THE FAMILY SIZE IN MUGUGA LOCATION

As far as the education of women is concerned, the argument advanced by scholars such as Cochrane (1979, 1983), it is the most pervasive factor influencing fertility control behaviour. According to Thomson and Lewis the social development resulting from education tends towards a reduction in fertility. Although the education of a woman is a key factor that influence family size (Rutenberg and Watkings 1997 – by making it possible for a woman to understand and use contraceptives effectively therefore resulting into a small family size), there are other factors that the researcher found to be important contributors to the family size reduction among women in Muguga location.

More recent writers have emphasized that the family is no longer an economically productive unit. The unstable transitory family is replacing the traditional stable family. This is an important factor in the decline of the birth rate. Aries (1948:471-493) has pointed out that with the increasing orientation of parents to the concern and welfare of their children, the family is increasingly becoming child-oriented. With more leisure, parents devote more time to the emotional needs of their children. This has paradoxically become the reason for limitation of family size.

With increasing income, the rational planning for one's future and that of one's children becomes possible. An improvement in social status may be sought and a tendency towards thrift may develop. This is a general mentality, which fosters the desire for a small family. In France where the decline in the birth rate began early several writers suggested that family size was being limited particularly in the upper classes because of love for luxury, desire for advancement in the social scale, the spread of the spirit of reflection and calculation and the desire to avoid the subdivision of property by inheritance (Moheau 1978).

Education further discourages high fertility by reducing the economic utility of children. This is because education creates aspiration for upward mobility for women. When people are maintained at the subsistence level with little hope for improving their social status such incentives are lacking. The belief that the decline in family size was due to causes other than family limitation was expressed frequently in the early literature (Brewis, A.A 1993:601). 63% of the respondents had secondary school education and above. This indicates a fairly well educated community. Women with secondary education marry 3 years later than women with no education. There has been a steady increase over the past two decades in the age at which Kenyan women first marry (KDHS 1993). If delay in marriage occurs, the family size will be small (Caldwell 1996).

The attitudes of the women of Muguga location concerning the ideal family size have changed dramatically from 1960's up to date. Education helps to modify and change attitudes. Whereas in the 1960's and 1970's a big family was to be desired as a sign of prestige, in the 1980's a big family was viewed by people with mixed feelings – some saw it as problematic (27%) prestigious (33%) and a blessing (40%). From 1990's up to date, a big family is seen as problematic (97%). There is evidence that the decline in fertility is due to rapidly changing

attitudes about family size (KDHS 1993:36) In the 1960's, 1970's and 1980's women would have big families because food was plenty, land was big, culture dictated that a big family was prestigious and many children provided free labour, the cost of living was less and education was cheaper.

However, as it emerged, from the study, Muguga women also limit their family size because of economic reasons namely: high cost of living, scarcity of land, education of children is expensive, joblessness and lack of adequate food. Peer pressure was also another contributing factor towards family limitation. 16% of the respondents said that a small family is fashionable and if a woman gets many children (4+) she is laughed at and seen as if she is a fool incapable of planning her family. This was evident from the focus group discussion and the case studies. It is also noteworthy that 42% of the respondents got their first information about contraceptives from friends. Bernard Barelson (1969:67) argues that family planning is the first step taken to control population.

When asked if the economy was excellent in all aspects if they would have more children, 97% of the respondents said that they would not nevertheless. The respondents would rather improve on the quality of the few children they have rather than add more children. Thomson and Lewis argue that in the more poorly paid white collar groups the desire to have their children move in to a high social and economic position is a very powerful motive for restricting the size of the family. Most of these people find it far easier to keep the family small and thus have more to spend per child on education. The rising expectations of the family, as social and economic development unveil opportunities for a healthier and more rewarding life which provides better nutrition, housing, health, education and other good things of life, calls for planning in the number and spacing of children (M. Croley 1969: 117).

Other respondents would rather invest surplus money in business rather than use it to support more children. The achievement of such goals calls for planning not only in relation to the number and spacing of children but also for all aspects of family life (M. Croley 1969:117)

Traditional views towards a big family have changed and mothers in Muguga location discourage their daughters from having many children. Some said that they do not even ask to be named after as one of the one respondent said:

"I do not wish my daughter to have many children so that she can name after me. What will that child survive on? Let her have two or three children that she can manage comfortably."

However, while the older women would really like their daughters to have few children, they would not mind if their daughters' in-law got more children. According to Dyson and More (1983) an educated woman is in a better position to stand against her mother in –law's demands of many grand children through her knowledge and greater participation in domestic decision making. Such a woman is also unlikely to be staying with the mother in- law unlike in the case of an uneducated woman who might be left with the mother in-law in the rural areas while her husband work in the city. Education could lead to the spreading of Western ideas and values, which undermine traditional norms, and values that favour large families (Caldwell 1980:228). A small family is seen as a good thing. For Muguga women, a small family is viewed as progress, modernity and good planning.

During the interview, it emerged that many of the respondents were brought up in big families whereby life was very difficult for their parents and generally survived on very little provision, as I quote one respondent.

"There were eleven children in the family and we never got enough of food, clothes, love, beddings, school fees was a problem..... I would not want the same to happen to my children. So I want to have a few children and give them the best I can."

Evidence from the focus group discussion showed that education of a woman is a major determinant of her family size. The more the education a woman has the smaller her family size. Cases were cited by the focus group discussion regarding women who were adversely affected by the contraceptive were all having less than 6 years of education. These women did not go to the hospital for medical advice when they started feeling unwell. As a result they abandoned the contraceptive and ended up having more children.

The highest number of children women are having today in this area today is 4 whereas 2 children are seen as ideal. Three women advocated for only one child-which is quite low in comparison. If a woman gets more than 3 children especially at close births she is avoided by the rest of the women, is laughed at and people watch keenly how she is feeding, clothing and educating them. If in particular she is unemployed and her land is small, she becomes the talk of the village whereby she is referred to as a fool who is not able to think and plan properly. The community and women group leaders revealed that the catholic women are taking the contraceptive though secretly. These women have discovered that the natural method of family planning is not so reliable. This was the case especially with the catholic elite and the young mothers in general. In addition to the influence of education, the focus group discussion also

concluded that women in Muguga location also limit their family size due the following reasons:

1.The economy is bad hence the cost of bringing up a child is very high.
2.Land is scarce in the area
3.Unemployment problems.
4.The women are not very healthy- they become very weak after giving birth to few children. The food they eat is of poor quality. Traditional foods such as sorghum, millet etc are very expensive.

The women have learnt the disadvantages and the advantages of both big and small families from the area and elsewhere. Today, small families have done better than big families in terms of living standards, education, food, clothing e t c. The women who were raised in big families said that they suffered from lack when they were growing up and they would not want their children to undergo the same things. Such women would therefore like to limit their family to a small size so as to give the best to their children.

From the focus group discussion it emerged that the advantage of a small family is that it is more manageable than a big one. The provision of food, clothes, shelter, education and attention is easier and well met. The disadvantage of a small family was said to be lack of adequate labour from the children and in case of death the size of this family is reduced significantly. The small family also discourages the use of tubaligation as a method of family planning.

The disadvantages of a big family are that it is had for parents to take care of the basic needs of their children. Food, clothing, education shelter affection etc are not well taken care of in a big family. In a big family there is more strive and

tension. Children from such families are more prone to prostitution and drugs abuse.

The advantages of a big family are that children provide labour and good support to their parents when employed.

The women of Muguga location give birth due to the following reasons:

1.To name after their parents as is the tradition

2.To have someone to inherit them

3.To have someone to carry on his or her lifeline.

4.It is socially unacceptable to stay without a child.

5.Some children are born as result of fornication and prostitution.

The focus group discussion pointed out that the contraceptive is part and parcel of the Muguga women. Almost every woman who has not reached menopause is using a contraceptive. If a woman says that she is not using one then she is lying. The use of the contraceptive was highly recommended and a small family was encouraged.

For the purpose of this study, I carried out two case studies comprising of a woman with a large family and another woman with a small family. This was done for comparison purposes of a big and small family to show the advantages and disadvantages of both. This was done to support the hypotheses that a more educated woman is more likely to have a smaller family than a less educated woman. Both women are residents of Muguga Location, belong to the Anglican Church, are married and are currently staying with their husbands. Anne who is aged 40 years has 2 children while Faith who is 37 years has 8 children. Anne has an education of secondary form 4 while Faith reached STD 6. Both agree that a woman's education is very necessary. While Anne explained that her

education helped her to plan her family, Faith could not answer this question. In her opinion Faith thinks that a woman should at least have 6 children but Anne said that a family of 3 children is ideal. Both women were 18 years when they got their first child. Anne had control over her family size but Faith said she has never thought about this issue and she has never discussed it with her husband. An educated woman is more likely to discuss family size with her husband than one who is not educated.

Nkanata (1990:92) in a research on family size preferences in Meru District found majority of women respondents had primary level of education, which did not greatly influence their decisions on the desired number of children. It emerged that Anne carefully planned her family using the pill. The interval between the births of her children is 3 years, which is optimal. Faith on the other hand had close births of 1-2 years, which is very unhealthy for her. Though the younger of the two she physically appeared to be the older one. Both women have used the contraceptive. Anne is currently using the coil because the injection had given her high blood pressure. Faith was not on contraceptive for she had a 3 weeks old baby. She claims to have used the coil before but it had given her problems. So she turned to the pill but she has been getting pregnant while still using the pill. She blames her large family to the pill, which she says refused to work for her. Her husband cannot agree to use the condom as a means of preventing pregnancy She has not considered seeking medical advice and she gets her pills from the village family planning agent. This is risky due to the fact that her health is not checked. She admitted that she sometimes miss to take the pill. If she had more education she would be more likely to go to the hospital to have an alternative contraceptive like an injection if she has problems with forgetting to take the pill sometimes.

Dow (1981:17) says that efficient users of contraceptives are also normally more educated than inefficient users of the contraceptives. This agrees with Lesthaeghe et al (1983:41) who argue that an increase in education produces an increase in the user-efficiency of family planning methods by increasing the usage level of contraceptives and by giving a large propondence to the more efficient methods. Anne who gets her contraceptive from the health clinic has got more knowledge about the contraceptive and is less fatalistic about the survival of her children than Faith. Anne started using the contraceptive at 19 years while Faith started at 23 years. This confirms the fact that an educated woman is more likely to use a contraceptive at an earlier age than a woman who is not educated. Both women say that a big family was highly valued in the 1960s, 1970s and 1980s but this is no longer the case. They said that the cost of living has become so expensive hence a small family is to be desired. Faith has had 4 of her children at home because she could not afford the hospital bills. This is very risky for her and her babies. Anne had both of her children in hospital for safe delivery. However, none of the women has suffered from child mortality.

Anne works in the family's clothes business while Faith is a housewife with no source of income except the occasional handouts from her children and the little money she gets from selling the sukuma she grows in her front yard. Faith owns a half-acre land while Anne has a 2-acre land. Both grow no cash crop and they do not sell the food that they grow. While Anne does not have they domestic animal, Faith has a cow and 2 pigs whose young ones she sells but it is her husband who decides how this income is to be used. On the other hand Anne has got a say over how to use the money she gets. Anne gets Kshs.20, 000/= per month while Faith gets Kshs.400/= per month. The latter's husband is a driver by profession but is currently unemployed. Anne's husband is an employed

engineer with a monthly income of Kshs30, 000/=. It emerged that Faith is a poor woman with a poor husband. She has a big family, which she cannot feed adequately. She is disadvantaged by her limited education and she has never sought employment because she thinks she does not qualify to be employed. Both women live in own houses but while faith's house is semi- permanent, Anne's house is permanent, has piped water, uses gas for cooking, and has a fridge, a colour TV, a farm hand, a house girl and her compound is secured by a barbed wire. While Anne's family eats three times a day Faith can only manage two meals per day for her family. The level of poverty at Faith's household is quite evident. There is only one bedroom for all the children with 3 children sharing one bed.

The following table (5.10) gives a summary of the monthly expenses on various items by the two women.

ITEM	FAITH-KSHS	ANNE-KSHS
Food	2,000.00	10,000.00
Clothing	100.00	5,000.00
Water	00.00	500.00
Fuel	1120.00	1,000.00
Recreation	00.00	1,000.00
Debts	400.00	3,000.00
Education	00.00	5,000.00
Investment	00.00	100,000.00
Hospital	00.00	1,500.00
Garden	00.00	2,000.00
House-girl	00.00	1,200.00
Others	100.00	1,000.00
TOTAL	**3720.00**	**131,200.00**

Anne's household is provided by both she and her husband while Faith has to depend on her husband and her 3 children who are casual labourers. While Anne has managed to educate her children up to college level, Faith cannot

afford to take her children to secondary school and getting them through primary school is a big struggle. She thinks her family needs are well met and adds that if she had fewer children, the level of living in her household would be better. This shows that a small family is easier to provide for than a bigger one and therefore it is to be desired. Faith said that she has lost friends because they do not want to be associated with someone with so many children. She is often ridiculed and laughed at and she does not come out of her home unless it is absolutely necessary. This is supported by the focus group discussion's finding that a woman with many children is looked down upon by the society. This shows that a big family is socially undesirable in Muguga location. She looked tired and too serious as we discussed her case. Ann was relaxed on the other hand and the village looks at her as a good example.

The above two cases demonstrate the merits and demerits of a big and a small family. The role of women's education and family size is also demonstrated. Ann, for example, with an education of form 4 planned her family through the careful use of contraceptive. Faith, on the other hand, with an education of Primary class 6, was unable to plan her family through proper use of contraceptives. This supports the fact that a woman who is less educated is less knowledgeable about the proper use of contraceptives. So at 37 years Faith has 8 children, her level of living is very low and she cannot give her children a good education. Both high rates of population growth and the poverty that is synonymous with under development severely impede a rapid expansion of education. A reduction in fertility would significantly improve education prospects (Rapid population growth- consequences and policy implications pg. 54-55).

The vicious cycle of poverty cannot therefore leave Faith's family. The people socially accept Ann while Faith has got no friends and is a laughing stock

currently. She is an example of what a low education can achieve and her children are not the village heroes.

These two case studies confirm the hypothesis that:

1.The more education a woman has, the smaller her family size.

2.The more education a woman has, the more she is likely to use contraceptive.

3.Formal education is positively related to decrease in family size.

5.3 THE SIGNIFICANCE OF FAMILY SIZE LIMITATION

Since the end of the world war, II, population problems have engaged the attention of human kind on an unprecedented scale (Philip. M. Hauser 1979: 1) Raising children requires much purchased input – food, clothing, shelter, schooling etc any policy that raise the costs of raising children reduces the number of children born (Duncan and John) There is great emphasis with regard to child care thus creating great emphasis on "quality children at the expense of numbers. In this way education increases the subjective attractiveness of expenditures competitive with having more children and thus tends to lower the demand for children. Rapid population growth in Kenya in the 1960's was seen as a threat to development (Ominde 1968:266).

In most cases, children of educated mothers are not viewed by their parents as being of economic value to the family. The influence of legislation prohibiting the employment of children, requirements for school attendance and the extension of the average period of education have forced parents to support their children fully for a much longer period than previously, on the average probably well over twice as long. Another factor increasing the period of economic dependence of children is the greater increase in technical and

professional education, the cost of which is often borne by the parents (Kutzner 1935; and Leybourne and White 1940: 203 – 207).

The findings of the 1989 KDHS provided the first evidence of a major decline in fertility from 7.4 in 1969 – 79 to 6.7 in 1979 – 1989 (CBS 1989) Moheau (1978) suggested that in France family size was being limited particularly in the upper classes because of love for luxury, desire for advancement in the social scale, the spread of the spirit of reflection and calculation and the desire to avoid the sub-division of property by inheritance. For the Muguga women, the understanding is that fewer children are easier to manage given the present economic hardships as in the costs of raising a child. The decline in family size has been brought about by the practice of family planning via the use of contraceptives in the study area, variables that are affected by the formal education of the woman.

KDHS (1993:36) says that the decline in fertility is due to rapidly changing attitudes about family size and increasing contraceptive practice. Education reduces fertility through its influence on educational patterns and its effects on the costs of child rearing and on the age at first marriage (Bernard Barelson: 1969). Investments in the "quality" of children may be taking place at the expense of savings by households and corresponding capital investments (Bernard Barelson: 1969). Education may lead to higher standards of living with regard to childcare and rearing, creating greater emphasis on the "quality" of children at the expense of numbers. Thus the demand of children is lower (Cochrane 1979, 1983).

As far as the education of women is concerned, the argument advanced by scholars such as Cochrane (1979,1983) it's the most pervasive factor influencing fertility control behaviour. Education could also lead to the spread of Western ideas and values which undermine traditional norms and values that favour large families (Caldwell 1989: 228) In Muguga location, 77% of the respondents said that their education helped them to plan and achieve their family size while 61% had already completed their family size.

CHAPTER SIX: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.1 SUMMARY

This work set out to examine the role of women's education on family size in Muguga Location, Kiambu District: to examine the part that maternal education has played in the decline of the family size. Interest in this study emanated primarily from the fact that the study area is in a District with one of the leading declines in fertility in Kenya (KDHS 1989) .The intercensal growth rates have significantly declined since 1969. Whereas the population growth rates for the study area were 3.4%, 2.8% and 1.8% in the period 1969,1989 and 1999, the National rates were 2.9%, 3.4% and 3.4% for the same period. Other regions experienced higher growth rates e.g. the Rift valley had 3.8%, 4.2% and 3.5% the highest growth rates for the same period According to the C.B.S (1999) the decline of the population in the study area is a combination of out-migration and the declining fertility rates. It was against this background that I set out to find out how maternal education has contributed towards this observation.

The study objectives were then formulated along these observations, which led to the formulation of the hypotheses whose consequent testing was done after interviewing by questionnaire 150 women aged between15-49 years from Muguga location. Focus group discussion and two case studies were also used.

Literature review on the study theme and variables was used to make clear the theoretical context of the study problem. Two theories namely the demographic transition theory and the demographic regulation theory were used as a foundational ground for this study. The data was processed using the SPSS

computer package to give the percentages and frequencies used to interpret the relationship between the independent and the dependent variables.

The findings of this study are important in the sense that they contribute to the scholarly understanding of the role played by maternal formal education in the decline of family size. It also outlines other factors that are important in the decline of fertility rate.

6.2 CONCLUSIONS

In attempting to answer the questions raised in the study, the findings in retrospect suggest that education of the woman is a major contributing factor towards the decline of family size in the study area. This was evident in the results of the descriptive data analysis where 77% of the women said that education had helped them to limit their family size. Further, 60% of the respondents were of the opinion that a woman should have only 1-2 children in her lifetime. The small family norm was particularly pronounced among the women with post secondary and above education. There was no much difference between women with lower and upper primary education in this case. This confirmed the hypothesis that the higher the woman's education, the smaller her family size.

All the respondents knew what contraceptives are and only one said that she did not know about any method of contraceptive. However although this is an indicator of wide knowledge of contraceptives, further probing reviewed that most of the women did not know of the actual composition of the contraceptives. Similarly whereas all the women with post secondary education knew about all the methods of family planning, women with lower education knew mainly of the pill, injection and the coil. Only 118(78%) of the

respondents had ever used a contraceptive and of these 40 women were not on contraceptive at the time of the study. Data analysis indicates that of all the women currently not on contraceptive, the majority of them (35) had primary education, 28 had up to form 4 education while only 6 had secondary form5 and above education. Therefore, this study concludes that contraceptive knowledge levels superceded user rates in the area. It also proves hypothesis two to be true: the higher the woman's education the more likely she is to use a contraceptive.

The women's literacy levels were found to be fair with only 5 of them with no education. The majority (51%) had secondary form 3-4 and above education. They were also found to be more knowledgeable about contraceptive than the women with lower educational levels. Similarly, women with secondary school form 3-4 and above education were found to have smaller families than women with lower educational status. For example, while no woman with secondary form 5-6 and above had more than 3 children 47 women with lower education achievements had family sizes of 4-5 children. Therefore, this study also concludes that increased formal education is positively related to decrease in family size. This finding concurs with the views of the literature review.

Other than the educational factor, other reasons for the decline of family size in the study area emerged as: the high cost of raising a child and peer pressure among others. Cultural attitudes towards a big family have changed greatly from 1960's 1970's, 1980's, and 1990's up to date. In Muguga location, having a small family is seen as a fashion and the ideal. The women would rather bring up a small 'quality' family at the expense of numbers. Having a small family is seen as reasonable planning and development. The status of a woman in this area does not depend on the number of children she has produced. Therefore, this study concludes that for the women in the study area a big family is no longer prestigious and a blessing. It is seen as a problem.

6.3 RECOMMENDATIONS

On the basis of the study findings, the following are recommended for areas experiencing undesired high population growth rates:

1. Efforts to limit population growth should be directed to the improvement of women educational achievement.

2. Family planning programmes should aim at changing the traditional attitudes that hinder the practice of family planning. Such attitudes include looking at children as a sign of wealth, source of labour and old age security. If such attitudes are to change women will be on a better position to make correct decision on fertility reduction

6.4 AREAS FOR FURTHER RESEARCH

1. There is need to carry out a similar study in other parts of Kenya for comparison purpose and future policy development.
2. There is need to carry out a research in the same location on how the decline of family size has affected the lives of people holistically.

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QUESTIONNAIRE FOR WOMEN-MUGUGA LOCATION KIAMBU DISTRICT.

INTRODUCTION

How are you? My name is Netter Mugure Wanyoike from Nairobi University. I am carrying out a research on women's education and family size. I would be glad if you can answer a few questions that I have for you. The information you give will be treated as confidential. Thank you.

BACKGROUND

1.Name.....

2.Residence.....

3.Age.....

4.Religion.....

5.Marital status: Married-----Single----Divorced-----Separated------Other [Specify]-------.

6.If married, how old were you at your first marriage?

7.Currently are you
[1] Staying with your husband?
[2] Staying away from your husband?

EDUCATION BACKGROUND

8. What is the highest level of formal education you attained?
[1] O [never been to school]
[2] Primary class 1-4
[3] Primary class 5-8
[4] Secondary form1-2
[5] Secondary form 3-4

[6] Secondary form 5-6
[7] University
[8] Other (Specify)

9. [a] Are you satisfied with your current level of education: yes---No--
[b] Please explain your answer to question 9 [a]

10. [a] Do you intend to further your education? Yes----No----
[b] Explain your answer to question 10[a]

11.How do you regard women's education?
1.Very Necessary.
2. Necessary
3.Not necessary
4.Undesirable

USE OF CONTRACEPTIVES

12.How would you describe contraceptives in your own understanding?.....
.....

13.From whom did you first learn about contraceptives? Not applicable---Family---------Books---Friends---doctors-----others [specify]

14.Have you ever use contraceptives? Yes .....No.....

15.If no to question 14, please give reasons.....
.....

16.Name the types of contraceptives you know about.....

17.How old were you when you used a contraceptive for the first time?

18.Are you currently on contraceptive? Yes---No—?

19.If no to question 18,why?.....

20.If yes to question 18, which methods are you using?.....

21.Have you always used this method? Yes.....No.....

22.If no to question 21, which one were you using before?.....

23.Why did you change?.....

24.Where do you get your contraceptives? Hospital-----Chemist----Other [specify].

FAMILY SIZE

25.Please list your live births as follows

Name	Sex	Age	Education	Occupation
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

26.Would say that your family size is now complete?
Yes.....No.....

27.If no how many more children would you like to have?
Girls.....Boys.....

28.How old were you when you got your first child?..... years.

29.Who decides how many children you will have? Myself---Husband---Relatives---Others [specify]-----.

30.What do people in this area think about:
[a] A big family?
[b] A small family?

31.Would say that your education has helped you to achieve your preferred family size? Yes.....No.....

32.If yes to question31,
explain.....

Values and attitudes

33.In your opinion, how many children should a woman have 1—2—3—4—more than 4—other [specify]---

34.Does your answer to question 34 also apply to you?
Yes.....No.....

35.Please explain your answer to question 4.....

36.What people think about a big family in this area/?
[a] In the 1960's
[b] In the 1970's
[c] In the 1980's
[d] In the 1990's and now

37.Please explain your answers to question 36

(a).....

(b).....

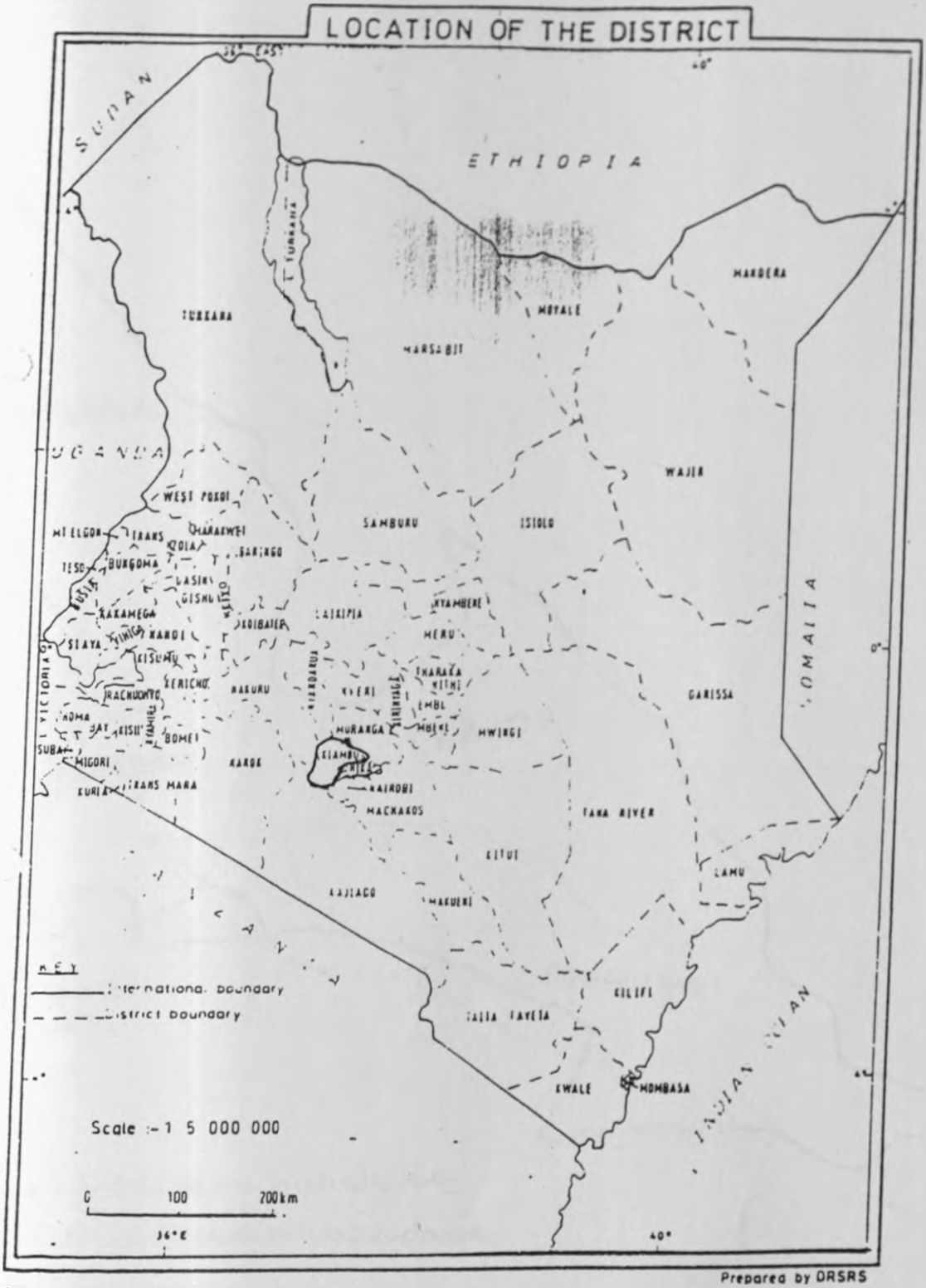
(c).....

(d).....

38.If the economy were favourable, would you have more children?
Yes.....NO.....

39.Please explain your answer to question 38.....

Map No 1


LOCATION OF THE DISTRICT
SUDAN
ETHIOPIA
SOMALIA
UGANDA
TANZANIA
INDIAN OCEAN
TURKANA
MOYALE
MARSABIT
MANDERA
WAJIR
SAMBURU
ISIOLO
WEST POKOT
TRANS NZOIA
UASIN GISHU
ELGEYO MARAKWET
BARINGO
LAIKIPIA
NYAMBENE
MERU
KAKAMEGA
KERICHO
NAKURU
NYERI
GARISSA
MURANGA
KIAMBU
NAIROBI
MACHAKOS
HWINGI
TANA RIVER
KITUI
KAJIADO
MAKUENI
KILIFI
TAITA TAVETA
KWALE
MOMBASA
LAMU
KEY
International boundary
District boundary
Scale :- 1 5 000 000
0
100
200km
36°E
40°
Prepared by DRSRS

MAP SHOWING MUGUGA LOCATION