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**Mens Knowledge, Attitude & Practice of
Family Planning in Kenya**

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MEN'S KNOWLEDGE, ATTITUDE AND PRACTICE OF FAMILY
PLANNING IN KENYA

hard copy

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BY

OTIENO, OWUOR PETER

A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR
THE DEGREE OF MASTERS OF ARTS IN POPULATION STUDIES

IFRA



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POPULATION STUDIES AND RESEARCH INSTITUTE

UNIVERSITY OF NAIROBI
1999

DECLARATION

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

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This thesis has been submitted for examination with our approval as University supervisors.

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TABLE OF CONTENTS

TABLE OF CONTENTS	i
LIST OF TABLES	iv
LIST OF FIGURES	vi
DECLARATION	vii
DEDICATION	vii
ACKNOWLEDGEMENTS	viii
ABSTRACT	ix

CHAPTER ONE

INTRODUCTION AND BACKGROUND OF THE STUDY	1
1.1 Introduction	2
1.2 Kenya's demographic profile	5
1.2.1 Mortality	6
1.2.2 Fertility	7
1.3 Socio-economic Setting	9
1.3.1 The Health Sector	10
1.4 Cultural Geography	11
1.5 Problem Statement	12
1.6 Study Objectives	15
1.6.1 Specific Objectives	15
1.7 Justification of Study	16
1.8 Scope and Limitation	18

CHAPTER TWO

LITERATURE REVIEW, THEORETICAL FRAMEWORK AND METHODOLOGY	19
2.1 Literature Review	19
2.1.1 Introduction	22
2.1.2 Patterns of family planning practice by selected background characteristics	23
(i) Age	23
(ii) Marital Status and Type of Marital Union	24
(iii) Current Family Size	26
(iv) Education	27
(v) Urban/Rural Place of Residence	30
(vi) Preferred Family Size	31
(vii) Influence of Religion	34
2.1.3 Male knowledge, attitudes and practice of family planning	36
(i) Knowledge	36
(ii) Attitude	38
(iii) Practice:	39
2.1.4 Family planning decision-making	41
2.2 Theoretical Framework	45
2.2.1 Background theoretical perspective	45
2.2.2 Conceptual Statement	47
2.3 Operationalization of study variables	49
2.4 Operational hypotheses	53

2.5	Study Area	54
2.6	Study Population	54
2.7	Source of Data	54
2.8	The Survey Design	55
2.8.1	Sample Design and Implementation	55
2.9	Methods of Data Analysis	56
2.9.1	Frequency Distribution and Percentages	57
2.9.2	Cross-tabulation and the Chi-square	57
2.9.3	Regression Analysis	59
2.9.4	Logistic Regression Analysis	59
2.9.5	Assumptions of the Logistic regression model	60
2.9.6	Description of variables used in Multivariate Logistic Regression	60
2.9.7	Definition of Dummy Variables	61
2.9.8	The Dependent Variables	62

CHAPTER THREE

DISCUSSION OF FINDINGS	63	
3.1	Background Characteristics of Survey Respondents	63
3.2	Family size and Fertility Preferences	68
3.3	Dependent Variables: Knowledge, Attitude and Practice of Family Planning	70
3.3.1	Knowledge of Family Planning Methods:	70
3.3.2	Attitude	72
3.3.3	Family Planning Practice: (Ever Use of specific Methods)	72
3.3.4	Current Use of Family Planning methods	74
3.4	Cross tabulations and Chi-square Results	76
3.4.1	Knowledge of Family Planning Methods by Age	77
3.4.2	Knowledge of Family Planning Methods by Education	78
3.4.3	Knowledge of Family Planning Methods by Religion	78
3.4.4	Knowledge of Family Planning Methods by Current Family size	78
3.4.5	Knowledge of Family Planning Methods by Province	79
3.4.6	Knowledge of FP Methods by exposure to Mass media	79
3.4.7	Knowledge of FP Methods by Place of residence	79
3.4.8	Knowledge of FP Methods by Preferred Family Size	79
3.4.9	Knowledge of FP Methods by Type of marriage	80
3.5	Knowledge of FP Methods by Marital Status	80
3.5.1	Knowledge of Family Planning Source	80
3.5.2	Knowledge of FP Source by Exposure to Mass Media	81
3.6	Men's Attitude toward Family Planning by Selected Background Variables	86
3.6.1	Family Planning Attitude by Exposure to Mass Media	88
3.6.2	Family planning practice by selected background variables	94
3.6.3	Current Use of any FP method by Exposure to Mass Media	98
3.7	Results of Multiple Logistic Regression Analysis	104
3.7.1	Introduction	104
3.7.2	Discussion of results for model one	105
3.7.3	Model Two	110
3.7.4	Discussion of Results for Model Two	111

(i)	Influence of Preferred Family size	111
(ii)	Influence of Exposure to mass media	112
(iii)	Influence of Place of Residence	112
(iv)	Influence of Education	113
(v)	Influence of Province/region inhabited	113
3.7.5	Logistic Regression Estimates on the Influence of Demographic, Socioeconomic and Sociocultural variables on Men's Family Planning Practice as measured by Current Use of Any Method	114
3.7.6	Discussion of Results for Model Three	116
(i)	Influence of Marital Status	116
(ii)	Influence of Province/region	117
(iii)	Influence of exposure to Mass media	117
(iv)	Influence of Age group	118
(v)	Influence of Religion	118

CHAPTER FOUR

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS	120
4.0 Introduction	120
4.2 Summary of Findings	121
4.2.1 Knowledge of family planning methods and source	121
4.2.2 Men's attitude toward family planning	126
4.2.3 Men's Practice of family planning	128
4.2.4 Conclusion	130
4.3 Recommendations	132
4.3.1 For policy makers	132
4.3.2 For further research	135
REFERENCES	137
APPENDICES	145

LIST OF TABLES

Table 1.1	Population Size, growth rates and density by Provinces, Kenya, 1969-1989	5
Table 1.2	Demographic indices by Census years; Kenya, 1948-1989. . .	6
Table 1.3:	Trends in Infant Mortality Rate and Life Expectancy at Birth by Provinces; Kenya, 1960-1989.	7
Table 1.4:	Trends in Fertility by Provinces; Kenya, 1984-1992	8
Table 3.1.1	Respondents' Distribution by Province	63
Table 3.1.2	Respondents' Distribution according to 5-year Age-groups . . .	63
Table 3.1.3	Distribution of Respondents by Current Marital Status	64
Table 3.1.4	Respondents' Distribution by Form of Marriage	64
Table 3.1.5	Respondents' Distribution by Religion	65
Table 3.1.6	Percent Distribution of Respondents by Education	66
Table 3.1.7	Respondents Distribution by Urban/Rural place of Residence: .	67
Table 3.1.8	Percent distribution of respondents by current family size	68
Table 3.1.9	Percent Distribution of Respondents by Preferred Family Size .	68
Table 3.2	Distribution of men who know specific Family Planning methods, by specific methods	70
Table 3.2.1	Frequency and Percentage of men who know a source for specific FP methods	71
Table 3.2.2	Respondents' Distribution according to FP Attitude	72
Table 3.2.3	Distribution of respondents' by ever use of specific methods .	72
Table 3.2.4	Respondents' Distribution by Current Use of FP method	73
Table 3.4.1	Percent of Men who Know of Specific Family Planning Methods by Selected Background Variables	75
Table 3.4.2	Knowledge of FP Source by Education	79
Table 3.4.3	Knowledge of FP Source according to Province	80
Table 3.4.4	Radio Listnership	80
Table 3.4.5	TV Watching	81
Table 3.4.6	Newspaper Reading	81
Table 3.4.7	Knowledge of FP Source by Age	82
Table 3.4.8	Knowledge of FP Source by Current Marital Status	82
Table 3.4.9	Knowledge of FP Source by Type of Marriage	83
Table 3.5.9	Knowledge of FP Source by Current Family Size	83
Table 3.6	Knowledge of FP Source by preferred family size	84
Table 3.6.1	Knowledge of FP Source by Usual Place of Residence	84
Table 3.6.2	Knowledge of FP Source by Religion	85
Table 3.6.3	Family Planning Attitude By Level of Education	85
Table 3.6.4	Family Planning Attitude by Province	87
Table 3.6.5	Radio Listnership (at least once a week)	87
Table 3.6.6	TV Watching	88
Table 3.6.7	Newspaper reading	88
Table 3.6.8	Family Planning Attitude by Age of Respondent	89
Table 3.6.9	Family Planning Attitude by Current Marital Status	89
Table 3.7	Family Planning Attitude by Type of Marriage	90
Table 3.7.1	Family Planning Attitude by Current Family Size	91
Table 3.7.2	Family Planning Attitude by Preferred Family Size	91
Table 3.7.3	Family Planning Attitude by Usual Place of Residence	92

Table 3.7.4	Family Planning Attitude by Religion	94
Table 3.7.5	Percent Distribution of Men Who Reported Ever Use of Specific FP Methods by Selected Background Variables.	95
Table 3.7.6	Current Use of FP Methods Number and Percentage of Male Users of specific FP methods by selected background variables	96
Table 3.7.8	Current Use of any FP method by Education	97
Table 3.7.9	Current Use by Radio Listnership	97
Table 3.8	Current Use by TV Viewing	98
Table 3.8.1	Current Use by Newspaper reading	98
Table 3.8.2	Current Use of any Family planning method by Age	99
Table 3.8.3	Current Use of any FP method by Current Marital Status	100
Table 3.8.4	Current Use of any FP method by Type of Marriage	100
Table 3.8.5	Current Use of any FP method by Current Family Size	101
Table 3.8.6	Current Use of any FP method by Preferred Family Size	102
Table 3.8.7	Current Use of any method by Usual Place of Residence	102
Table 3.8.8	Current Use of any FP method by Religion	103
Table 3.8.9	Logistic Regression Estimates on the Influence of Selected independent variables on family planning knowledge	105
Table 3.9	Logistic Regression Estimates on the Influence of Demographic, Socioeconomic and Sociocultural variables on Men's Attitude toward Family Planning	110
Table 3.9.1	Logistic Regression Estimates on the influence of selected independent variables on Current Use of Family Planning.	114

LIST OF FIGURES

Figure 1	Conceptual Model	48
Figure 2	Operational Model	52

DEDICATION

This thesis is gratefully dedicated to my parents Mzee Raphael Otieno Odongo and Mama Getruda Akinyi Otieno for giving me the treasure of a lifetime.

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ABSTRACT

The Family Planning Programme in Kenya has always approached the issue of fertility regulation with females as the target group, while ignoring men who are equally involved in the process of reproduction/procreation, and who in many communities are the main decision-makers. In the same tradition, most studies that have been conducted on the level of awareness and practice of family planning have focused on women, rather than on both gender. As a result, men's knowledge and attitude of family planning is often misunderstood and shrouded in uncertainty (where people act on rumours and wrong perceptions of methods).

This study set out to investigate men's knowledge, attitude and practice of family planning in Kenya, and how they are influenced by various demographic, socio-economic and socio-cultural factors namely age, marital status, current family size, education, preferred family size, exposure to mass media, place of residence, religion and type of marital union. The ultimate aim is to generate information that can form the basis of programmes to improve men's awareness, approval and acceptance, and consistent use of family planning methods.

Data for the study was drawn from a carefully sampled field survey and the 1993 Kenya Demographic and Health Survey (the male questionnaire component), which covered 2,336 men, aged 20-54 years. The sample was national in scope, based on the national master plan maintained by the Central Bureau of Statistics(CBS). Analysis was undertaken using three statistical methods namely frequency distribution and percentages, cross-tabulation and the chi square, and finally logistic regression

analysis, all performed with the help of a computer package-SPSS/PC + .

Major findings of the study indicate that there is high level of knowledge (awareness) of family planning methods and source and favourable attitude among men in Kenya, but limited readiness to use both as clients and supportive partners. The most widely known methods were the condom(94.5%), the pill(92.9%), female sterilization(86.3%), and periodic abstinence(84.2%). There was an almost universal approval as 90.8% of the men interviewed approved of family planning.

However, this reported high knowledge and considerably favourable attitude has not been translated into practice. While about 50 percent of the respondents reported current use of "any" method, further analysis of practice of specific modern methods revealed that, apart from the condom (12.4%), less than 10 percent of men were actually practising any specific method.

Based on the findings, a number of relevant recommendations for policy and areas of further research are suggested. There should be increased use of radio and newspapers as a channel for disseminating family planning information; family planning education should be introduced in primary school education curriculum, possibly in Home science lessons; there should also be deliberate programs to change men's preferred family sizes, which is still high(over four children). Further research should address the gap between high knowledge, positive attitude on one hand, and very low use on the other hand, and between ever-use and current use of specific methods.

CHAPTER ONE

INTRODUCTION AND BACKGROUND OF THE STUDY

1.1 Introduction

A restricted definition of family planning that I would like to adopt in this study is the conscious effort to determine the number and spacing of births. It is the right of individuals and couples to "freely and responsibly" decide the number and spacing of their children and to have the information, education and means to do so (World Population Conference, 1974). Family Planning in itself is not a demographic process, but a behavioral process with a demographic impact. It is instrumental in regulating one of the key demographic events -fertility. Since fertility is the phenomenon to be explained, it is not surprising that many studies have sought the explanation in terms of Family Planning Knowledge, Attitudes and Practice. It should be noted that however motivated couples might be to regulate their fertility, if neither have the knowledge of existing and efficient family planning methods, or where to get them, then this motivation can be frustrated.

One of the most prominent items on the agenda of population programmes as they make a transition to comprehensive reproductive health programmes in the next millennium is the issue of men. Africa as a whole has lagged behind other world regions in the acceptance and adoption of family planning. In rural sub-Saharan Africa particularly, the practice of family planning remains very low, even though many men and women report knowledge of at least one family planning method and a number of them also report approval of use.

Since the 1950s and 1960s, we have witnessed an enormous amount of research and writings on population programmes and their impact on women's

fertility and choices, but one would be hard pressed to find any surveys and articles on men. Men seem to have become what Potts (1952) called "the forgotten 50% of family planning". Indeed, Mason and Taj (1987) found that not only was there "a general paucity of studies focusing on differences between men and women's reproductive goals but men are rarely interviewed in fertility surveys of any kind".

African family planning promotion programmes and population policy development have been severely hampered by their neglect of men (Mbizvo and Adamchak, 1991). These programmes are also hindered by the relative scarcity of information about men's knowledge, attitudes and practices regarding family planning. Men's role or participation in reproductive health has generally been typified by their conspicuous absence, although their pervasive influence, as husbands, partners, fathers, uncles or brothers, is clear. Family planning services have long been offered through maternal and child health care providers, thereby effectively by-passing men's involvement. Both research and services in this area have been dominated by findings derived almost exclusively from women. In general, policies and programmes based on such findings have not had a high level of success in increasing the practice and simultaneous reduction in overall fertility in Africa.

For more than four decades, conventional population programmes have largely been designed and implemented with a gender bias -towards women. This approach assumes either that the characteristics of the woman can serve as a proxy for those of the couple or that the woman plays the most important role in determining the couple's behaviour. Research in various parts of the world

challenges both of these assumptions.

Several studies have found significant divergences in men's and women's reports about contraceptive use, attitudes toward family planning and fertility preferences and intentions (e.g Coombs and Chang, 1981; Koenig et al., 1984, Mitra, 1985). Population Reference Bureau, 1995 writes, "although many men want to participate more actively in deciding how many children they should have, and when to have them, they lack sufficient information to achieve this". In some cases, men do not know about any effective method of family planning, the few who know hardly cooperate with their partners in using the same (Khasiani, 1988). This is partly due to little access to correct information about such services because many programmes are designed with women in mind.

This bias has made birth control services and essential information about them inaccessible to men. If a person does not know of a method that exists, or has heard of it but does not have enough information to either use it, or support its use by a partner, then that method is not an option. Despite the fact that men constitute about 50 percent of the sexually active adult population, and the important role they play in family planning and fertility decisions, most Kenyans consider family planning and reproduction to be the responsibility of women. This attitude is reinforced by the structure and organization of clinics which combine the family planning programme with maternal and health care services. Men feel excluded from these services and have been reluctant to use them (Khasiani, 1989). Even within the same community, men's reasons for opposing family planning vary; some want more children, others oppose contraception even if they do not want more children because they worry that their wives might be unfaithful

if protected from pregnancy. Still others oppose it due to unspecified reasons.

It is important to note that even in places where family planning services are widely available, women often do not have a free choice in the matter. Fear of the husband's reaction is a major factor when women consider using a method (Otieno and Kaseje, 1989). More recently, some attention has been given to studying family planning among men. DHS surveys that included both women and men have been conducted in well over twenty developing countries. Findings from these surveys have contributed to identifying the gender disparities in reproductive behaviour and fertility preferences, and in understanding men's influence in decision-making regarding family size and family planning adoption. Men's initiative could assume an especially prominent role in the individual couples' family planning effort.

In Kenya, rapid population growth is already threatening national development goals, and family planning has to be considered as a key factor in advancing social and economic development, and in achieving desired demographic goals. But despite increased efforts, family planning programmes continue to face formidable challenges, the biggest of which has been identified as the "male factor". Family relations among Kenya's various ethnic groups involve both congruence and conflict, and the benefits and costs of child-rearing are not distributed equally between men and women (Caldwell and Caldwell, 1990). Thus neither gender can be ignored in attempts to understand fertility behaviour and communication between partners may be vital to successful family planning. More so, the dominant view of marriage in sub-Saharan Africa is such that a husband and wife are not one but two. In such a setting, it is particularly important to

explore the attitudes of both men and women, to understand the role of each in decisions about family planning. Family planning managers have therefore identified the need to promote male support of, and participation in effective family planning and this proposed research is a step in the same direction.

1.2 Kenya's demographic profile

Kenya's population was estimated at 5.4 million in 1948 and in 1969, the population had increased to 10.9 million. The 1979 census enumerated 15.3 million people with an annual intercensal growth rate of 3.4 percent between 1969 and 1979. In 1989, Kenya's population was found to be 21.4 million people, thus giving an intercensal annual growth rate of 3.3 percent (see Table 1). The population density for the nation as a whole is generally low, but it has been increasing rapidly since the 1950's. However, Nairobi, Western, Nyanza and Central provinces have very high population densities while North Eastern, Coast and Rift Valley provinces have low population densities .

Table 1.1 Population Size, growth rates and density by Provinces, Kenya, 1969-1989

PROVINCES	POP. SIZE	GROWTH RATE(% p.a.)		DENSITY		
	1989	1969-1979	1979-1989	1969	1979	1989
Nairobi	1,324,570	4.86	4.70	746	1210	1910
Central	3,116,703	3.36	2.84	127	178	235
Coast	1,829,191	3.52	3.09	11	16	22
Eastern	3,768,677	3.55	3.26	12	17	24
N. Eastern	371,391	4.19	-0.06	2	2	3
Nyanza	3,507,162	2.20	2.83	168	211	280
R. Valley	4,981,613	3.83	4.30	12	19	27
Western	2,544,329	3.22	3.28	161	223	307
TOTAL	21,443,751	3.37	3.35	19	27	37

Source: CBS (1994), Kenya Population Census, first report vol.1

In terms of the distribution of population by race and ethnic groupings, about 98 percent of the population are Africans, and the rest are of Arab, Asian and European origins. The African population is composed of more than 42 ethnic groups. Each of these ethnic groups by and large inhabit their traditional land areas, although land resettlement schemes and land purchases are constantly altering the traditional ethnic boundaries. The non African population are mostly found in urban centres. Christianity and Islam are the major religions.

1.2.1 Mortality

Kenya has experienced a rapid decline in mortality during the last three decades (Brass and Jolly, 1993). There has been a considerable decline in infant and under-five mortality and improvement in life expectancy at birth between 1948 and 1989. The Crude Death Rate (CDR) was estimated at 25 deaths per 1000 population in 1948; it was 17 in 1969 and 12 deaths per 1000 population in 1979. The life expectancy at birth was about 57 years in 1979 (Ewbank et al., 1986, cited in Ikamari 1996). The Infant mortality rate was 184 deaths per 1000 live births in 1948 but dropped to about 84 deaths per 1000 live births in 1979 and to 74 in 1989.

Table 1.2 Demographic indices by Census years; Kenya, 1948-1989.

YEAR	1948	1962	1969	1979	1989
Pop. (in millions)	5.4	8.6	10.9	16.1	21.4
Natural growth rate (%)	2.5	3.0	3.3	3.8	3.4
Total Fertility Rate (TFR)	6.7	6.8	7.6	7.9	6.7
Crude Birth Rate	50.0	50.0	50.0	52.0	48
Crude Death Rate	25.0	20.0	17.0	14.0	10.6

Source: Ministry of Planning and National Development, 1989-1993 Development Plan

Table 1.3 Trends in Infant Mortality Rate and Life Expectancy at Birth by Provinces; Kenya, 1960-1989.

PROVINCE	INFANT MORTALITY RATE (IMR)			LIFE EXPECTATION AT BIRTH (BOTH SEXES)		
	1969	1979	1989	1969	1979	1989
Nairobi	75	72	49	56.4	57.1	66.1
Central	76	61	30	56.3	60.0	68.4
R. Valley	89	85	53	53.4	54.1	61.9
Eastern	105	84	47	50.0	54.4	67.2
N. Eastern	132	107	77	44.5	49.0	54.7
Coast	133	101	77	44.4	50.7	56.5
Western	131	120	101	44.8	46.9	56.7
Nyanza	165	133	111	39.0	44.3	51.5

Sources: Otieno and Kichamu (1986), and Census data (1989)

The mortality improvements observed in Tables 1.2 and 1.3 is one of the results of the improvements in the social and economic conditions coupled with the application of modern medical technology and public health measures.

However, wide provincial differences in the level of Infant and child mortality exist in the country. Generally, mortality is high in the Nyanza, Western and Coast provinces (Table 1.2). Nairobi, Central, Rift Valley and Eastern provinces have low mortality. The 1993 KDHS indicates that infant and child mortality continued to be high in the Western, Nyanza and Coast regions; and low in the Central, Eastern, Rift Valley and Nairobi provinces.

1.2.2 Fertility

Fertility level was persistently high in Kenya, having increased from a CBR of 50 per 1000 in 1948 to 52 per 1000 in 1979. The TFR increased from the level of 6.7 children per woman in 1948 to 7.9 children per woman in 1979. However, from the 1989 KDHS, there are indications that fertility is on the decline, having dropped to 6.7 children per woman and CBR to 48 per 1000 population in 1989. The results from the 1993 KDHS show that fertility has

dropped further to 5.4 children per woman.

This decline has been largely attributed to increasing family planning practice (Robinson 1992; Brass et al. 1995, both cited in Ikamari, 1996). However, this explanation ignores completely other equally important underlying factors such as government policies and development programmes (for example, massive investment in education and health sectors) which have transformed social and economic conditions in the country since independence (Gaisie, 1995). The explanation also ignores the effects of the economic recession and the Structural Adjustment Programmes(SAPs) on the cost of children and in turn on fertility (Ikamari, 1996).

Provincial differentials in the level of fertility in Kenya are quite marked. For instance, the 1993 KDHS data showed that fertility was above the national average of 5.4 children per woman in the Western, Rift Valley, Nyanza and Eastern provinces. Nairobi and Central provinces depict the lowest fertility levels while Total Fertility Rate(TFR) for the Western province (6.7) is almost twice the rate in Nairobi (3.4).

Table 1.4 Trends in Fertility by Provinces; Kenya, 1984-1992

PROVINCE	1989 KDHS	1993 KDHS
Nairobi	4.6	3.4
Central	6.0	3.9
Coast	5.5	5.3
Eastern	7.0	5.9
Nyanza	7.1	5.8
R. Valley	7.0	5.7
Western	8.0	6.7
KENYA	6.7	5.4

Source: KDHS, 1993

1.3 Socio-economic Setting

Kenya has achieved substantial social and economic development in the last 34 years of independence. Although the annual growth rates of the economy has been fluctuating, the overall economic growth was quite impressive between 1964 and 1987. The performance of the Kenyan economy between 1950 and 1980 was comparable with any developing country (CBS, 1989).

By World Bank standards, Kenya is classified as a low income country (Ikamari, 1996). Within the country, there are wide income disparities, by rural/urban place of residence, by gender, by provinces and by districts within the provinces. Income and other forms of wealth are concentrated among a small section of the population, while the majority are living in poverty. Kenya is primarily an agricultural country, with nearly 81 percent of the population depending on agriculture for their livelihood. The agricultural sector is also the major source of raw material for the growing agro-industrial sector and the source of food. It remains by far the largest source of foreign exchange earnings followed by tourism (CBS, 1989).

There has been a remarkable expansion in the education system during the last 35 years. This includes the increase in the number of enrolments at schools, colleges and universities. One important aspect of educational development has been the improvement in enrolments of girls, particularly in primary schools. However, despite the rapid advances in the educational sector, wide gender and provincial disparities still exist in Kenya (1989 Census). Nairobi province has the highest concentration of well-educated people and also

relatively modest gender differences in educational attainment. It is followed by Central province. Western and Nyanza provinces have almost the same educational levels, which are better than those for Rift Valley, Eastern, Coast and the lowly-ranked North Eastern province.

1.3.1 The Health Sector

The government has accorded the health sector priority since independence in 1963. Many policies, measures and strategies have been established to accelerate the development of health services. Before 1989, nearly all health services were provided free of charge to make them accessible to all people. Service delivery points (hospitals, health centres, dispensaries) have also been increased remarkably over the years. However, from 1989 the government introduced cost-sharing as part of cost recovery measures being undertaken within the Structural Adjustment Programme.

Health services are delivered by the ministry of Health, Local government councils, private voluntary organizations, the private profit making sector and traditional healers. However, the Ministry of Health provides most of the health care through it's nation-wide infrastructure.

In spite of the government's efforts to make health care accessible to all people by the year 2000, a heavy urban bias in allocation of health facilities and personnel exists in the country. In addition, there are also marked disparities in the distribution of health facilities and manpower between the provinces and districts.

The problem of lack of access to health services is particularly serious in

provinces of Nyanza, Western, Coast, parts of Rift Valley and North Eastern. The problem is further aggravated by rapid population growth, poor physical infrastructure and the World Bank-sponsored SAPs being implemented since the early 1980s. AIDS/HIV is another problem that is putting additional strain on the already ailing public health system. The spread of AIDS is already threatening to reverse the recent gains made in infant, child and adult mortality.

1.4 Cultural Geography

Kenya as a country enjoys a wide range of cultural diversity, both between and within the provinces. The main modes of production are agriculture, largely practised in Central, Western, Rift Valley and parts of Nyanza; Pastoralism is widely practised in the Rift Valley and North Eastern provinces. Fishing is practised among the Coastal and Nyanza people. The main religions are christianity and Islam. Moslems are mainly found in North Eastern and Coast provinces. Pockets of African Traditional Religion also exist all over the country. The catholic religion is widely known for its stand against modern methods of birth control and its support for strict monogamy. Islam on the other hand allows polygamy and is not openly against family planning, but has a strong son preference and pronatalist doctrines.

Polygyny is widely practised in the Coast and Western and Nyanza provinces. It is least found in Central and Nairobi provinces. Early age at marriage is common in the Coast and the Rift Valley communities. Age at marriage is highest in Nairobi and Central provinces. In all the provinces save for Nairobi and Central, men are considered to be the major bread-winners, owners

and custodians of community/lineage resources and are the overall heads of their families.

This background information depicts the various demographic, socio-economic and cultural environments in which Kenyan men live and operate, and within which they make reproductive/fertility decisions. This, consequently, is likely to have a bearing on the theme of this study i.e Men's knowledge, attitude and practice of family planning.

1.5 PROBLEM STATEMENT

The Family Planning programme has long been recognized for its importance in improving the health of women and children, and in reducing population growth rates. Family planning efforts were officially launched in Kenya in the early 1960s when the Family Planning Association of Kenya (FPAK) was formed to promote information about voluntary birth control and to provide the people with the means to do so. The National Family Planning Programme (NFPP) was launched in 1967 with the aim of reducing population growth rates by regulating fertility and consequently reducing the rapid population growth.

Despite these conscious interventions to reduce fertility and population growth, Kenya's annual population growth rate still stood at 3.4 percent by 1989. At this rate, Family Planning programmes cannot be said to have achieved the desired goal. Africa in general, and Kenya particularly has performed very dismally in the adoption, sustenance and expansion of family planning. This is largely attributable to concentration of family planning efforts

on the supply side and completely ignoring programmes designed to bring about a change in the family norm, and also due to the fact that the focus of these programmes has been on women, due to the perception that it is the women who get pregnant and give birth! Given the critical role that African men play in family decisions, men's support and involvement are essential for family planning to gain wider acceptance. Sessional Paper No.1 of 1997 on National Population Policy for Sustainable Development captures this necessity in the following words:

"Men fall under a special category of the population that is currently under-served and inadequately targeted by reproductive health programmes. Men in most communities have the overall authority and decision-making responsibility on all family matters including reproductive health. There is, therefore, urgent need to involve them in all population programmes". (p24)

From the aforementioned, it goes without saying that if organised family planning and reproductive health programmes are to reach out to men, a better understanding of their reproductive knowledge and intentions has to be sought.

The proposed study looks at the knowledge, attitudes and practice of family planning among men in Kenya. It is interested specifically in finding answers to the following general questions:

- To what extent are men in Kenya aware of Family Planning?
- Do men have positive attitudes towards Family Planning?
- Do men know the specific methods and where to get them?
- What are men's sources of information?
- Do men use contraceptives?, If so, what methods do they use?

Men have been selected because they are viewed as a special priority group that deserves an investigation of this nature, yet they have received relatively little attention from previous studies. This is not only serious because the African man wields immense powers when it comes to family size and family planning decision-making, but also because generally, male fertility is considerably higher than female fertility. Because society accepts men having sexual relations with several women, men have a greater likelihood than women to have more children by the end of their reproductive life span.

According to KAP studies conducted in the country, and in which men and women were asked separately questions regarding family planning, the majority of Kenyan men know, and approve of family planning. In fact men are generally more likely than women to know about family planning methods, yet in many cases, they are less likely than women, to approve of family planning for their own use. In Kenya, like in many other African countries, a wide gap exists between male knowledge and attitude toward family planning on one hand, and their actual use on the other hand (CAFS Research Project, 1995).

Although many men want to participate more actively in deciding how many children they should have, and when they should have them, ***the various demographic, socio-cultural and economic environments in which they find themselves often militate against these good intentions.*** Often they also lack sufficient information to enable them achieve this. Men's role in family planning, either as users of male methods or as supportive partners of users has largely been ignored by programme planners, policy makers and service delivery personnel. Definitely this exclusion of men from family planning programmes

has grossly contributed to low levels of use among couples, partners, and individuals, and has deprived men of an opportunity to exercise reproductive responsibility.

1.6 STUDY OBJECTIVES

The general objective of this study was to to examine differentials in family planning knowledge, attitude and practice among males by selected demographic, socio-economic and socio-cultural variables, so as to generate and make available information that can form the basis for the design, development and implementation of effective and culturally sensitive male-targeted interventions and integrate them with existing programme activities.

1.6.1 Specific Objectives

- 1: To identify demographic factors that influence men's knowledge, attitude and practice of family planning in Kenya.
- 2: To identify socio-economic factors that influence men's knowledge, attitude and practice of family planning in Kenya.
- 3: To identify socio-cultural factors that influence men's knowledge, attitude and practice of family planning in Kenya.
- 4: To determine the influence of these factors on men's Knowledge, Attitude and Practice of Family Planning in Kenya.

1.7 JUSTIFICATION OF STUDY

Since the establishment of the family planning programme, the target for researches, messages, literature, recruitment and motivation has been women. But recently, researchers and programme managers have begun to realize that men are equally critical and interested parties in family planning efforts. Men throughout the world are concerned about the health and welfare of their partners and children. Because men often influence their partners' reproductive attitudes and determine whether or not they use contraception, male involvement in family planning is essential to encourage men to assume responsibility for their sexual behaviour and to protect the health and well-being of their wives/partners, potential and existing offspring, and the family as a whole.

Recognising that certain misinformation, misconceptions and rumours exist about family planning methods in general and particularly about male involvement in contraceptive decision-making, a study of this nature is necessary as it contributes to the understanding of knowledge, attitudes and use of family planning among men, and also seeks possible explanations. Findings from the study are therefore of great use in developing new strategies to promote the acceptance of birth control programmes. Information, Education and Communication (IEC) messages, literature and other media messages can then be appropriately developed to create a positive impact. Training of programme personnel can also benefit from such information if they are taken into account in the review and development of curricula.

By identifying major demographic, socio-economic and cultural barriers to male participation in and support for family planning, the research has emphasized

the importance of strong partnerships between men and women for improving family health. It has also suggested promising solutions to overcome or lessen these barriers. Findings will also be helpful in winning the much-needed active cooperation of men in on-going family planning programmes and get them either to practice family planning themselves or support their partners in the same.

In recent years, male support for family planning has been of concern to managers and planners even though it has never attracted adequate attention. Many non-contracepting women have always cited partners objection as their main reason for non-use, and many family planning programmes often work from the assumption that men are generally opposed to the practice of birth control. Lack of any systematic evidence supporting this assumption calls for an evaluative research of Mens reproductive preferences, attitudes and perceptions and the factors that shape them. It is only through such a study that we can be able to identify priority areas to target in promoting adoption and continuation of effective family planning methods to control Kenya's rapidly growing population at this critical time when land, food and employment have become scarce, environmental degradation is on the increase and many people live in abject poverty that they can barely afford to cater for the children they bear, and more so in an era when citizens are more interested in their own survival than in the demographic goals of the nation. Studies such as this, it is hoped, will form the basis of increased family planning use and eventual fertility reduction in Kenya.

1.8 SCOPE AND LIMITATION

The study is based on 1993, KDHS data. Data on selected variables viz: Respondent's Age, Current Marital status, Current Family Size, Place of residence, Education level, Preferred family size, Exposure to Mass media, Type of Marriage etc were extracted from the data set. At the same time information on the number of methods known, Ever use, Current use, Approval or disapproval of family planning was obtained and examined. In brief, the study has focused on selected demographic, socio-economic and socio-cultural factors and how they influence, shape, or modify male Knowledge Attitude and Practice of family planning in Kenya.

One major limitation of the use of secondary data on research is that the researcher has no control of the data quality and has to use it the way it is. In this case such data may have some non sampling errors arising out of errors made in carrying out field activities such as failure to locate and interview the correct sample selected, errors in the way questions were asked and misinterpretation of questions on the part of the interviewer and respondent, plus other entries or processing errors.

The data that has been used in this study is limiting in another sense that it was collected with different objectives in mind and not of the present study and therefore may not have captured adequate relevant information for this study. For example, despite the interest of the study in including experience of infant mortality as a study variable, such a measure for men was not available in the data. This therefore demanded that certain manipulations be made to make it as reliable and appropriate as possible for the study.

CHAPTER TWO

LITERATURE REVIEW, THEORETICAL FRAMEWORK AND METHODOLOGY

2.1: LITERATURE REVIEW

2.1.1: Introduction

Of all the eleven intermediate variables, (Davis and Blake, 1956) through which socio-cultural, economic, and demographic factors can influence fertility, family planning (contraceptive use) is by far the most important. The exact nature of the relationship between fertility and contraception has been measured with increasing accuracy and frequency over the past few decades, beginning with the KAP surveys of the 1960s and 1970s, and followed by the WFS surveys and Contraceptive Prevalence Surveys of the 1970s and 1980s, and by the more recent DHS of the 1990s (Mauldin and Segal, 1988). There is a general agreement among researchers that contraceptive use is usually associated with fertility. Researchers argue that increased use of Family Planning methods, particularly that of modern methods is largely responsible for the observed decline in fertility in a number of developing countries (Caldwell & Caldwell, 1990; Njogu, 1991; Bongaarts, 1986; Mauldin and Ross, 1991 & Bongaarts, Mauldin and Phillips, 1990, both cited in Gule, 1994).

Bongaarts (1986) argues that Family Planning programmes have played a crucial role in increasing contraceptive use and reducing fertility in a number of developing countries, Mauldin and Ross (1991) associate Family Planning programme efforts with the magnitude of fertility decline, arguing that countries with "strong" effort tend to have larger fertility declines than countries with

"moderate" or "weak" efforts. For example, Botswana, a country with a "strong" family planning programme had a significantly sharper decline (25 percent) than Kenya (13 percent) and Zimbabwe (18 percent) both of which had "moderate" family planning programmes. But the Kenyan case, according to KDHS, has improved dramatically from 1989 to 1993.

In most of sub-Saharan Africa, use of family planning methods is primarily motivated by the desire to space births or avoid premarital or extramarital pregnancy, rather than to stop childbearing. Page (1988) argues that many people use contraception to replace traditional family planning methods, and this has been declining in a number of countries in the region. Limiting family size is still only a minor function of contraception (Caldwell and Caldwell, 1987), even in countries such as Zimbabwe, where contraceptive prevalence is reportedly high. This use of family planning mainly for child spacing purposes tends to minimize its effects on overall fertility.

Kenya was among the first countries of Africa to initiate a national family planning programme, but unfortunately the programmes had overwhelming bias in their design - aimed almost exclusively at women. This could have been for various reasons, including the threat that excessive childbearing poses to maternal and child health, the link between family planning and women's development and the integration of many family planning programmes into maternal and child health care services. There was also an overriding assumption that men either are not interested in family planning, or are vehemently opposed to it.

Many population analysts have reported the onset of dramatic fertility declines in Africa, especially in Kenya, Botswana, and Zimbabwe. The commonly

cited precursors of fertility decline are:

- (a) proportion of couples who report that they would like to use contraception in the future;
- (b) the desired number of children as reported by women (which is declining).

These can only translate into real precursors of fertility decline if they are actually implemented. Sadly, the decision to use family planning methods and the decision on the number of children to have, are both hypothesised to rest with the husband or male sex partner. Dodoo, 1998 writes "the almost exclusive focus of population policy and research on women has hindered fertility decline because the power to dominate sex and reproduction is culturally bestowed on men (or their families)". It is therefore important to systematically assess the factors which influence male use of contraception and general involvement in family planning (Odhiambo, 1988). At the same time, research needs to be done to establish the extent of male knowledge, nature of their attitude and degree of use of family planning. Once these are clearly identified and defined, the Kenya government can formulate strategies designed to modify men's attitudes and involve them actively in family planning issues. It is hoped that increased male involvement will go along way in reducing the average family sizes in Africa in general, and in Kenya in particular (Dodoo, 1997; CAFS Research Report, No.2, June 1995).

Even in sub-Saharan Africa, where men were in the past considered a stronghold of opposition to fertility regulation and/or control, recent studies (Muhawenimana, 1988; Gallen et al. 1986; Muigana, 1994) indicate that a substantial number of male respondents approve of family planning. The view that

men are less in favour of birth control than women is incorrect. Stycos (1962, cited in Molnos, 1968) speaks of the "feminist bias" in planned parenthood programmes and points out that although there are several a priori reasons for believing the husband to be less motivated for family planning than the wife, there are equally plausible reasons for believing the male might be even more motivated for family planning, especially in a situation where the major disadvantages of children is viewed as "economic" rather than medical. In this sense, says Stycos, the burden of children falls more heavily on the shoulders of the family breadwinner, who in most cases is the father.

Moreover, in areas of rapid population growth like Kenya, where land supply is scarce, and holdings have become fractioned, the advantage of additional children as farm hands easily turn into a distinct disadvantage, -one which the land-astute peasant male can hardly fail to see. Also, especially in the developing countries, it is the male population which first experiences the greatest gains in education, which is most likely to be exposed to urban influences, and which has greater social freedom to profit from innovations. Thus, the male is in a much more favourable position than the female to be exposed to, and influenced by the social changes occurring around him (Molnos, 1968).

At the very least, the disadvantages of a large family would seem to be as great for males as for females. The empirical data available, while not clear cut, tend to favour this proposition (Stycos, 1962). Saxton et al.(1965) reports that three-quarters of the women attending the family planning clinics in Kampala are married to wage-earning men, most of whom are obliged to live on a fixed income. This suggests that financial problems lead these husbands to want, or at least to

allow the wives to begin birth control. Findings everywhere indicate that financial difficulties children create are among the strongest male motivations in favour of family planning (Fapohunda and Rutenberg, 1999; Molnos 1968).

Hawkins (ed), 1992 reports that research in Zimbabwe indicated that the question of the socioeconomic benefits of family planning were the main trigger for men's motivation rather than the health benefits. Since men take all the important decisions concerning the family, the women are not in a position to undertake family planning unilaterally (Caldwell & Caldwell, 1990; Dodoo & van Landewijk 1996; Ezeh, 1993). Very little investigation has been directed towards discovering male knowledge, use and attitudes regarding family planning, but it would seem to be a promising area for future surveys (Agarlwala, 1962).

2.2.1 PATTERNS OF FAMILY PLANNING PRACTICE BY SELECTED BACKGROUND CHARACTERISTICS

(i) Age

Dodoo (1998) argues that age has a potentially conflicting effect on family planning practice i.e while younger men are probably further from their reproductive goals, they may be less traditional and more accepting of contraceptive technology. Comparative analysis of DHS held in various countries of Africa do not show any particular age-related patterns of contraceptive use among married men. In some countries, such as Morocco and Tanzania, contraceptive practice is highest among husbands in their 30s; in other countries such as Egypt and Ghana, it is highest among husbands in their 40s (Ezeh et al., 1996). For women, a survey carried out in Kenya revealed that younger women are starting to use

contraceptives at lower parities than the older women did. Nineteen percent of the women aged 20-24 started practising family planning after their first child, compared to only 4 percent of women aged 45-49. This reflects the fact that younger women are more likely to use family planning to space births while older women use it to limit births (KDHS, 1989). This study investigated the influence of age, as defined by five-year age groups on men's knowledge, attitude and practice of family planning.

(ii) Marital Status and Type of Marital Union

Ocholla-Ayayo (1991) contends that in rural Africa, social actions and social characteristics are rooted in traditional norms, beliefs and values of marriage and family life. Some of these beliefs are of procreation. These belief systems and ethical premises tend to generate prejudices, customs and habits, loyalties and allegiances that drastically affect efforts to control high population growth rates in Africa. Traditionally among many Kenyan communities, marriage was never considered complete until the couple produced a child. Many children, especially sons, was a source of prestige and great honour. Even today, childlessness is still looked at with great disgust. Were (1975) argues that there is no society in Africa where childlessness is regarded as the ideal condition for everyone. Also, one child is rarely accepted as a desirable number. Given an environment with such a cultural background, matters to do with family planning especially limiting the number of children, are likely to meet strong opposition.

Polygyny, the practice of having more than one wife at a time, is a common feature of many African families (Doodoo, 1998). The practice varies widely

throughout the continent and among different ethnic groups within countries. Polygyny is most common in West Africa, and least common in North Africa. It is more common in rural areas than in urban areas, and somewhat more common among less educated men.

There are indications that polygyny is on the decline. DHS show that in Ghana, the percentage of married men aged 40-49 in polygynous marriages dropped from 29 percent in 1988 to 17 percent in 1993. In Kenya, the same age-group showed a 1989 rate of 18 percent, which dropped by 4 percent in 1993.

Family planning practice differs by type of union, and this relationship varies from country to country. In Burkina Faso, Cameroon, Egypt and Kenya, family planning practice is reportedly higher among men in monogamous marriages than among those in polygynous marriages. In Malawi, Niger, and Rwanda, the opposite is true. In Malawi, 38 and 24 percent of husbands in polygynous and monogamous marriages, respectively, reported that they were practising family planning. In Morocco, Senegal and Tanzania, contraceptive practice is similar among monogamous and polygynous husbands (DHS Comparative Studies, No. 18, 1996). Dow and Werner (1982, cited in Dodoo 1998) assert that polygynous men are less likely to use contraception, partly because they are more likely to practice abstinence.

Men in polygynous marriages generally have a high and actual family size than monogamous men. The higher reproductive preferences of males, coupled with power to implement their goals, frustrate female inclinations to use family planning (Dodoo, 1993 and Dodoo & van Landewijk, 1996). In Cameroon, for example, the average preferred family size among polygynous men is 16 children,

compared with an average of 10 children for those in monogamous marriages. One reason African men practice polygyny is to achieve their desire for more children. In Senegal, where polygyny is common, men in polygynous marriages, in all age groups have more living children. Husbands interviewed in the 1988 Ghana DHS expressed an average preferred family size of 7.6 children, and one in eight husbands could not name a figure, saying that it was "upto God" (International Family Planning Perspectives, 1990). The present study investigated the influence of marital status and type of marital union on men's knowledge, attitude and practice of family planning.

(iii) Current Family Size

The relationship between family planning practice and current family size can be generalized except that the most significant increases in use are recorded up to the third Child (Mamlock, 1982). Generally men with more surviving children are likely to have a favourable attitude towards the Practice of Family Planning than their counterparts with few or none. The same scenario applies to Women. In Korea women with two living children were found to be twice as likely to be using contraceptives as those with only one. Married Hungarians with two or more living children were the greatest users of contraception (Dierdre, 1979).

In Ghana, Caldwell (1968b) found that the number of Children ever born alive was positively related to the willingness to practice family planning among women. One other factor which has not been considered in this study, but which work closely with Current Family Size in influencing family planning attitude and practice is sex composition of the Living Children.

Pessimism is often expressed with regard to the success of conventional supply oriented family planning programmes in the developing countries in view of prevalent large family size norms (Dodoo et al. 1997; Davies, 1967). One of the frequently mentioned reasons for the high level of desired fertility in the developing Countries, is the importance of having sons for economic social and religious reasons. Since in most societies males have been valued more highly than females, it is easy to understand why many families would continue to have children until they have at least one Son. Many couples in the developing world prefer a family that contains more sons than daughters (Williamson, 1976) and will therefore deliberately surpass the desired parity unless they have one or two sons by the time they reach the most preferred family size. Minkler (1970) hypothesizes that in a situation where parents are dependent on male children for social economic or cultural reasons there would be few incentives to reduce fertility no matter what the social cost of rapid population growth. This study investigated the influence of current family size on men's knowledge, attitude and practice of family planning.

(iv) Education

Education can either be formal or informal knowledge of a certain object or idea. Education has been found to be a very important variable in as far as practice and decision to practice family planning is concerned (Njogu, 1991). Several studies have shown a link between education, preferred family size and family planning practice. As education increases, awareness and the need to have a small family also increases, and so may lead to increased family planning practice, while less education tends to discourage family planning practice and so enhance large

families (Njogu, 1991; Kimani 1982).

Vaura (1972) contends that education reinforces the prospects for continued mortality decline. Therefore as McNamara(1977) adds, the parents have knowledge about basic sanitation, the value of inoculation and antibiotics, hence they are confident that their child will survive and are unlikely to want more children merely as an insurance against some dying. Such parents are more likely to accept and practice family planning.

Kimani (1982) takes the same line by arguing that education may increase an individual's willingness to accept new products and to use them effectively, i.e. education may reduce fertility by increasing acceptance and effectiveness of family planning methods. From the above, it can be noted that reproductive behaviour cannot be brought under control without knowledge of the means necessary to achieve this, and without the ability to utilize the means effectively. Education facilitates for both men and women the acquisition of information on family planning, increasing their exposure to mass media and printed material and enables them to learn more about modern contraceptives (McNamara, Ibid).

For Caldwell (1980), education increases the costs of childbearing and rearing, and also reverses the pattern of inter-generational flow of wealth. This reduces the value of children to the parents. Education also spreads Western ideas and values which powerfully undermine traditional norms and familial relationships that are essentially pronatalist. According to Henin (1982) and Farouq (1987), education may raise parents' aspirations for material goods and decreases the relative desire for children.

McNamara (1977) points out that parents with good education themselves,

typically desire an even better education for their children and realize that if their aspirations are to be achieved, family size will have to be limited. He adds that education decreases the economic utility of children. Educational attainment also increases communication between husband and wife, and imparts a sense of control over one's destiny, which may encourage attempts to control childbearing.

DHS data reveal striking differences in family planning practice according to husband's education. Better-educated men are far more likely than their less educated counterparts to practice, or have a spouse who practices, family planning. In Ghana, for example, 61 percent of husbands who have completed secondary school or higher practice family planning, compared with 35 percent of those husbands whose education did not go beyond primary school and only 10 percent of those with no education (GDHS, 1993). This pattern is similar to what researchers have long observed with regard to women's education and their reproductive behaviour.

Graaf (1979) notes that although a negative association exists between female education and realized fertility, the effect of male education may be weaker and positive. Couples in which the husband is better educated may have higher coital frequency, if his education lowers the probability of their living in a joint household, and of temporary separations. Education reduces the demand for children and thus increases the desire, and probably the ability to regulate fertility.

In Kenya, 45 percent of husbands who have attained secondary level of education or higher practised modern method of family planning, compared with 27 percent of those who had attained primary level of education, and only eleven percent of those with no education (KDHS, 1993). The present study investigated

whether or not education had a significant influence on men's knowledge, attitude and practice of family planning in Kenya.

(v) Urban/Rural Place of Residence

It has been hypothesised that human behaviour shapes and is shaped by the environment in which an individual spends most of his/her time. We can usually anticipate that people residing in urban areas will have fairly distinctive ways of behaving compared with rural dwellers. It is almost an axiom in population studies that urban fertility levels are lower than rural levels. Generally, urban residents are more likely to practice family planning, in part because of their greater exposure to information about contraceptive methods and their easier access to them through the commercial sector, public and private health services, and also because they are usually more likely to be educated. Infant mortality is also low. (Tuladhas, 1985, cited in Dodoo, 1998; Mauldin, 1975).

In view of the above situation, African men living in urban areas have been found to be more likely to practice family planning than those living in rural areas (Roudi, 1996). In Morocco, where half of the population lives in urban areas, 51 percent of married men living in urban areas practice family planning, compared to 30 percent of those living in rural areas (Morocco DHS, 1992). In Kenya, 42 percent of married men living in urban areas reported practising modern methods of family planning, compared to only 29 percent of those living in rural areas.

A similar pattern has also been observed for women. Many studies in developing countries have shown that women living in urbanized areas are more likely to use contraceptives than those in the countryside (Abdullah et al. 1984).

But in developed countries, where family planning has long been accepted and where the strong communications and commercial sectors have helped to homogenize the urban and rural populations, there is little difference in contraceptive use by type of residence (Mamlock, 1982). Urban life is more permissive of non-traditional behaviours than the rural environments (Millman, 1985). The present study investigated the influence of urban/rural place of residence on male knowledge, attitude and practice of family planning.

(vi) Preferred Family Size

Ideal family size is a good indicator of men's and women's attitude toward childbearing, even though actual reproductive behaviour may differ from stated desires. In countries where the ideal family size is large, particularly in West Africa, the gap between husbands' and wives' responses is also large. In Niger, Cameroon, and Senegal, on average, husbands ideally want at least 3 more children than their wives. In East Africa, where the ideal family size is lower, there is little difference between husbands' and wives' responses. Ghana and Tanzania stand out as exceptions in their respective regions (DHS Comparative Studies No. 18, 1996). Men's ideal family size is lowest in North Africa -around 3 and 4 children in Egypt and Morocco, respectively. Husbands in these countries also have a slightly higher ideal family size than their wives.

Ideal family size remains one of the most influential factors on actual family size -the number of children a man or woman has. For women, family size is typically measured in terms of total fertility -the average number of children a woman has over her childbearing years. For example, in Cameroon, a woman bears

about six children on average (Cameroon DHS, 1991), while in Egypt, women have about 4 children during their reproductive years (Egypt DHS, 1992). Comparable measures of men's family size are difficult to construct in part because men have children far later in life than do women, and in part because male surveys are not as comprehensive as female surveys in tracking men's childbearing experiences. On average however, African men have more children over their lifetime than women do, because their reproductive years are longer and they tend to have multiple partners (Roudi, F. 1996). Closely linked to this is the desire for more children. Only couples or individuals who have as many children as or more children than they want or who want more children but at intervals of some desired length can be expected consciously and deliberately to regulate their fertility.

A study carried out in Kisumu on population, health, nutrition and family planning (Ominde, 1983) revealed that the cultural desire to have a few more children negates the need to continue with the family planning programme. Some women withdraw from the programme because of pressure against contraceptive use from the husband, in-laws and parents (Gachuhi, 1975; Ocholla-Ayayo, 1985). Ocholla-Ayayo (1991) says that the rights and obligations of individuals with regard to procreation are implanted by societal ideology, not just by an individual. Individuals have a limited right to voluntary control of their own fertility in accordance with their own personal preferences and conditions. Such are the cultural norms that guide an individual's or group's behaviour. However, one may conform or deviate from such norms.

Husbands' desire for more children and their perception of their wives' to have more children both play important roles in decisions leading to family planning

use (Roudi, F. 1976). The proportion of men who want another child is a meaningful predictor of future childbearing. Fertility has remained high in many African countries in part because the demand for children is still high. Fertility among Kenyan men is still high, with a total fertility rate of 7.27 children (CAFS Research Report Series No.2, 1995). This is mainly due to polygamy and the desire to have a son in the home. The mean ideal number of children reported by men in the research was 4.48. The gap between actual birth performance as shown by the TFR and the reported ideal number of children clearly shows that men still cannot fully implement their reproductive decisions. Culture still has some influence in motivating men to marry and have children. The higher reproductive preferences of males, coupled with power to implement their goals, frustrate female inclinations to use contraception (Dodoo, 1993; Ezeh, 1993).

There is a certain age at which the society expects a man to be married. Beyond this age, unmarried men are looked down upon and hence they get a lot of pressure to marry from relatives and friends. Impotent men are least respected in the Kenyan cultural contexts. Due to this, some men marry for no other reason except to demonstrate their fertility (Omondi-Odhiambo, 1988).

In most countries, DHS show that men are more likely than women to want another child (Ezeh, et al. 1996). The majority of husbands surveyed in sub-Saharan African countries either want to have more children or are not sure. In Senegal, where on average married men have 5.6 children, 94 percent of husbands want to have more children or are unsure and only 6 percent want no more children. A larger percentage of husbands living in the East African countries have reached their desired family size than those living in West African countries, with

the exception of Ghana. In Kenya, where on average men have 4.7 children, 44 percent of husbands do not want to have more children. In Egypt, where men have 3.6 children on average, the majority of husbands have reached their desired family size and do not want any more children. Doodoo et al (1997) writes that time has come when honest attempts to reduce population growth in sub-Saharan Africa must take into account the higher preferences of males. This study investigated the influence of men's preferred family size on their knowledge, attitude and practice of family planning.

(vii) Influence of Religion

Religion has regularly come under the demographic scrutiny, with particular attention being paid to its potential influence on fertility. Religion is known to have influence on the way people behave, specifically how they react to new ideas. Religion can affect a couples' decision to use family planning either positively or negatively, depending on how they are loyal to the doctrines espoused by their church. Some religions support contraception while others oppose it. Where there is a high number of couples whose religion supports family planning, we expect to find a high level of family planning practice and vice versa.

Christianity, particularly Roman Catholicism, traditionally had a definite and negative attitude towards birth control, other than the rhythm and withdrawal methods. For centuries, the attitude of the Roman Catholics towards deliberate family limitation was clear cut. According to them, the aim of sexual intercourse in marriage was the procreation of children. Any artificial interference with the natural process of coitus and conception was contrary to the laws of God, and was

condemned as gravely sinful.

Roman Catholics are opposed to family planning through artificial means and Catholic church leaders have historically resisted the introduction of artificial contraception in various parts of the world (Smith 1973). Bertrand et al. (1975) argues that religion served to slow family planning adoption in Latin America. Clyde (1962) and Mayones (1964) are also of the opinion that Christian churches have traditionally been opposed to family planning. However, given the influence of education, urbanization and modernization and the pressures of hard economic times, people may take what religion says seriously.

The traditional religions were mainly concerned with the spirits of the ancestors and their worship. Children were very important. Lack of children meant physical and spiritual extinction since the ancestor spirits depended for their survival on resemblance in the minds of their "grandchildren". From the traditional point of view, as Molnos (1968) puts it, the person who decided to limit the number of his children is clearly sinning against higher forces because this was tantamount to limiting the chances of the very survival of the ancestors.

Throughout the world, Muslims tend to have higher fertility than almost any other religious group (Mistry, 1990). The Kenya fertility survey in 1977 showed that among currently married Muslim women, the average preferred family size was 8.4 children. This was the highest of any religious grouping, with Catholic women preferring an average of 7.1 children and Protestant women an average of 7.0 children (Kent and Larson, 1982 cited in Weeks 1994). The present study investigated the influence of religion, particularly Christianity, Islam and traditionalism on men's knowledge, attitude and practice of family planning.

2.1.1 MALE KNOWLEDGE, ATTITUDES AND PRACTICE OF FAMILY PLANNING

(i) Knowledge

Knowledge is a necessary step in the adoption of new ideas and practices. In family planning, the quality and adequacy of knowledge deserve special attention, because poor and inadequate knowledge may hinder the adoption process and create resistance to acceptance of practice. The sources of information are also important because they determine, to some extent, the number and characteristics of people reached, the quality and quantity of information diffused, and the effect which information may have on recipients (Gadalla, 1978).

The majority of African men know at least one family planning method, either modern or traditional. In a number of countries, such as Egypt, Morocco, Kenya, Rwanda and Zimbabwe, knowledge of family planning among men is nearly universal (DHS Comparative Studies No. 18, 1996). In many countries, both men and women have at least a basic knowledge of modern family planning methods, but in some, men are more likely than women to have this knowledge.

The gap between men's and women's knowledge of family planning is greater where overall knowledge of family planning is lower. This may reflect the relative status of men and women and/or the stage of family planning programme development in those countries. According to the Centre for African Family Studies (CAFS) Research Report no.2 of 1995, a high proportion of Kenyan men know about family planning and what it means. However, like in many other African countries, there exists a very wide gap between contraceptive knowledge and practice. Current contraceptive use stood at 29 percent while knowledge is

well over 80 percent. The most known source of family planning methods are government health facilities.

The pill is the most known contraceptive method among African men. Due to the traditional focus on female methods among family planning providers, men more often know of a female than a male method. They are also more likely to know about modern methods than traditional methods, although a majority of them do know about traditional methods. The main traditional methods are periodic abstinence and withdrawal, both of which require men's participation. Another known method is the condom, whose use is on the rise due to the AIDS epidemic. Currently, the condom is the only effective method, apart from abstinence and monogamous relationships, that prevents the spread of AIDS. Of all methods, African men know the least about Vasectomy. The lack of availability of Vasectomy in family planning programmes may in part explain the low level of knowledge about the method. Service providers who lack knowledge of the procedures may fail to inform male clients of this option. Other providers may know of the method but discourage clients from considering it. For example, a study in Zaire found that three-quarters of clinicians interviewed believed a couple should have more than five children before considering sterilization (Bertrand et al. 1990). Research indicates that where vasectomy is accessible and promoted, men tend to know more about it and use it. Increasing acceptance of vasectomy will require overcoming misinformation and cultural barriers among African men, such as confusion of Vasectomy with castration, and fearing its effects on male sexuality (Fapohunda and Rutenberg, 1999; Danforth and Jezowski, 1994). The present study set out to investigate how men's knowledge of specific methods and

source of family planning is influenced by demographic, socio-economic, and socio-cultural factors.

(ii) Attitude:

Attitude toward family planning determines whether or not it is practised. While the majority of African men "approve" of family planning, there is much variation across the continent. Generally, men in West Africa, with the exception of Ghana, are less likely to have a positive attitude toward family planning than men in other parts of Africa (DHS Comparative Analysis No. 18, 1996). The gap between men's and women's approval rates is wider where the male approval rate of family planning is lower. For example, the 1987 Mali DHS showed that only 23 percent of husbands approved of family planning compared to 71 percent of wives, despite the fact that they had considerably more knowledge of family planning than wives.

The DHS, along with other studies, show that African men's attitudes toward family planning are more positive than assumed. For example, the Ankole Fertility Survey, conducted in 1984 in south-western Uganda, showed that men had a positive attitude toward family planning methods, particularly modern methods, despite their extremely low level of contraceptive use. While only 7 percent of men in Ankole had ever used a modern method of contraception, including female methods, 65 percent said they were willing to use modern methods (Ntozi, J. 1993).

In Zimbabwe, where modern contraceptive use is relatively high, the DHS asked men whether they find it acceptable to disseminate family planning

information on the radio or television. 94 percent of respondents said that the broadcast of family planning information is acceptable (ZDHS, 1994).

In Kenya, the CAFS research (1995) found that generally, men approve of family planning. Among the men interviewed, 93 percent reported approval of the use of modern contraception. But when it comes to personal use, the proportion approving drastically went down to 61 percent. Men, it would appear from this data, are not averse to the concept of family planning when applied to others, but resist admitting that it is an issue that can be applied to their own marital situations (CAFS Research Report, no.2, 1995). The present study investigated the influence of demographic, socio-economic and socio-cultural factors on men's attitude toward family planning.

(iii) Practice

Family Planning utilization among women is usually measured by calculating the rate of contraceptive prevalence, which is the percentage "of at risk" women of reproductive age(15-49) who are using a method of contraception. For example, there are about 850 million married couples of reproductive age in the world, of which about 400 million are estimated to be using some method of contraception (Mauldin and Segal, 1988). Thus, the approximate rate of contraceptive prevalence in the world is 47 percent.

Men can participate in family planning in two ways; by supporting their partners' decision to use family planning and/or by practising a male method of family planning themselves(e.g. vasectomy, withdrawal, condom or periodic abstinence). Men's support affects the choice, adoption, continuation and correct

use of female methods. Joesoef (1988) found that husband's attitude may affect not only whether or not wives use contraception but also the choice of a method and how long it is used. Husband's opposition can have serious consequences. For example one woman told researchers in Guatemala that she had been using oral contraceptives without her husband's knowledge, but when her husband discovered, "he told me that I was doing so because I had a lover. But his beatings were greater than that" (de Barriors et al. 1985). Many Kenyan women suffer the same fate in silence.

A wide gap exists between African couples' knowledge of and attitude toward contraceptives and their use. Although the majority of married couples in Africa know about family planning, it is estimated that on average only about 22 percent of couples use either a modern or traditional method. The CAFS research among Kenyan men found that 48 percent of those men with partners had ever used some form of contraception to prevent unwanted pregnancies. The contraceptive cited to have been ever used by ever-users are the pill (47%), the condom (41%), the injectable (22%) and abstinence (12%). Use of other contraceptive methods was very limited. Nyeri district recorded the highest prevalence of 51 percent (CAFS Research Report no.2, 1995).

According to DHS Comparative Analysis no. 18 1996, 10 percent of married men in Ghana reported use of condoms, the highest rate of condom use among countries where data were available in the early 1990s. Seven percent of married men in Kenya and 6 percent of married men in Malawi and Zimbabwe rely on the condom. In other countries, less than 5 percent of married men use condoms. Reported use of condoms by married men was found to be significantly higher than

that reported by married women in all countries. The principal reason is to be that men are more often using condoms with partners outside of marriage. Fapohunda and Rutenberg (1999) reported that in Kenya, among married men, condoms are used with "outside partners in casual non-regular relationships. Use in those contexts is mainly to prevent STDs and HIV/AIDS. Although pregnancies are also prevented, men do not make that conscious decision, although they are aware of the dual role of condoms. A study in Ilorin (Nigeria), found that men are somewhat more willing to support their wives in using contraceptives than they are to consider using them themselves. Responsibility for actual use of contraceptives lies predominantly with women (Oni, Gbohalan and J. McCarthy, 1991).

Vasectomy, the only other modern male method of family planning is almost non-existent, except for a few pioneers in Kenya, Madagascar and Rwanda. In Africa, vasectomy is the least known method of all the modern family planning methods. But it is a common family planning practice in Europe, North America and parts of Asia. The 1993 KDHS indicated that despite the fact that 99 percent of all men know of at least one family planning method, only 32.4 percent claimed current use of a modern method. The study investigated the influence of demographic, socio-cultural and socioeconomic factors on practice of family planning among men.

2.1.4 Family planning decision-making

Ideally, family planning issues and decisions should be more of a couple's right than of an individual partner and where partners hold divergent views there have to be compromises at family level. However, this is not the case under

ordinary circumstances. The views that tend to hold on the practice or non practice of family planning will in most cases, depend on power distribution within the union. Thus the partner who possesses more power is the one who influences decisions in the household (Rono K.R. 1998).

Men in Africa play an important role in most decisions pertaining to family life, including family size and family planning. This is reinforced by the power to control economic resources. A number of cultural and institutional factors favour African men in matters related to marriage and family life. Men in male dominated cultures are likely to make decisions about additional children (Hollerbach, 1983) and adoption of fertility regulation (Gachuhi, 1975) in terms of their own interests and needs. When husbands want to have more children than their wives, the preference of the husband usually prevails (Lloyd, 1993; Mason and Taj, 1993). Focus Group Discussions conducted in Zimbabwe in 1987 suggested that men were the ultimate decision-makers on family size and family planning matters (Piotrou et al. 1992).

Beckman (1983, cited in Ezeh 1993) identified the husband as the chief pro-fertility decision-maker, whereas Caldwell (1983) located fertility decision-making not with the biological parents but with the older members of the husband's lineage or his kinfolds. In discussing the role of men in contraceptive decision-making, Edwards (1994) argues that the development of modern contraceptive technologies has allowed women unprecedented sexual freedom, but has also shifted the burden of preventing unwanted pregnancies from men to women (Edwards, 1984) cited in Grady et al. (1995).

Male dominance is certainly one of the strongest obstacles to family planning

adoption. In many cultures a wife must have the husband's full consent before she can decide to limit her reproduction. And many men are reluctant to agree. They fear the possibility of their wives' infidelity or the loss of their control over her. Mustafa and Mumford (1984, cited in Mbizvo et al 1991) observed that, as a rule, most family decisions were made by husbands in Sudan, and family planning was not an exception.

Huston (1978), in a study among the Mexican people, writes "that when a wife wants to do something on her own, such as trying to limit the number of mouths to feed in the family, the husband will become angry and even beat her. He thinks it is unacceptable that she is making a decision on her own. She is challenging his power over her and thus the very nature of his virility".

Harvard researcher Donald Warwick (1982) in his book *Bitter Pills* provides an important critique of the original family planning approach. He points out how the programmes ignored the cultural context of fertility decisions in which women often have no authority and have never viewed themselves as unilaterally able to determine family size, or may change their minds overtime.

According to Ocholla-Ayayo (1988), Kenya's socio-cultural imperatives must have contributed to the failure or dismal performance of the Family Planning programme. Programme planners did not give serious attention to socio-cultural factors as they did perhaps to the socio-economic indicators. With respect to socioeconomic indicators, they considered the need to educate people about family planning and requested for more funding for obtaining and distributing contraceptives materials. Ayayo takes issue with the fact that family planning as a persuasive policy aimed at controlling fertility in Africa was introduced in an

environment riddled with inhibitive socio-cultural imperatives and maintains that unless the programme can address and infiltrate these imperatives, the impact of the family planning programme will still remain feeble.

Additional evidence of male involvement in family planning decisions is found in Burger and Indebritzen, (1985; Fisher, 1984; Bradford & Beck, 1991, all cited in Grady et al. 1994); Dodoo, (1993); Dodoo et al (1997); Ezeh, (1991, 1993); Fapohunda & Rutenberg, (1999). Ideally, family planning decisions are supposed to be made jointly by a man and his spouse. In the CAFS' male survey, (1995), current users of contraception were asked about who made the decision to use the current method. About 54 percent of the men reported that they themselves made the decisions, while only in 32 percent of the cases were decisions jointly made by the spouses.

Immerwahr (1977) writes : "one of the cultural factors that tend to keep fertility high is that in most of the high-fertility countries, there appears to be a high degree of male dominance and female subservience in reproductive decisions". There appears to be little statistical proof, -in fact the few KAP studies in which women and men were asked separately how many children they considered ideal, show generally similar sets of responses.

While as mentioned above, men's and women's ideal family size responses tend to be similar, a study in Sierra Leone (Dow, 1971) showed that one-half of the women who had approved family planning felt their husbands would disapprove. A Mexico city survey (van Keep and Rice-Wray, 1973) showed considerable disagreements between husbands and their wives. Observations in the West Indies, Latin America and in Nigeria have supported the claim that many men

want large numbers of children to prove their own virility. Power differences in reproductive decision-making almost always favour men. Ezeh (1993) found that even in cases where spouses seem to agree on reproductive goals, this agreement may reflect dominance and/or selectivity by men.

This literature shows that traditional African culture generally bestows upon men considerable, and perhaps dominant, power in reproductive decision-making. It is with this in mind that the present study set out to investigate men's knowledge, attitude and practice of family planning, as influenced by a group of demographic, socioeconomic and sociocultural variables.

Deriving from and supported by the above literature review, three major conceptual variables (i.e demographic, socio-economic and socio-cultural) tend to relate logically with knowledge, attitude and the decision to practice family planning. Conceptually, this study postulates various types of relationships between the individual factors of the three concepts and family planning knowledge, attitude and practice among men in Kenya.

2.2 THEORETICAL FRAMEWORK

2.2.1 Background theoretical perspective

The fertility behaviour of a given population is influenced by a number of complicated factors which are not clear cut, hence difficulties in coming up with an appropriate universal model for its study. In spite of these problems, various studies have considered the role of demographic, socioeconomic and sociocultural factors determining differences in fertility behaviour between and within populations (Bongarts, 1978; Davis and Blake, 1956).

A classification of these factors was proposed by Davis and Blake in 1956.

Later Bongaarts (1978) reclassified them into three broad categories as follows:

I: Exposure factors

1) Proportion of married women

II: Deliberate Marital Fertility Control Factors

2) Contraception (practice of family planning)

3) Induced Abortion

III: Natural Marital Fertility Factors

4) Lactational infertility

5) Frequency of intercourse

6) Sterility

7) Spontaneous foetal mortality

8) Duration of the fertile period

This study has found this theoretical framework relevant as it envisages that any factor, be it demographic, social, cultural or economic that affects fertility must operate through a series of intermediate variables, of which family planning (contraception) is one.

The intermediate determinants of fertility outlined above are acted upon by a host of demographic, social, cultural, and economic factors. These factors, which form the independent variables in this study are referred to as "indirect determinants" because they exert their influence through the intermediate variables. For example, education may increase parents preference for consumption items not related to children and reduce preference for more traditional lifestyles

which favour large family sizes. Education may also increase an individual's willingness to accept new products and to use new procedures more effectively. Thus education can bring about favourable attitudes and effective practice of family planning.

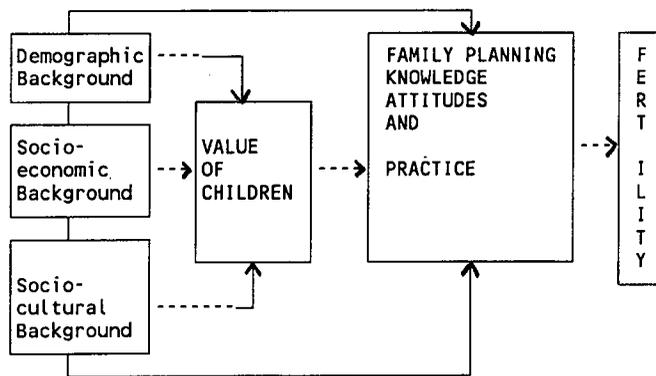
Fertility is not the dependent variable in this study, but this framework has been borrowed because it considers the influence of demographic, sociocultural and socioeconomic factors on family planning (contraception) and maintains that these factors must influence or work through contraception as a deliberate marital fertility control factor, in order to ultimately influence fertility, which is a prime objective of the family planning programme in Kenya.

2.2.2 Conceptual Statement

Demographic, Socio-cultural and socio-economic background of men are likely to affect, modify or promote their Knowledge, Attitudes and Practice of Family Planning. Arising from the above statement are a number of Conceptual hypotheses:

- (i) That demographic characteristics of men influence their knowledge, attitudes and practice of family planning.
- (ii) That socio-economic background of men influence their knowledge, attitudes and practice of family planning.
- (iii) That socio-cultural background of men influence their knowledge, attitudes and practice of family planning.

Figure 1: **CONCEPTUAL MODEL**



Source: Adapted (with slight modifications) from ARNOLD et al.(1975)

The conceptual model above is borrowed from the work of Arnold and Fawcett (1975) who used it in their cross-national study of the influence of societal value of children on family planning. It is simply a diagrammatic presentation of the complex interrelationships of dependent and independent variables. The model has been adapted because its basic tenets are consistent with the objectives of this study, which links selected demographic, sociocultural and socioeconomic factors to family planning knowledge, attitude and practice.

The terms demographic, socio-economic, and socio-cultural in the boxes on the left column are the key concepts. Each of these key concepts has been operationalised into a set of variables as presented in the operational model to follow. The direction of the arrows illustrate how the variables are perceived to be interrelated for the purpose of this study. Many other interrelations are possible in this model, including the ones shown by broken lines. But these are out of the scope of this study and therefore will not be considered. Finally, the single large box placed second from the right represents the dependent variable (Family Planning Knowledge, Attitude and Practice).

2.3 OPERATIONALIZATION OF STUDY VARIABLES

In order to operationalize the conceptual variables, they have been broken down into measurable variables as below:

The **demographic variables** include age, marital status and current family sizes. The **socio-economic variables** include the level of education attained, exposure to mass media (radio listenership, TV viewing and newspaper reading) and urban/rural place of residence. Finally, the **socio-cultural variables** include religion, particularly denomination, practice of polygyny and preferred family size.

The family planning variables which include Knowledge, Attitudes and Practice have also been broken down as follows:

Knowledge is measured in terms of whether the respondent has ever heard of a method(s), and whether he knows where to obtain the method or family planning service (source). While high levels of family planning knowledge may indicate that the male population is highly aware of fertility-limiting options, low levels of knowledge of sources of family planning, on the other hand, may suggest that access to family planning methods and services is limited and programme extension is warranted.

The **attitude variable** refers to an overall reaction of approval or disapproval concerning the use of family planning to limit family size or prevent unwanted pregnancies. It is measured in terms of whether respondents approve (number in favour of) or disapprove (number against).

The **Family planning practice variables** are "ever-use" and "current-use". Current Use of a method is the aspect of family planning practice that has been of utmost interest both to demographers (as a proximate determinant of fertility) and

to family planning policy makers (as a measure of the coverage of their programmes). Ever Use can signal the degree to which family planning is tried. The comparison between ever use and current use is an indication, though crudely, of the continuation of users.

Age: This variable is defined in this study as the number of years lived since birth to the time of the interview.

Marital Status: refers to whether the respondent is never married, currently married, divorced, separated or widowed.

Current Family Size: This variable refers to the number of living children per married man at the time of the interview.

Education: In this study, it will be measured by level attained. Four categories will be considered i.e none, primary, secondary and post-secondary.

Mass media exposure: This refers to whether or not the respondent listens to radio, watches television or reads newspapers (at least once a week).

Type of Marriage: Is measured in terms of whether the person is married to one (monogamy), or more than one wife (polygyny).

Preferred Family Size: The total number of children the respondent would like to have. It indicates whether a man wants more children in addition to the ones he already has or not.

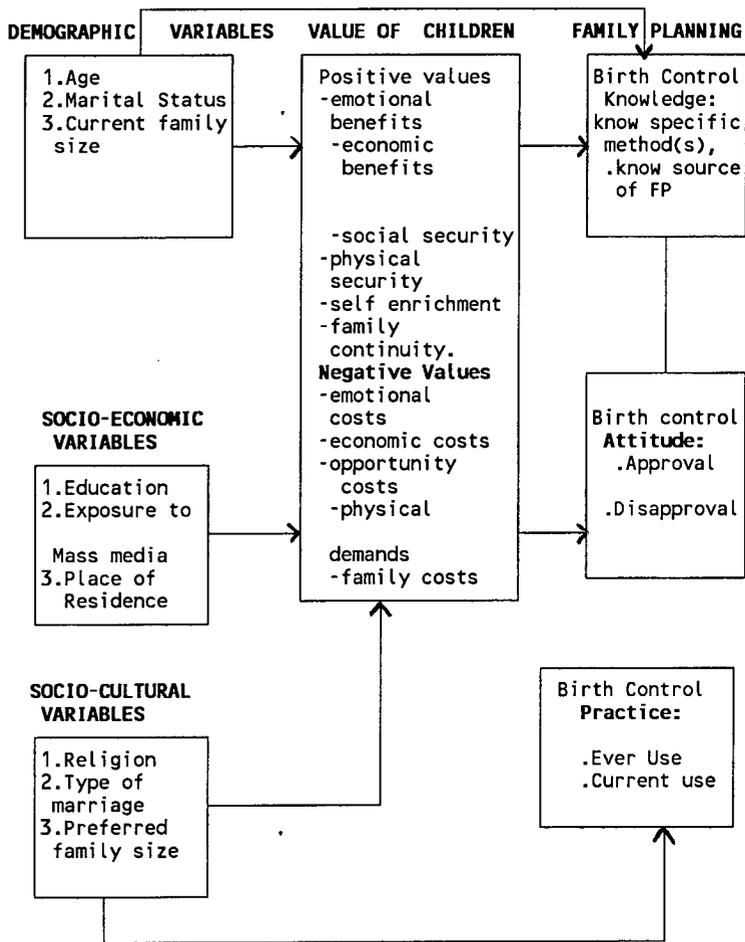
Place of Residence: This refers to whether the respondent was residing in the rural or urban area at the time of the interview. It has been categorised into urban and rural.

Religion: This refers to the religious faith an individual belongs to. The major

categories considered in this study are Christianity, Islam and African Traditional Religion. Christianity has been split further into two denominational categories namely Catholics and Protestants.

Province inhabited: This refers to the region of residence. A seven-category classification has been employed to cover the spectrum of administrative provinces (with the exclusion of North Eastern).

Figure 2 OPERATIONAL MODEL



Source: Derived from the Conceptual Framework

2.4 OPERATIONAL HYPOTHESES

1. That age has a significant influence on men's knowledge, attitude and practice of Family Planning.
2. That current family size significantly influences men's knowledge, attitude and practice of family planning.
3. That marital status influences men's knowledge of source, attitude and practice of family planning.
4. That there is a relationship between men's preferred family size and their knowledge, attitude and practice of family planning.
5. That education is positively related to Family Planning Knowledge, Attitude and Practice:- educated men are more likely than their non-educated peers to know of more modern methods, to approve of, and to practice Family Planning.
6. That exposure to Mass Media (e.g. radio, T.V. magazines, news papers) contributes positively to men's knowledge, attitude and use of Family Planning.
7. That urban/rural residence influences male Knowledge, Attitude and Practice of Family Planning.
8. That religious affiliation has a significant influence on men's knowledge, attitude and practice of family planning.
9. That the practice of Polygyny influences men's knowledge, attitude and practice of family planning.
10. That province/region is likely to have some influence on men's knowledge, attitude and practice of family planning.

2.5 Study Area

This study focuses on Kenya, particularly the provinces covered by the 1993 KDHS. These are Central, Rift Valley, Western, Nyanza, Eastern, Coast and Nairobi. The expansive North Eastern province was not covered by the 1993 KDHS.

2.6 Study Population

The study population here are a sample of 160 male respondents covered in the field survey and all the 2336 males covered in the KDHS. Because of the scientific reliability of the random sampling method and validity of the CBS master plan, information from these samples has been generalised for all the male members of the Kenyan population.

2.7 Source of Data

This study is based on field survey data obtained by administering questionnaires to some selected 160 male respondents and secondary data drawn from the 1993 Kenya Demographic and Health Survey (KDHS). The 1993 KDHS was a nationally representative survey of 7,540 women aged 15-49 and 2,336 men aged 20-54 years conducted by the National Council for Population and Development (NCPD) in collaboration with the Central Bureau of Statistics (CBS) of the government of Kenya. It was designed to provide information on levels and trends of fertility, infant and child mortality, family planning, maternal and child health, and knowledge of the dreaded disease AIDS. Specifically, the male part of the survey, on which this study is based, obtained data on men's fertility preferences and sexual behaviour, knowledge, attitude and practice of family planning and awareness of AIDS.

Data from this survey were intended for use by researchers, programme

managers and policy makers to evaluate and improve family planning and maternal and child health programmes in the country. The 1993 KDHS was the second of its kind to be carried out in the country; the first one was conducted in 1989. The survey therefore remains a valuable source of relevant data for assessment and evaluation of population, health and family planning programmes, and of necessary information for assessing the overall demographic situation in the country since 1989, and for development of new strategies for the future.

2.8 The Survey Design

2.8.1 Sample Design and Implementation

The sample for the 1993 KDHS was national in scope, with the exclusion of the whole of North Eastern province and the four northern districts of Isiolo, Marsabit, Samburu and Turkana. Together, these excluded areas account for less than four percent of Kenya's population and therefore does not compromise the national representativeness of the survey.

The KDHS sample points were selected from a national master sample maintained by the Central Bureau of Statistics, the third National Sample Survey and Evaluation Programme (NASSEP-3). The master plan follows a two-stage design, stratified by urban-rural residence, and within the rural stratum, by individual district.

In the first stage, 1989 census "enumeration areas" were selected with probability proportional to size. These selected enumeration areas were then segmented into expected number of standardized clusters to form NASSEP clusters. Out of an entire master sample of 1,048 rural and 325 urban (defined as

centers with population of 10,000 or more, plus all the district headquarters, regardless of size) sample points, a total of 536 clusters- 92 urban and 444 rural- were selected for coverage in the survey. Of these, 520 were successfully covered. Sixteen clusters were inaccessible for various reasons.

After the selection of the KDHS sample points, a household listing operation was conducted prior to the beginning of fieldwork. A systematic sample of households was then selected from these lists, with an average "take" of 20 households in the urban clusters and 16 households in rural clusters, for a total of 8,864 households selected. Every other household was identified as selected for the male survey, meaning that in addition to interviewing all women aged 15-49, interviewers were also to interview all men aged 20-54.

The sample was expected to yield interviews with approximately 2,500 men aged 20-54 and 8000 women aged 15-49. However, in the households that were selected for inclusion in the male survey, 2,762 men were identified as eligible for individual interview and of these, 2,336 or 85 percent were successfully interviewed. Response rates were higher in rural than in urban areas. See the Appendix for details of the survey questionnaire and field work logistics.

2.9 Methods of Data Analysis

This section discusses the methods used in data analysis. Three statistical techniques have been applied, i.e.;

- (i) Frequency distributions and Percentages.
- (ii) Cross-tabulations and the Chi-square test.
- (iii) Logistic regression analysis.

2.9.1 Frequency Distribution and Percentages

These have been used to show the distribution of respondents according to the various categories of the study variables. It is a form of Univariate analysis and has been done for each of the study variables. It offers a general feel of the data used and also gives a first hand glance at the preliminary findings of the study.

2.9.2 Cross-tabulation and the Chi-square

A cross-tabulation is a joint frequency distribution of cases according to two or more classificatory variables. Cross-tabs are one of the quantitative methods used to interpret the relationship between any selected two variables. In this study, they have been used to show the relationship between the background variables, for example, education level and men's attitude toward family planning, marital status and knowledge of family planning methods, religion and ever use of family planning, or family size and current use of any family planning method. Cross-tabs were particularly preferred at this stage of analysis for their appropriateness in comparative analysis and because of their clarity in further illustrating the frequency distributions according to each category of the selected variables.

The Chi-square test is used to measure the extent of association as well as the statistical test of study hypotheses that a relationship does not exist (null hypothesis), for example, that there is no significant relationship between level of education and men's attitude toward family planning. This method is applied within the cross-tabulation tables and it basically measures the hypotheses that the two variables cross-tabulated are independent of each other.

The Chi-square distribution provides a model from which one can calculate

the probability of the observed values deviating from the expected values by a particular amount. If this probability is large, greater than a selected alpha level, then there is a good possibility that the deviation of the observed from the expected values occurred by chance alone. In this study, the alpha level selected is 0.05.

If the observed significance is less than 0.05, then there is a statistically significant association between the dependent and the independent variable, in which case the hypothesis that the two variables are independent is rejected.. But if the observed significance is greater than 0.05, then there is no association/relationship between the dependent and the independent variable.

The Chi-square is mostly used to test the null hypothesis i.e the assumption that there is no relationship between the variables one is studying. In tests of significance, we actually try to disprove the null hypothesis. If we can disprove it, then we conclude that there is a relationship.

The actual computation of the X^2 statistic involves calculating the difference between no relationship, called the *expected result* (E), and the relationship one finds, the *observed result* (O). See the appendix for the Chi square formula and assumptions of application.

However, the chi square statistic only tells us whether a finding could have happened by chance, it does not tell us that the finding is a positive one or negative one, a weak one or a strong one i.e it does not give the direction and magnitude of the relationship. This is a major limitation with this method that calls for the application of other methods.

2.9.3 Regression Analysis

Regression analysis deals with the description of the nature of relationship between independent and dependent variables to estimate the value of the dependent variable when the values of the independent variables are known. For instance, the chance that one will approve of family planning given his level of education. Ordinary Least Square multiple regression analysis could have been used in this study. However, the result that would be given by the method would have a limitation since the dependent variables are basically dichotomous e.g approve or disapprove of family planning, use or non use of a method, or know or don't know a method. The fact that the outcome variables are dichotomous or binary therefore makes the use of ordinary least square regression inadequate because it assumes the outcome variable to be continuous. This study therefore opted for Logistic regression analysis.

2.9.4 Logistic Regression Analysis

Logistic regression has been found suitable as a method of analysis, especially in attempts to determine the probability of an event occurring (in this case, knowledge, approval, or practice of family planning), given certain conditions (i.e the independent variables). Its application in this study is necessary given the fact that the major response variables in this study, that is, knowledge, attitude and use, are binary, taking a value of one if the respondent knows, approves or reports use of a method, or zero if he does not.

The logistic regression model is the same as that of any model-building technique such as linear or multiple regression, the idea being to find the best

fitting model to describe the relationship between an outcome (dependent or response) variable, in this case, men's knowledge, attitude and practice of family planning and a set of independent (predictor or explanatory) variables. For details of the formula and procedures of fitting the logistic regression model, see the appendix.

2.9.5 Assumptions of the Logistic regression model

Any statistical model used in analysis has a given set of assumptions. The results are valid and correct only if the model assumptions are correct. One major assumption of the logit model is that the dependent variable is not normally distributed and therefore does not satisfy the assumption of the ordinary least squares.

Secondly, that we are dealing with a situation where the event has either occurred, for example, a person is currently using a family planning method or a person is not currently using a method. The assumption here is that the dependent variable has a binomial distribution. There is also the assumption that unless any interaction terms are introduced, the effect of each explanatory variable is the same, regardless of the effect of any other variable i.e the absence of multicollinearity. Generally, the basic principles guiding linear regression analysis also apply in logit.

2.9.6 Description of variables used in Multivariate Logistic Regression

To determine the influence of demographic, socio-economic and socio-cultural factors on men's knowledge, attitude and practice of family planning, 3

logistic regression models were fitted, one for each of the dependent variables as shown in the operational model, with the various demographic, socioeconomic and sociocultural variables specified in the form of dummy variables. For a description of the dummy variables, see the appendix.

2.9.7 Definition of Dummy Variables

When using logistic regression analysis, all explanatory variables are entered in categorical form i.e. each category of the independent variables is specified and coded as a different independent variable. These independent categories are called dummy variables. The method of specifying dummy variables involves setting all of them equal to zero for the reference category and then setting a single dummy variable equal to 1 for each of the other groups. The detailed description of this procedure is shown in the appendix.

Coefficients of the dummy variables represent contrasts with the omitted (reference) category, expressed as differences in the logit of knowing a family planning source, of approving family planning and of using a family planning method.

Logit coefficients correspond in terms of sign and relative magnitude to effects on probabilities. That is, a negative logit coefficient implies a negative effect on probabilities. A positive logit coefficient implies a positive effect on probabilities. Looking across coefficients for multiple variables in the same equation, effects that are relatively large in the logit metric correspond to relatively large effects on probabilities.

The key independent variables in this analysis are province/region inhabited,

age, current family size, marital status, preferred family size, type of marriage, education, exposure to mass media, rural/urban place of residence and religion.

2.9.8 The Dependent Variables

The dependent variables regressed with the dummies are three, namely: Knowledge of family planning, Attitude toward family planning and Current use of a family planning method.

CHAPTER THREE

DISCUSSION OF FINDINGS

This chapter deals with descriptive presentation of data and analytical interpretation of the results.

As was pointed out in chapter two, this study employs descriptive methods, (namely frequency distribution, crosstabulation and the chi-square) and multiple logistic analysis as tools of data analysis.

3.1 Background Characteristics of Survey Respondents

The survey covered a total of 2336 male respondents sampled from seven of the eight provinces of Kenya. This represented well enough variations in ethnic distribution in the country, a reflection of the different socio-cultural beliefs and practices which may affect family planning attitude and acceptance in one way or another. The level of social and economic development were also taken into consideration. This section presents the background characteristics of the men interviewed.

Table 3.1.1 Respondents' Distribution by Province

PROVINCE	FREQUENCY	PERCENT
Nairobi	171	7.3
Central	305	13.1
Coast	353	15.1
Eastern	308	13.2
Nyanza	302	12.9
Rift Valley	624	26.7
Western	273	11.7
TOTAL	2336	100.0

Source: Study Data (KDHS 1993)

Table 3.1.1 shows the distribution of respondents according to region (province). The largest proportion (26.7%) of the sample was drawn from Rift Valley and the smallest (7.3%) from Nairobi.

Men were asked two questions in the individual interview to assess their age: "In what month and year were you born?" and "How old were you at your last birthday?". Interviewers were instructed to compare and correct answers from the two questions in case of any inconsistency. The table below shows the respondents' distribution by age.

Table 3.1.2 Respondents' Distribution according to 5-year Age-groups

AGE-GROUP	FREQUENCY	PERCENT
20-24	526	22.5
25-29	396	17.0
30-34	417	17.9
35-39	298	12.8
40-44	305	13.1
45-49	228	9.8
50-54	166	7.1
TOTAL	2336	100.0

Source: Study Data (KDHS, 1993)

From the table, age-group 20-24 emerges as the modal age-group, and the mean age of the respondents was 33.7 years.

The table below shows the distribution of the respondents according to the various categories of marital status.

Table 3.1.3 Distribution of Respondents by Current Marital Status

MARITAL STATUS	FREQUENCY	PERCENT
Never Married	602	25.8
Married	1637	70.1
Widowed	17	0.7
Divorced	35	1.5
Separated	45	1.9
TOTAL	2336	100.0

Source: Study Data(KDHS, 1993)

Most men interviewed (74.2 percent) had married or lived with a woman while almost a third (25.8 percent) of them had not.

The married respondents also stated the number of wives they had and this has been used to classify them either as polygynous or monogamous. The table below gives the frequency distribution:

Table 3.1.4 Respondents' Distribution by Form of Marriage

FORM OF MARRIAGE	FREQUENCY	PERCENT
Monogamy	1457	62.4
Polygyny	180	7.7
Non Response	699	29.9
TOTAL	2336	100.0

Source: Study Data (KDHS, 1993)

Only 7.7% of the men interviewed had more than one wife. 62.4 had only one wife while about 30% never responded to the question.

Another important respondent characteristic in this study is religion. This is because many people take what religion says very seriously. The faith professed by different religions or denominations can inhibit or promote approval of family planning. In the 1993 KDHS, religion alone accounted for 7.1 percent of those women who did not intend to use any family planning method in the future. The Roman Catholic church is particularly known for its hard stand against any other family planning method apart except Natural Family Planning. In this study, more than three-quarters of the men interviewed were Christians (89.8 percent). Of these, 35.2 percent were Catholics while 54.6 percent were Protestants. Muslims accounted for smallest proportion (4.3 percent). See the Table 3.5.

Table 3.1.5 Respondents' Distribution by Religion

RELIGION	FREQUENCY	PERCENT
Catholic	823	35.2
Protestants	1276	54.6
Muslims	100	4.3
Traditional	137	5.9
TOTAL	2336	100.0

Source: Study Data (KDHS, 1993)

Respondents were also asked about their level of educational attainment, and their usual place of residence. These are key variables in any study where knowledge and acceptance of new ideas and values are involved. Tables 3.6 and 3.7 show the distribution of respondents by education and urban/rural place of residence respectively.

Table 3.1.6 Percent Distribution of Respondents by Education

LEVEL OF EDUCATION	FREQUENCY	PERCENT
None	182	7.8
Primary	1284	55.0
Secondary	823	35.2
Post Secondary	47	2.0
TOTAL	2336	100.0

Source: Study Data (KDHS, 1993)

The table above shows that majority (55%) of Kenyan men have primary school education with only a few in the secondary and post secondary educational categories. This agrees with the findings of Development and Research Services (DRS, 1989).

Table 3.1.7 Respondents Distribution by Urban/Rural place of Residence:

PLACE OF RESIDENCE	FREQUENCY	PERCENT
Urban	480	20.5
Rural	1856	79.5
TOTAL	2336	100.0

Source: Study Data (KDHS, 1993)

More than three-quarters (79.5%) reported their Usual place of residence as rural. The survey therefore had a rural bias, is understandable given the relatively small urban population in the country.

To obtain information about respondents' access to family planning information, a question was asked if they usually read a newspaper, listen to the radio or watch television at least once a week. This information is important to programme planners seeking to reach men with family planning and other related health messages through the media. The three variables: radio listnership, television viewing and newspaper reading have been used as a measure of Access to Mass Media. In this study, 87.8 percent of the men listen to the radio, 57.9 percent read a newspaper and 30.5 percent watch television at least once a week. Majority of the respondents have access to the radio, more than any other media. This suggests the radio would be the most effective media of reaching men with family planning messages.

3.2 Family size and Fertility Preferences

Table 3.8 shows percent distribution of respondents by current family sizes. Slightly more than a quarter (28.3%) of the respondents did not have a child. This is just about the size of the unmarried proportion. Among those who reported having children, 25.2% had 6 or more children.

Table 3.1.8 Percent distribution of respondents by current family size

CURRENT FAMILY SIZE	FREQUENCY	PERCENT
0	661	28.3
1	237	10.1
2	242	10.4
3	230	9.8
4	189	8.1
5	184	7.9
6+	589	25.2
Non Response	4	0.2
TOTAL	2336	100.0

Source: Study Data (KDHS, 1993)

Table 3.1.9 Percent Distribution of Respondents by Preferred Family Size

PREFERRED FAMILY SIZE	FREQUENCY	PERCENT
0	7	0.3
1	35	1.5
2	426	18.2
3	509	21.8
4	732	31.3
5	152	6.5
6+	290	12.4
God's plan/Any No.	170	7.3
Non Response	15	0.6
TOTAL	2336	100.0

Source: Study Data (KDHS, 1993)

In the 1993 KDHS, information on men's preferred family sizes was elicited through two questions. Men who had no children were asked "If you could choose exactly the number of children to have in your whole life, how many would that be?". For men who had children, the question was rephrased as follows: "If you could go back to the time you did not have any children and would choose exactly the number to have in your whole life, how many would that be?" The data

obtained from these questions is tabulated above:

The data indicate that the vast majority of men were able to give a numeric response to the question. Only 7.3 percent of all men gave a non-numeric response such as "It is upto God" or "Any number". Taking into account only the 2151 respondents who gave specific number of children desired, the mean number of children desired is 3.3.

3.3 Dependent Variables: Knowledge, Attitude and Practice of Family Planning

This section presents results of the key dependent variables in terms of frequency distributions and percentiles, which are displayed in tabular form and explained.

3.3.1 Knowledge of Family Planning Methods:

Information about knowledge of family planning methods was obtained in two ways in the 1993 KDHS. Respondents were first asked to name ways or methods by which they could delay or avoid having a child. When a respondent failed to mention a particular method spontaneously, the interviewer described the method and asked if the respondent knew it. Information was collected for eight modern methods; the pill, IUD, injectables, norplant, vaginal methods (foam, jelly or diaphragm), condom and female and male sterilization and three traditional methods: the calendar (rhythm), natural family planning (mucus method) and withdrawal. In this analysis, both prompted and unprompted knowledge are combined and presented as below:

Table 3.2. Distribution of men who know specific Family Planning methods, by specific methods

FP METHOD	FREQUENCY	PERCENT
Pill	2172	92.9
IUD	1534	65.7
Injectables	2012	86.1
Foam tablets/Jelly	794	34
Condom	2208	94.5
Female Sterilization	2017	86.3
Male Sterilization	1274	54.5
Norplant	281	12.1
Rhythm/Counting Days	1969	84.2
Natural Fam. Planning	856	36.6
Withdrawal	1097	47.0

Source: Study Data (KDHS, 1993)

The most widely known methods by men are the condom (94.5), the pill (92.9%), tubal ligation (86.3%), and Abstinence or rhythm (84.2). Interestingly, many men report knowledge of female sterilization than male sterilization. The least known methods are the vaginal methods(34%), and the Norplant (12.1%)

For each method known by a respondent, he was asked if he knew of a source or person from which/whom he could obtain the method(s):

Table 3.2.1 Frequency and Percentage of men who know a source for specific Family Planning methods

FAMILY PLANNING METHOD	KNOW SOURCE OF METHOD		DON'T KNOW SOURCE		NON RESPONSE	
	FREQ.	PERCENT	FREQ	%	FREQ	%
The Pill	1862	79.7	299	12.8	175	7.5
IUD	1315	56.3	210	9.0	911	34.7
Injectables	1804	77.2	192	8.2	340	14.6
Foam tablets/Jelly	674	28.9	115	4.9	1547	66.2
Condoms	1984	84.9	213	9.1	139	6.0
Female Sterilization	1768	75.7	232	9.9	336	14.4
Male Sterilization	1116	47.8	150	6.4	1070	45.8
Norplant	220	9.4	60	2.6	2056	88.0
Rhythm/Counting Days	1426	61.0	531	22.7	379	16.2
Natural Fam Planning	625	26.8	216	9.2	1495	64.0

Source: Study Data (KDHS, 1993)

The source to get information and/or service for Norplant, Foam/jelly, natural family planning and male sterilization were known by a relatively smaller number of men, 9.4%, 26.8%, 28.9% and 47.8% respectively. Sources for the rest of methods were known by more than half of the respondents.

3.3.2 Attitude toward family planning

The KDHS was also designed to assess men's attitudes toward fertility and family planning. Respondents were asked in general if they approved or disapproved of couples using a method to delay or avoid getting a child. The results show an almost universal approval. 90.8% of the respondents reported that they approved of family planning. Further analysis will be undertaken to see whether this positive attitude translates into practice and if not, possible explanations will be sought.

Table 3.2.2 Respondents' Distribution according to Family Planning Attitude

FP ATTITUDE	FREQUENCY	PERCENT
Approve	2122	90.8
Disapprove	186	8.0
Non Response	28	1.2
TOTAL	2336	100.0

Source: Study Data (KDHS, 1993)

3.3.3 Family Planning Practice: (Ever Use of specific Methods)

All men who were interviewed in the KDHS and who reported knowledge of a family planning method were asked if they had ever used it, the results of which are presented below:

Table 3.2.3 Distribution of respondents' by ever use of specific methods

FAMILY PLANNING METHOD	EVER USED		NEVER USED		NON RESPONSE	
	FREQ.	%	FREQ.	%	FREQ.	%
Pill	460	19.7	1707	73.1	169	7.2
IUD	131	5.6	1395	59.7	810	34.6
Injectables	194	8.3	1808	77.4	334	14.3
Foam /Jelly	57	2.4	732	31.3	1547	66.2
Condom	802	34.3	1401	60.0	133	5.7
Tubal Ligation	105	4.5	1903	81.5	328	14.1
Vasectomy	-	-	1269	54.3	1067	45.7
Norplant	11	0.5	269	11.5	2056	88
Rhythm/Counting Days	1121	48.0	842	36.0	373	16.0
Natural Fam Planning	106	4.5	745	31.9	1485	63.6
Withdrawal	304	13	783	33.5	1249	53.4

Source: Study Data (KDHS, 1993)

The Rhythm method which involves the partners counting the days of the woman's cycle and avoiding having sexual intercourse on the days when she is more likely to become pregnant, is the most widely used method (48%), followed

by the Condom (34%). Not any single man in this sample reported the use of Vasectomy, so far the most effective male-based method. If this is not due to under reporting because of the shame, fears and rumours that local cultures associate with this practice, then it shows the extent to which these men still want to have more children. The general picture confirms that Kenyan men are still against modern methods of family planning, especially for own use.

3.3.4 Current Use of Family Planning methods

Respondents' current use of family planning methods are presented below:

Table 3.2.4 Respondents' Distribution by Current Use of Family Planning method

FAMILY PLANNING METHOD	FREQUENCY	PERCENT
Any Method	1195	51.2
Pill	177	7.6
IUD	48	2.1
Injectables	110	4.7
Foaming tablets/Jelly	4	0.2
Condom	289	12.4
Female sterilization	92	3.9
Norplant	1	0.0
Rhythm/Counting Days	406	17.4
Natural Fam Planning	18	0.8
Withdrawal	20	0.9
Other(e.g herbs)	30	1.3
Non Response	1141	48.8

Source: Study Data (KDHS 1993)

The level of current use of family planning is the most widely used and valuable measure of the success of The Family Planning Programme. Furthermore it can be used to estimate the reduction to fertility attributable to family planning use. The discrepancy between ever use and current use is also a good pointer to

the rate of discontinuation among users. Even though men's current use of any method is slightly over 50 percent, a look at their practice of specific methods shows that family planning practice among Kenyan men is still very low.

The high non response rate recorded for practice of specific methods also confirm that many men are not taking Family Planning seriously, especially the use of the more effective modern methods. Rhythm and the Condom still remain the most widely used methods (17.4 and 12.4 percent respectively), but given their unreliability and failure rates, this is unlikely to bring any positive impact on realised family size.

3.4 Cross tabulations and Chi-square Results

Table 3.4.1 Percent of Men who Know of Specific Family Planning Methods by Selected Background Variables

	PILL	IUD	INJECT	F/JELLY	CONDOM T.L	VASECT	NORPLT	RYTHM	NFP	WHR	
PROVINCE											
Nairobi	98.2	72.5	87.6	54.1	98.8	88.8	62.1	29.6	87	43.2	50.9
Nyanza	89.4	46.0	78.1	17.6	92.4	78.4	33.9	8.3	84.7	47.8	28.7
Central	90.2	84.6	78.7	23.9	93.1	86.9	59.3	6.6	83.9	30.5	45.9
Coast	97.7	53.3	86.3	40.6	96.0	83.5	52.7	20.5	78.9	30.3	57.5
Eastern	97.7	84.7	94.1	55.0	98.1	93.2	61.4	17.8	93.5	33.7	47.1
R.V.	90.2	54.3	88.0	29.5	92.8	88.4	53.8	7.1	90.9	32.3	58.4
Western	93.0	82.4	91.2	29.7	96.0	86.1	64.8	5.9	66.3	50.2	27.1
AGE											
20-24	92.0	57.6	82.7	37.3	98.1	84.2	55.1	9.1	85.6	36.5	49.0
25-29	95.2	70.5	89.6	38.1	97.0	85.5	57.4	12.9	89.6	40.3	53.3
30-34	93.5	71.2	87.5	38.7	95.9	87.7	57.7	15.5	84.9	38.9	48.3
35-39	92.6	70.8	86.9	36.2	93.3	85.6	53.4	11.1	80.9	38.9	45.6
40-44	95.7	69.2	90.1	27.5	94.4	91.4	59.6	14.3	86.4	36.1	47.4
45-49	91.2	63.2	84.2	23.2	91.2	88.2	44.3	11.0	77.1	32.9	37.3
50-54	89.8	53.6	83.1	25.9	84.3	84.3	47.0	10.2	81.9	27.7	39.2
CURRENT MARITAL STATUS											
Married	93.8	68.5	88.1	32.6	93.6	87.5	55.3	13.0	84.8	37.4	46.0
Never M.	91.3	59.0	81.7	39.3	97.7	84.2	54.7	10.0	83.8	37.2	50.6
Separated	97.8	68.9	91.1	26.7	97.8	84.4	40.0	6.7	91.1	15.9	44.4
Divorced	91.2	60.0	88.2	35.3	97.1	85.3	55.9	11.8	78.8	32.4	50.0
Widowed	88.2	35.3	76.5	11.8	94.1	88.2	29.4	11.8	82.4	35.3	35.3
TYPE OF MARRIAGE											
Monogamy	94.2	69.6	88.9	34.1	94.4	88.0	56.8	13.3	85.8	37.7	47.3
Polygyny	90.6	59.4	81.1	20.0	86.7	83.9	43.3	10.6	76.1	34.4	35.0
CURRENT FAMILY SIZE											
0-3 chdren	93.1	64.8	85.5	38.2	97.2	85.4	57.3	12.2	86.6	38.1	51.0
4-5 chdren	92.8	68.6	88.2	31.5	93.0	85.5	55.4	13.8	83.9	37.6	47.6
6+ chdren	93.5	65.5	87.2	26.4	90.1	90.0	48	10.9	80.1	33.3	38.0
PREFERRED FAMILY SIZE											
0-3 Chdren	96.3	75	88.5	39.8	97.6	89.7	60.9	14.7	87.4	37.9	48.6
4-5 chdren	93.2	65.5	88	34.5	96	87.5	55	11.4	84	39.9	49.2
6+ chdren	89.7	50.7	83.1	25.9	90.7	83.7	43.9	8.7	80.6	29.9	43.9
Any/God	81.4	40.5	72.7	14.8	79.8	69.9	37.2	7.1	78.1	27.3	33.9
EDUCATION											
None	77.5	30.2	69.8	12.1	80.2	67	31.9	5.5	76.9	20.3	32.4
Primary	92.3	58.8	84.9	23.8	94.1	85.1	44.9	9.3	80.5	29.6	41
Secondary	97.8	82.4	92	52.3	98.8	92.7	72.7	16.7	92	49.4	58
Post Sec.	95.7	97.9	93.6	83	100	95.7	93.6	34	95.7	78.7	78.7
EXPOSURE TO MASS MEDIA											
Radio	94.9	69.6	89.3	37	95.8	88.8	57.6	12.6	86.2	39.1	49.2
T.V	96.1	76.5	90.3	49.3	98	91.6	65.3	18.7	89	46.1	55.4
Newspaper	95.8	77.1	90.3	44.4	97.9	90.6	65.3	16.7	88.6	43.5	52.3
PLACE OF RESIDENCE											
Urban	97.5	70	86.6	48.2	97.5	85.1	58.5	22.2	84.3	39	51.8
Rural	92	64.5	86.3	30.5	94.1	86.9	53.7	9.5	84.6	36.3	45.9
RELIGION											
Catholic	91.8	64.6	85.7	33.7	94.1	86	52.2	12.6	86	38.2	48.5
Protestant	94.4	68.6	88.3	35	95.9	87.8	57.8	10.6	84.8	37.7	46.5
Muslim	95.0	59	81	38	96	83	52	22.0	76	36	57
Traditional	88.2	49.6	76.5	25.2	86.8	80.9	42.6	15.4	79.4	21.3	36.8

SOURCE: Computed from KDHS 1993 DATA

The crosstabulation results indicate that Kenyan men have a high knowledge of family planning methods, except Norplant and the Vaginal implants e.g foaming tablets, jelly and diaphragm. As can be seen in Table 3.4, the Condom, Pill and Rhythm are the most widely known methods, recording well over 80 percent across all categories. Norplant and Foam/jelly are the least known methods.

3.4.1 Knowledge of Family Planning Methods by Age

The results show that knowledge of various family planning methods is widespread across all age-groups. There is good knowledge of the methods that require cooperation of the male partner e.g. condom, vasectomy, and Rhythm, which in most age groups is well over 80%. Age group 40-44 report the highest knowledge of the pill (95.7%), female and male sterilization (91.4% and 59.6% respectively). However, it is instructive to note that more men know about female than male sterilization. This is perhaps because safe vasectomy as a birth control measure is a recent introduction.

Younger men of age group 20-24, who are sexually active but in most cases unmarried reported highest knowledge of the condom (98.1%) and the trend decreases with increasing age. The two last age groups, 45-49 and 50-54 have the least knowledge of all the methods. These results contradict Mativo (1994)'s finding that knowledge of family planning at early ages is lower than at advanced ages.

3.4.2 Men's Knowledge of Family Planning Methods by Education

There is a clear differential in knowledge of all methods by the different categories of education. Well over 80% of the men with post secondary education know of all methods of family planning, except the Norplant, which is known by less than 50% of all men regardless of the level of education. In general the more educated a man is, the more the number of methods known.

3.4.3 Men's Knowledge of Family Planning Methods by Religion

There were found to be no significant differentials in knowledge of various FP methods across the three major forms of religious faith (catholic, protestant, and muslim) and between these and traditional faith, even though relatively, traditionalists record the lowest knowledge of all methods, except the norplant. Catholics reported highest knowledge of natural methods, including rhythm.

3.4.4. Men's Knowledge of Family Planning Methods by Current Family size

For those with smaller families (0-3 children), condom is the most known method (97.2%), followed by the pill(93.1%), natural family planning (86.6%) and tubal ligation (85.4%). Norplant is the least known method, known by only 12% of the men with this family size. A larger number of those with moderate family sizes(4-5 children) know of the condom(93.0%), the pill(92.8%), injections and natural family planning(88.2 and 83.9%) respectively. The pill is still the most widely known among those with large families.

3.4.5 Men's Knowledge of Family Planning Methods by Province

Even though knowledge of many family planning methods is uniformly high in all the provinces, important differences emerge. For example men in Nyanza record the lowest knowledge for all methods, save for the highly unreliable natural method. Western Kenya has the widest knowledge of vasectomy (64.8%), followed by Nairobi (62.1) and Eastern (61.4%)

3.4.6 Men's Knowledge of Family Planning Methods by exposure to Mass media

In normal circumstances, those who have access to radio are likely to have access to the TV as well. Therefore the differences in birth control knowledge between radio listeners and TV viewers is very minimal (less than 10%). Condom being the most aggressively advertised (though not as a contraceptive), is widely known across all the three media (over 90%), followed by the pill, vasectomy and injections. The norplant and foam/jelly remain the least known.

3.4.7 Men's Knowledge of Family Planning Methods by Place of residence

Well over half of the males resident in urban areas have good knowledge of many family planning methods. The norplant does not seem to improve even among the urban dwellers (only 22%). In all there does not seem to be any remarkable differences in family planning knowledge between urban and rural men.

3.4.8 Men's Knowledge of Family Planning Methods by Preferred Family Size

The condom is known by over 90% of all men who mentioned a definite number of children, even among who preferred leaving the decision to God. The Pill, Injection and Rhythm also enjoy wide knowledge (over 80%).

3.4.9 Men's Knowledge of Family Planning Methods by Type of marriage

Condom and pill are widely known among monogamous men, followed by injections, vasectomy and rhythm. Vasectomy is poorly known among polygynous men (only 43.3%). compared to 56.8% among monogamous.

3.5 Men's Knowledge of Family Planning Methods by Marital Status

Apart from the condom and withdrawal methods, knowledge of various methods is more widespread among married people than among the unmarried. The widowed record the least knowledge.

3.5.1 Knowledge of Family Planning Source

Table 3.4.2 Knowledge of Family Planning Source by Education

KNOW FP SOURCE	NONE	PRIMARY	SECONDARY	POST SEC.	TOTAL
YES	66(47.8)	479(71.3)	278(87.4)	13(92.9)	836(73.2)
NO	72(52.2)	193(28.7)	40(12.6)	1(7.1)	306(26.8)
TOTAL	138(12.1)	672(58.8)	318(27.8)	14(1.2)	1142(100.0)

Number of missing observations:1194 Computed $X^2=82.105$ DF=3 Significance=0.000 Tabulated $X^2(0.05)=7.815$

The percentage of men who knew of a source was lowest (47.8%) among men with no education. It increased steadily with increasing education and is highest (92.9%) among those with post secondary education. The greatest difference was between men with no education and those with primary education. The computed chi-square value is greater than the tabulated value at 0.05 level of significance. This means that there is a significant association between the Dependent variable(in this case, knowledge of a family planning source) and the Independent variable(Education). In saying this, we reject the null hypothesis that denies the existence of such a relationship and accept the alternative. The

Independent variable is therefore likely to impact on the dependent variable significantly.

Table 3.4.3 Knowledge of FP Source according to Province

KNOW FP SOURCE	NAIROBI	NYANZA	CENTRAL	COAST	EASTN	R.V.	WESTN	TOTAL
YES	54(78.3)	121(74.7)	92(70.8)	108(64.3)	117(76.5)	229(70.2)	115(85.8)	836(73.2)
NO	15(21.7)	41(25.3)	38(29.2)	60(35.7)	36(23.5)	97(29.8)	19(14.2)	306(26.8)
TOTAL	69(6.0)	162(14.2)	130(11.4)	168(14.7)	153(13.4)	326(28.5)	134(11.7)	1142(100.0)

Number of missing observations:1194 Computed $X^2 = 21.449$ Tabulated $X^2 (0.05) = 12.592$ DF=6 Significance=0.00152

Knowledge of source is over 60% in all the provinces. It is highest in Western province (85.8%) and lowest in the Coast (64.3%). The working null hypothesis in this case was that province inhabited did not have any influence on me's knowledge of family planning source. Since the computed chi square value is greater than the tabulated value at 0.005 level of significance, we reject this hypothesis and confirm the alternative one that proposes the existence of such influence. The observed differences in knowledge of family planning source between the provinces are therefore statistically significant.

3.5.2 Knowledge of Family Planning Source by Exposure to Mass Media

Table 3.4.4 Radio Listnership

KNOW FP SOURCE	LISTENS TO RADIO AT LEAST ONCE A WEEK		
	YES	NO	TOTAL
YES	730(76.7)	106(56.1)	836(73.3)
NO	222(23.3)	83(43.9)	305(26.7)
TOTAL	952(83.4)	189(16.6)	1141(100.0)

Missing observations:1195 df=1 sign=0.000 Computed $X^2 = 34.154$ Tabulated $X^2 (0.05) = 3.841$

76.7% of the men who reported that they listen to radio at least once a week knew of a family planning source. The chi square test confirms the existence of a significant relationship between radio listnership and knowledge of source. Those who listen to radio are more likely than those who do not to know of a family planning source.

Table 3.4.5 Television Watching

KNOW FP SOURCE	WATCHES TV AT LEAST ONCE A WEEK		
	YES	NO	TOTAL
YES	223(81.4)	612(70.8)	835(73.4)
NO	51(18.6)	252(29.2)	303(26.6)
TOTAL	274(24.1)	864(75.9)	1138(100.0)

Number of missing observations:1198 Computed $X^2=11.859$ DF=1 Significance=0.00057 Tabulated $X^2(0.05)=3.841$

Table 3.4.5 shows that 81.4% of the men who watch television weekly also knew of a family planning source. The chi square test confirms the existence of a significant relationship between TV watching and family planning knowledge.

Table 3.4.6 Newspaper Reading

KNOW FP SOURCE	READS NEWSPAPER AT LEAST ONCE A WEEK		
	YES	NO	TOTAL
YES	448(81.2)	313(72.8)	761(77.5)
NO	104(18.8)	117(27.2)	221(22.5)
TOTAL	552(56.2)	430(43.8)	982(100.0)

Missing observations:1354 Computed $X^2=9.707$ DF=1 Sig=0.00184 Tabulated $X^2(0.05)=3.841$

81.2% of the men who reported that they read newspaper at least once a

week knew of a family planning source. The chi square test confirms the existence of a significant relationship between newspaper reading and family planning knowledge.

Table 3.4.7 Knowledge of Family Planning Source by Age

KNOW FP SOURCE	AGE GROUPS							TOTAL
	20-24	25-29	30-34	35-39	40-44	45-49	50-54	
YES	160(76.2)	127(76.5)	139(72.0)	124(77.0)	109(75.2)	107(70.4)	70(60.9)	836(73.2)
NO	50(23.8)	39(23.5)	54(28.0)	37(23.0)	36(24.8)	45(39.1)	45(39.1)	306(26.8)
TOTAL	210(18.4)	166(14.5)	193(16.9)	161(14.1)	145(14.1)	152(13.3)	115(10.1)	1142(100.0)

Number of missing observations:1194 Computed $X^2=13.027$ $df=6$ Significance= 0.04261 Tabulated $X^2(0.05)=12.592$

Even though knowledge of family planning is fairly high across all the age groups, there are some significant differences between the age groups. The age group 50-54 had the lowest percentage of men who knew of a family planning source (60.9%), while age group 35-39 reported the highest (77%). The chi square test confirms that there is a significant relationship between age and family planning knowledge.

Table 3.4.8 Knowledge of Family Planning Source by Current Marital Status

KNOW FP SOURCE	CURRENTLY MARRIED	NEVER MARRIED	SEPARATED	DIVORCED	WIDOWED	TOTAL
YES	633(74.9)	171(71.3)	14(58.3)	10(50)	8(61.5)	836(73.2)
NO	212(25.1)	69(28.8)	10(41.7)	10(50)	5(38.5)	306(26.8)
TOTAL	845(74.0)	240(21.0)	24(2.1)	20(1.8)	13(1.1)	1142(100.0)

Number of missing observations:1194 Computed $X^2=10.821$ $df=4$ Sign= 0.02866 Tabulated $X^2(0.05)=9.488$

The highest knowledge for method and information source was reported among the currently married (74.9), though this was not far from the never married (71.3). Lowest knowledge for source was reported among the widowed (50%). There is a significant relationship between marital status and family planning knowledge

Table 3.4.9 Knowledge of Family Planning Source by Type of Marriage

KNOW FP SOURCE	MONOGAMY	POLYGAMY	TOTAL
YES	547(75.6)	86(71.1)	633(74.9)
NO	177(24.4)	35(28.9)	212(25.1)
TOTAL	724(85.7)	121(14.3)	845(100.0)

Number of missing observations:1491 Computed $X^2=1.106$ DF=1 Significance=0.29291 Tabulated $X^2(0.05)=3.841$

The computed chi square value is less than the tabulated value (at 0.005 level of significance). We therefore fail to reject the null hypothesis that denies the existence of such a relationship. There is no significant relationship between type of marriage and knowledge of family planning.

Table 3.5.9 Knowledge of Family Planning Source by Current Family Size

KNOW FP SOURCE	0-3 CHILDREN	4-5 CHILDREN	6+ CHILDREN	TOTAL
YES	454(73.9)	131(73.2)	250(71.8)	835(73.2)
NO	160(26.1)	48(26.8)	98(28.2)	306(26.8)
TOTAL	614(53.8)	179(15.7)	348(30.5)	1141(100.0)

Number of missing observations:1195 Computed $X^2=0.500$ DF=2 Sign=0.77873 Tabulated $X^2(0.05)=5.991$

Table 3.5.9 shows that there does not exist a significant relationship between family size and family planning knowledge. The differences observed in the cross-tabulation may be a result of

chance and are not significant (at 0.005).

Table 3.6 Knowledge of Family Planning Source by preferred family size

KNOW SOURCE FOR FP	0-3 CHILDREN	4-5 CHILDREN	6+ CHILDREN	ANY NUMBER/ GOD KNOWS	TOTAL
YES	278(76.8)	348(78.0)	117(65.4)	93(60.0)	836(73.2)
NO	84(23.2)	98(22.0)	62(34.6)	62(40.0)	306(26.8)
TOTAL	362(31.7)	446(39.1)	179(15.7)	155(13.6)	1142(100.0)

Number of missing observations:1194 Computed $X^2=27.057$ DF=3 Sign=0.00001 Tabulated $X^2(0.05)=7.815$

Knowledge of source was highest among those men who preferred 4-5 children (78.0%) and is lowest among those who reported that they prefer any number of children(60.0%). The chi square results show that there is a significant relationship between preferred family size and family planning knowledge. We therefore reject the null hypothesis that denies the existence of such a relationship.

Table 3.6.1 Knowledge of Family Planning Source by Usual Place of Residence

KNOW FP SOURCE	URBAN	RURAL	TOTAL
YES	135(73.0)	701(73.2)	836(73.2)
NO	50(27.0)	256(26.8)	306(26.8)
TOTAL	185(16.2)	957(83.8)	1142(100.0)

Number of missing observations:1194 Computed $X^2=0.00605$ DF=1 Sign=0.93798 Tabulated $X^2(0.05)=3.841$

Knowledge is equally high for both rural and urban dwellers (over 70%). There is only a little difference of 0.2% between them, but this is not significant. We therefore conclude that there is no significant relationship between place of residence and knowledge.

Table 3.6.2 Knowledge of Family Planning Source by Religion

KNOW FP SOURCE	CATHOLIC	PROTESTANT	MUSLIM	TRADITIONAL	TOTAL
YES	337(76.2)	434(75.1)	28(66.7)	37(46.3)	836(73.2)
NO	105(23.8)	144(24.9)	14(33.3)	43(53.8)	306(26.8)
TOTAL	442(38.7)	578(50.6)	42(3.7)	80(7.0)	1142(100.0)

Number of missing observations:1194 Computed $X^2 = 33.673$ DF=3 Sign=0.0000 Tabulated $X^2 (0.05) = 7.815$

Catholics and protestants reported the highest knowledge of family planning, 76.2% and 75.1% respectively, followed by moslems (66.7%). The least knowledge was reported among the traditional believers(46.3%). The chi square results show that the differences observed on the table are significant. We therefore conclude that there is a significant relationship between religion and knowledge.

3.6 Men's Attitude toward Family Planning by Selected Background Variables

Table 3.6.3 Family Planning Attitude By Level of Education

FP ATTITUDE	LEVEL OF EDUCATION				TOTAL
	NONE	PRIMARY	SECONDARY	POST-SEC	
APPROVE	136(76.0%)	1147(90.7%)	794(97.1%)	45(95.7%)	2122(91.9)
DISAPPROVE	43 (14.4)	117 (9.3)	24 (2.9)	2 (4.3)	186 (8.1)
TOTAL	179(7.8)	1264(54.8)	818(35.4)	47(2.0)	2308(100.0)

Number of missing observations:28 Computed $X^2 = 93.923$ df=3 Sign=0.000 Tabulated $X^2(0.05) = 7.815$

The computed Chi-square value is far greater than the table value at 95% level of significance at 3 degrees of freedom. This means that there is a strong statistically significant association between level of education and family planning attitude. Going by these results, we therefore reject the Null Hypothesis(H_0) which

stated that there is no statistically significant relationship between level of education and attitude toward family planning, and we accept the alternative hypothesis (H^1) that there exists a statistically significant relationship between family planning attitude and level of education. As an independent variable, education is therefore expected to have a strong influence on men's attitude toward family planning.

Table 3.6.4 Family Planning Attitude by Province

FP ATTITUDE	NAIROBI	NYANZA	COAST	CENTRAL	R.V	EASTN	WSTN	TOTAL
APPROVE	155 (92.8)	278 (95.2)	309 (88.3)	291 (95.4)	554 (90.1)	288 (93.8)	247 (90.8)	2122 (91.9)
DISAPPROVE	12 (13.5)	14 (4.8)	41 (11.7)	14 (4.6)	61 (49.6)	19 (6.2)	25 (9.2)	186 (8.1)
TOTAL	167 (7.2)	292 (12.7)	350 (15.2)	305 (13.2)	615 (26.6)	307 (13.3)	272 (11.8)	2308 (100)

Number of missing observations:28 Computed $X^2=20.426$ $df=6$ $Sign=0.00232$ Tabulated $X^2(0.05)=12.592$

This cross-tabulation indicate a statistically significant association between family planning attitude and province. The computed X^2 value is greater than the tabulated value at 95% level of significance. The Null hypothesis that there is no significant influence of province/region on men’s attitude toward family planning is therefore rejected and the alternative confirmed. This means that the province which a person inhabits is likely to have some influence on his attitude toward family planning.

3.6.1 Family Planning Attitude by Exposure to Mass Media

Table 3.6.5 Radio Listnership (at least once a week)

FP ATTITUDE	LISTENS TO RADIO AT LEAST ONCE A WEEK		
	YES	NO	TOTAL
APPROVE	1897 (93.5)	223 (80.2)	2120 (91.9)
DISAPPROVE	131 (6.5)	55 (19.8)	186 (8.1)
TOTAL	2028 (87.9)	278 (12.1)	2306 (100)

Number of Missing observations:30 Computed $X^2=58.537$ $df=1$ $Sign=0.000$ Tabulated $X^2(0.05)=3.841$

Table 3.6.6 Television Watching

FP ATTITUDE	WATCHES TV AT LEAST ONCE A WEEK		TOTAL
	YES	NO	
APPROVE	670 (95.2)	1447 (90.6)	2117 (92.0)
DISAPPROVE	34 (4.8)	150 (9.4)	184 (8.0)
TOTAL	704(30.6)	1597 (69.4)	2301 (100)

Computed X^2 value = 13.828 DF = 1 Sign = 0.00020 Tabulated X^2 value(0.05) = 3.841

Table 3.6.7 Newspaper reading

FP ATTITUDE	READS NEWSPAPER AT LEAST ONCE A WEEK		
	YES	NO	TOTAL
APPROVE	1285 (95.9)	669 (89.7)	1954 (93.7)
DISAPPROVE	55 (4.1)	77 (10.3)	132 (6.3)
TOTAL	1340(64.2)	746 (35.8)	2086 (100)

Number of missing observations:250 Computed X^2 = 31.250 df = 1 Sign = 0.000 Tabulated X^2 (0.05) = 3.841

Tables 3.6.5, 3.6.6 and 3.6.7 show that 93.5% of the men who reported that they listened to radio weekly also approved family planning. For those who watched television weekly 95.2% approved, and for men who read newspaper weekly, 95.9% of them approved. For each of these sub-variables that have been used in this study as a measure of Exposure to Mass Media (i.e radio listnership, TV watching and newspaper reading), the computed X^2 is greater than the tabulated at 95% level of significance. These results demonstrate the presence of a significant association between attitude and exposure to mass media. The null hypothesis is therefore rejected and the alternative confirmed. Exposure to mass media is significantly related to attitude. Men who are exposed to radio, TV, and newspapers are more likely than those who are not to approve of family planning.

Table 3.6.8 Family Planning Attitude by Age of Respondent

FP ATTITUDE	AGE GROUP							
	20-24	25-29	30-34	35-39	40-44	45-49	50-54	TOTAL
APPROVE	499 (96.1)	374 (95.4)	379 (92.0)	265 (90.4)	269 (89.1)	199 (88.1)	137 (83.5)	2122 (91.9)
DISAPPROVE	20 (3.9)	18 (4.6)	33 (8.0)	28 (9.6)	33 (10.9)	27 (11.9)	27 (16.5)	186 (8.1)
TOTAL	519 (22.5)	392 (17.0)	412 (17.9)	293 (12.7)	302 (13.1)	226 (9.8)	164 (7.1)	2308 (100)

Number of missing observations:28 Computed $X^2 = 43.233$ DF=6 Significance=0.000 Tabulated $X^2 (0.05) = 12.592$

It has been hypothesised that the variable age is inversely related to family planning attitude among men. The cross tabulation results show just that. Even though approval of family planning is fairly high across all the seven age-groups, it steadily decreases with increasing age and is lowest in the oldest age group.

Since the computed X^2 value is greater than the table value, the null hypothesis that there exists no relationship between age and family planning attitude has been rejected and the alternative confirmed at 95% level of confidence.

Table 3.6.9 Family Planning Attitude by Current Marital Status

FP ATTITUDE	CURRENTLY MARRIED	NEVER MARRIED	WIDOWED	DIVORCED	SEPARATED	TOTAL
APPROVE	1466 (90.7)	571 (95.8)	15 (88.2)	29 (82.9)	41 (93.2)	2122 (91.9)
DISAPPROVE	150 (9.3)	25 (4.2)	2 (11.8)	6 (17.1)	3 (6.8)	186 (8.1)
TOTAL	1616 (70.0)	596 (25.8)	17 (0.7)	35 (1.5)	44 (1.9)	2308 (100)

Number of missing observations:28 Computed $X^2 = 19.580$ DF=4 Sign=0.001 Tabulated $X^2 (0.05) = 9.488$

The approval rate is highest among the never married men (95.8%), followed by the separated, the currently married, the widowed and the divorced in that

order. The computed X^2 value is greater than the tabulated value at 95% level of significance at 4 degrees of freedom. The null hypothesis(H_0) that there is no statistically significant relationship between marital status and men's attitude toward family planning is therefore rejected and the alternative confirmed. This means that a man's marital status is likely to influence his perception of family planning.

Table 3.7 Family Planning Attitude by Type of Marriage

FP ATTITUDE	MONOGAMY	POLYGAMY	TOTAL
APPROVE	1312(91.2)	154(87.0)	1466(90.7)
DISAPPROVE	127(8.8)	23(13.0)	150(9.3)
TOTAL	1439(89.0)	177 (11.0)	1616(100)

Number of Missing Observations:720 Computed $X^2=3.253$ $df=1$ $Sign=0.07130$
 Tabulated $X^2 (0.05)=3.841$ Tabulated $X^2 (0.1)=2.706$

The cross-tabulation result indicate that Polygynous men are less likely than monogamous men to approve of family planning but this difference is not statistically significant at 0.05 level of significance because the computed X^2 value is less than the tabulated value. It could be attributed to other factors. However, an association emerges at 0.1 significance level which is an unacceptably high chance of error (10%). We therefore fail to reject H_0 : that there exists no statistically significant relationship between form of marriage and attitude toward family planning. For this particular analysis, the finding of this study on the association between family planning attitude and form of marriage is inconclusive. Whether a man is polygynous or monogamous does not seem to influence his attitude toward family planning.

Table 3.7.1 Family Planning Attitude by Current Family Size

FP ATTITUDE	NUMBER OF LIVING CHILDREN			TOTAL
	0-3	4-5	6+	
APPROVE	1274(94.0)	329(89.6)	515(88.6)	2118(91.9)
DISAPPROVE	82(6.0)	38(10.4)	66(11.4)	186 (8.1)
TOTAL	1356(58.9)	367(15.9)	581(25.2)	2304 (100)

Number of missing observations:32 Computed $X^2 = 18.529$ $df = 2$ Sign = 0.00009 Tabulated $X^2(0.05) = 5.991$

Even though the approval rates are fairly high among men across all the categories (> 85%), it decreases with increasing number of children, suggesting that men with bigger families are less likely than their counterparts with smaller families to approve of family planning.

It has been hypothesized that the number of children a man has can influence his attitude toward family planning. To test this hypothesis, the null and alternative hypotheses have been formulated as:

H_0 : There exists no relationship between current family size and family planning attitude.

H_1 : There exists a relationship between current family size and family planning attitude.

According to the X^2 results, the null hypothesis has been rejected and the alternative accepted at 95% level of significance.

Table 3.7.2 Family Planning Attitude by Preferred Family Size

FP ATTITUDE	PREFERRED NUMBER OF CHILDREN				
	0-3	4-5	6+	ANY/GOD KNOWS	TOTAL
APPROVE	944(97.3)	820(93.9)	238(83.8)	120 (66.3%)	2122(91.9)
DISAPPROVE	26(2.7)	53(6.1)	46(16.2)	61(33.7)	186(8.1)
TOTAL	970(42.0)	873(37.8)	284(12.3)	181(7.8)	2308(100)

Number of missing observations:28 Computed $X^2 = 228.541$ $DF = 3$ Sign = 0.000 Tabulated $X^2(0.05) = 7.815$

The computed chi-square value is far greater than the tabulated value at 95% level of significance at 3 degrees of freedom. The null hypothesis is rejected and the alternative accepted. This means that there is a statistically significant relationship between preferred family size and family planning attitude. The number of children a man wishes to have will certainly influence his attitude toward birth control. Men who leave their family sizes to fate as can be inferred from such non-numeric answers as "any number" or "God knows" reported the least approval rate for birth control.

Table 3.7.3 Family Planning Attitude by Usual Place of Residence

FP ATTITUDE	URBAN	RURAL	TOTAL
APPROVE	427(90.3)	1695(92.4)	2122(91.9)
DISAPPROVE	46(9.7)	140(7.6)	186(8.1)
TOTAL	473(20.5)	1835(79.5)	2308(100)

Number of missing observations:28 Computed $X^2 = 2.229$ DF=1 Sign=0.13543 Tabulated $X^2 (0.05) = 3.841$

The computed chi-square value is less than the tabulated value at 95% level of significance. There seem not to be any significant difference in attitude toward family planning between urban and rural dwellers. The null hypothesis that rural/urban place of residence does not significantly influence men's approval of birth control cannot be rejected, and the alternative is not acceptable. The conclusion derived here is that in Kenya, men have a similarly positive attitude toward family planning regardless of whether they live in the urban or rural area.

Table 3.7.4 Family Planning Attitude by Religion

FP ATTITUDE	CATHOLIC	PROTESTANT	MUSLIM	TRADITIONAL	TOTAL
APPROVE	745 (92.3)	1182 (93.2)	84 (85.7)	111 (82.2)	2122 (91.9)
DISAPPROVE	62 (7.7)	86 (6.8)	14 (14.3)	24 (17.8)	186 (8.1)
TOTAL	807 (35.0)	1268 (54.9)	98 (4.2)	135 (5.8)	2308 (100)

Number of missing observations:28 Computed $X^2=25.281$ DF=3 Sign=0.00001 Tabulated $X^2(0.05)=7.815$

The null hypothesis that religion does not influence men’s attitudes toward birth control is rejected and the alternative confirmed at 0.05 level of significance. Protestants report a slightly higher approval rate than the Catholics and all other religions. Followers of the traditional faith record the highest disapproval rate (17.8). This is in agreement with the documented pronatalism of traditional religion and their resistance of new ways of doing things.

3.6.2 FAMILY PLANNING PRACTICE BY SELECTED BACKGROUND VARIABLES

This section provides percentage distributions and chi-square results and percentages of men who reported ever use and current use of a family planning method with their wives or partners either to avoid or delay a pregnancy. The percentages are given in parentheses.

Table 3.7.5 Percent Distribution of Men Who Reported Ever Use of Specific FP Methods by Selected Background Variables.

	PILL	IUD	INJECTION	FOAM/ JELLY	CONDM	T.L	NPLANT	NFP	WITHDRL
EDUCATION									
None	19(13.7)	2(3.6)	5(4.0)	1(4.5)	22(15.2)	7(5.8)	0	74(53.2)	17(29.3)
Primary	228(19.3)	57(7.6)	104(9.6)	16(5.3)	381(31.7)	62(5.7)	8(6.8)	593(57.7)	180(34.5)
Secondary	198(24.7)	66(9.8)	77(10.2)	40(9.4)	380(46.9)	32(4.2)	3(2.2)	430(57.3)	97(20.6)
Post Sec.	15(33.3)	6(13.0)	8(18.2)	0	19(40.4)	4(8.9)	0	24(53.3)	10(27.8)
PROVINCE									
Nairobi	57(34.1)	15(12.2)	16(10.8)	10(11.0)	78(46.7)	8(5.4)	0	88(60.3)	14(16.3)
Nyanza	54(20.1)	4(2.9)	30(12.9)	3(5.7)	65(23.4)	16(6.8)	2(8.3)	109(42.9)	19(22.4)
Central	81(29.5)	40(15.6)	23(9.6)	10(13.7)	147(51.9)	18(6.8)	0	160(62.7)	50(35.7)
Coast	59(17.3)	14(7.5)	22(7.3)	12(8.6)	126(37.4)	7(2.4)	5(6.9)	134(48.7)	41(21.0)
Eastern	100(33.2)	27(10.3)	26(9.0)	12(7.1)	115(38.3)	17(5.9)	2(3.7)	246(85.4)	33(22.8)
R.V	76(13.6)	22(6.5)	57(10.5)	8(4.4)	209(36.3)	30(5.5)	2(4.5)	366(64.9)	144(39.8)
Western	33(13.0)	9(4.0)	20(8.0)	2(2.5)	62(23.7)	9(3.8)	0	18(9.9)	3(4.1)
AGE GROUP									
20-24	51(10.5)	10(3.3)	9(2.1)	11(5.6)	266(51.7)	2(0.5)	2(4.2)	243(54.2)	62(24.3)
25-29	79(21.1)	16(5.8)	24(6.8)	10(6.7)	191(50.0)	1(0.3)	3(6.0)	213(60.7)	65(31.4)
30-34	114(29.3)	28(9.5)	50(13.9)	13(8.2)	150(37.7)	9(2.5)	2(3.1)	203(57.8)	70(35.2)
35-39	71(25.8)	28(13.3)	36(14.0)	11(10.5)	79(28.4)	14(5.5)	1(3.0)	146(60.6)	36(26.5)
40-44	67(23.3)	18(8.6)	36(13.3)	5(6.0)	68(23.9)	29(10.6)	0	145(55.6)	41(28.9)
45-49	51(24.5)	16(11.1)	23(12.0)	3(5.7)	33(15.9)	27(13.4)	1(4.0)	100(57.1)	17(20.0)
50-54	27(18.1)	15(17.0)	16(11.7)	4(9.3)	15(10.8)	23(16.4)	2(11.8)	71(52.2)	13(20.6)
CURRENT MARITAL STATUS.									
Married	382(25.0)	113(10.1)	180(12.6)	40(7.6)	453(29.7)	98(6.9)	8(3.8)	808(58.5)	211(28.4)
Never mar.	57(10.4)	15(4.2)	10(2.0)	16(6.8)	318(54.3)	2(0.4)	3(5.0)	258(51.6)	79(26.2)
Separated	12(27.3)	0	3(7.3)	0	20(45.5)	2(5.3)	0	25(61.0)	9(45.0)
Divorced	7(22.6)	3(14.3)	0	1(8.3)	8(24.2)	1(3.4)	0	19(73.1)	1(5.9)
Widowed	2(13.3)	0	1(7.7)	0	13(18.8)	2(13.3)	0	11(78.6)	4(66.7)
TYPE OF MARRIAGE.									
Monogamy	347(25.4)	105(10.4)	157(12.2)	36(7.3)	431(31.5)	88(6.9)	8(4.2)	737(59.2)	197(28.9)
Polygyny	35(21.5)	8(7.5)	23(15.9)	4(11.1)	22(14.1)	10(6.7)	0	71(51.8)	14(22.6)
CURRENT FAMILY SIZE									
0-3 children	241(19.0)	59(6.7)	73(6.3)	37(7.1)	611(46.1)	19(1.6)	6(3.6)	72(57.1)	193(27.9)
4-5 children	103(29.8)	31(12.2)	51(15.6)	10(8.7)	92(26.6)	33(10.4)	3(5.9)	182(58.5)	50(28.4)
6+ children	113(20.6)	40(10.5)	69(13.5)	10(6.5)	97(18.4)	53(10.1)	2(3.1)	264(56.1)	61(27.7)
PREFERRED FAMILY SIZE									
0-3	251(26.7)	79(10.8)	93(10.8)	33(8.5)	446(46.9)	59(6.8)	7(4.9)	501(58.9)	116(24.6)
4-5	164(20.0)	38(6.6)	76(9.8)	22(7.3)	289(34.1)	33(4.3)	3(3.0)	431(58.3)	120(27.8)
6+	34(13.2)	6(4.2)	15(6.3)	2(2.7)	47(17.9)	7(2.9)	1(4.2)	123(53.2)	48(38.4)
Any Number/ God knows	11(7.4)	8(10.7)	10(7.6)	0	20(13.9)	6(4.7)	0	66(46.5)	20(33.9)
USUAL PLACE OF RESIDENCE									
Urban	130(28.0)	43(13.0)	41(10.0)	19(8.3)	217(46.9)	21(5.2)	4(3.8)	224(56.1)	42(17.4)
Rural	330(19.4)	88(7.4)	153(9.6)	38(6.8)	585(33.6)	84(5.2)	7(4.0)	897(57.4)	262(31.0)
EXPOSURE TO MASS MEDIA									
Radio	439(22.6)	127(8.9)	188(10.3)	53(7.0)	742(37.9)	94(5.2)	10(3.9)	1035(58.8)	274(27.4)
T.V	215(31.4)	62(11.4)	80(12.5)	35(10.1)	334(48.1)	36(5.5)	8(6.1)	415(65.9)	115(29.4)
Newspaper	349(27.0)	110(10.6)	133(11.0)	49(8.2)	581(44.0)	66(5.4)	10(4.5)	695(58.4)	170(24.4)
RELIGION									
Catholic	149(19.9)	45(8.5)	59(8.4)	18(6.5)	288(37.4)	40(5.7)	5(4.9)	433(61.5)	128(32.4)
Protestant	273(22.7)	74(8.5)	119(10.6)	37(8.4)	443(36.3)	56(5.0)	5(3.7)	588(54.7)	153(26.0)
Muslim	19(20.0)	8(13.6)	7(8.8)	1(2.6)	32(33.3)	4(4.8)	0	38(50.0)	12(21.1)
Traditional	19(15.8)	4(5.9)	9(8.8)	1(2.9)	39(33.1)	5(4.5)	1(4.8)	62(57.4)	11(23.4)

SOURCE: COMPUTED FROM KDHS 1993 DATA (In parentheses are the row percentages)

Table 3.7.5 shows that levels of ever use of family planning methods are considerably low, especially for modern methods. No man reported ever use of male sterilization (vasectomy).

Table 3.7.6 Current Use of Family Planning Methods: Number and Percentage of Male Users of specific methods by selected background variables

PROVINCE	PILL	IUD	INJECT	FOAM/ JELLY	CONDOM	T.L	NORPLANT	NFP	WITHDRAWAL
Nairobi	21(11.9)	4(8.3)	7(6.4)	2(50.0)	26(9.0)	6(6.5)	--	26(6.4)	--
Nyanza	12(6.8)	1(2.1)	17(15.5)	--	13(4.5)	15(16.3)	--	32(7.9)	1(5.0)
Central	36(20.3)	15(31.3)	10(9.1)	--	52(18.0)	14(15.2)	--	35(8.6)	--
Coast	21(11.9)	4(8.3)	11(10.0)	1(25.0)	36(12.5)	5(5.4)	1(100)	49(12.1)	4(20.0)
Eastern	39(22.0)	12(25)	18(16.4)	1(25.0)	43(14.9)	16(17.4)	--	109(26.8)	2(10.0)
R.V.	25(14.1)	9(18.8)	33(30.0)	--	81(28.0)	27(29.3)	--	147(36.2)	13(65.0)
Western	23(13.0)	3(6.3)	14(12.7)	--	38(13.1)	9(9.8)	--	8(2.0)	--
Column total 177	48	48	110	4	289	92	1	406	20
AGE									
20-24	13(7.3)	1(2.1)	3(2.7)	1(25)	124(42.9)	--	--	90(22.2)	2(10.0)
25-29	43(24.3)	7(14.6)	11(10)	2(50)	74(25.6)	--	1(100)	69(17)	5(25.0)
30-34	48(27.1)	9(18.8)	28(25.5)	--	48(16.6)	6(6.5)	--	70(17.2)	5(25.0)
35-39	23(13.0)	12(25.0)	24(21.8)	1(25.0)	18(6.2)	13(14.1)	--	64(15.8)	2(10.0)
40-44	27(15.3)	7(14.6)	27(24.5)	--	22(7.6)	26(28.3)	--	59(14.5)	1(5.0)
45-49	15(8.5)	6(12.5)	11(10.0)	--	2(0.7)	27(29.3)	--	37(9.1)	4(20.0)
50-54	8(4.5)	6(12.5)	6(5.5)	--	1(0.3)	20(21.7)	--	17(4.2)	1(5.0)
Column total 177	48	48	110	4	289	92	1	406	20
EDUCATION									
None	9(5.1)	1(2.1)	2(1.8)	--	6(2.1)	7(7.6)	27(6.7)	27(6.7)	2(10.0)
Primary	80(45.2)	16(3.3)	51(46.4)	--	138(47.8)	55(59.8)	1(100)	229(56.4)	12(60.0)
Sec.	83(46.9)	27(56.3)	52(47.3)	4(100)	135(46.7)	26(28.3)	--	143(35.2)	6(30.0)
Post Sec.	5(2.8)	4(8.3)	5(4.5)	--	10(3.5)	4(4.3)	--	7(1.7)	--
Column total 177	48	48	110	4	289	92	1	406	20
EXPOSURE TO MASS MEDIA									
Radio	174(98.3)	47(97.9)	105(95.5)	4(100)	268(93.1)	82(89.1)	1(100)	37(91.4)	17(85)
Television	95(53.7)	22(45.8)	38(34.5)	3(75.0)	134(46.7)	32(34.8)	--	132(32.5)	4(20.0)
Newspaper	135(79.9)	4(93.6)	74(69.2)	4(100)	211(75.4)	57(67.9)	1(100)	219(60.2)	6(33.3)
USUAL PLACE OF RESIDENCE									
Urban	52(29.4)	17(35.4)	22(20.0)	3(75)	73(25.3)	18(19.6)	1(100)	56(13.8)	--
Rural	125(70.6)	31(64.6)	88(80.0)	1(25)	216(74.7)	74(80.4)	--	350(86.2)	20(100)
Column total 177	48	48	110	4	289	92	1	406	20
CURRENT MARITAL STATUS									
Married	162(91.5)	44(91.7)	108(98.2)	1(25.0)	116(40.1)	92(100)	1(100)	312(76.8)	17(85)
Never married	11(6.2)	3(6.3)	1(0.9)	3(75)	165(57.1)	--	--	88(21.8)	2(10)
Separated	1(0.6)	--	1(0.9)	--	5(1.7)	--	4	--	--
Divorced	2(1.1)	1(2.1)	--	--	2(0.7)	--	--	1	1
Widowed	1(0.6)	--	--	--	1(0.3)	--	--	--	--
Column total 177	48	48	110	4	289	92	1	406	20
TYPE OF MARRIAGE									
Monogamy	149(92.0)	42(95.5)	99(91.7)	--	112(96.6)	83(90.2)	1(100)	283(90.7)	15(88.2)
Polygamy	13(8.0)	2(4.5)	9(8.3)	1(100)	4(3.4)	9(9.8)	--	29(9.3)	2(11.8)
Column total 162	44	44	108	1	116	92	1	312	17
PREFERRED FAMILY SIZE									
0-3 children	96(54.2)	31(64.6)	59(53.6)	3(75)	154(53.3)	52(56.5)	1(100)	151(37.2)	4(20.0)
4-5 children	66(37.3)	14(29.2)	38(34.5)	1(25)	111(38.4)	29(31.5)	--	161(39.7)	12(60.0)
6+ children	13(7.3)	1(2.1)	10(9.1)	--	20(6.9)	6(6.5)	--	58(14.3)	2(10.0)
Any Number/ God knows.	2(1.1)	2(4.2)	3(2.7)	--	4(1.4)	5(5.4)	--	36(8.9)	2(20.0)
CURRENT FAMILY SIZE									
0-3 children	92(52.3)	24(50.0)	36(33.0)	4(100.0)	241(83.4)	11(12.0)	1(100)	225(55.6)	13(65.0)
4-5 children	44(25.0)	11(22.9)	34(31.2)	--	21(7.3)	30(32.6)	--	70(17.3)	2(10.0)
6+ children	40(22.7)	13(27.1)	39(35.8)	--	27(9.3)	51(55.4)	--	110(27.2)	5(25.0)
Column total 178	48	48	109	4	289	92	1	405	20
RELIGION									
Catholic	54(30.5)	16(33.3)	34(30.9)	1(25.0)	92(31.8)	37(40.2)	--	183(45.1)	7(35.0)
Protestant	109(61.6)	29(60.4)	68(61.8)	3(75)	167(57.8)	47(51.1)	--	193(47.5)	13(65)
Muslim	9(5.1)	3(6.3)	3(3.6)	--	12(4.2)	3(3.3)	--	9(5.6)	--
Traditional	5(2.8)	--	6(5.5)	--	18(6.2)	5(5.4)	1(100)	21(5.2)	--
Column total 177	48	48	110	4	289	92	1	406	20

SOURCE: Computed from Study data (1993 KDHS) In parentheses are the column percentages

Table 3.7.8 Current Use of any Family Planning method by Province

CURRENTLY USING ANY METHOD	NYANZA	NAIROBI	CENTRAL	COAST	WESTN	R.V.	EASTN	TOTAL
YES	96 (61.1)	95 (73.1)	167 (70.5)	135 (59.2)	104 (80.0)	353 (75.3)	245 (84.5)	1195 (72.8)
NO	61 (38.9)	35 (26.9)	70 (29.5)	93 (40.8)	26 (20)	116 (24.7)	45 (15.5)	446 (27.2)
TOTAL	157 (9.6)	130 (7.9)	237 (14.4)	228 (13.9)	130 (7.9)	469 (28.6)	290 (17.7)	1641 (100.0)

Number of missing cases:695 df = 6 Significance = 0.000 Computed $X^2 = 57.551$ Tabulated $X^2(0.05) = 12.592$

In respect of the above distribution, the hypotheses for testing are:

H_0 : There is no association between province/region and men's use of family planning.

H_1 : There exists a significant association between province/region and men's use of family planning.

Since the value of the X^2 calculated is greater than the value of X^2 critical, the null hypothesis (H_0) is rejected and the alternative accepted at 0.05 level of significance. That is, the province where a man inhabits is likely to influence his use of family planning. Therefore, the differences observed in family planning practice among men between the provinces is statistically significant and are not due to chance.

Table 3.7.9 Current Use of any Family Planning method by Education

CURRENTLY USING ANY METHOD	NONE	PRIMARY	SECONDARY	POST SEC.	TOTAL
YES	61 (65.6)	604 (70.9)	493 (75.3)	37 (90.2)	1195 (72.8)
NO	32 (34.4)	248 (29.1)	162 (24.7)	4 (9.8)	446 (27.2)
TOTAL	93(5.7)	852(51.9)	655(39.9)	41(2.5)	1641(100.0)

Number of Missing cases:695 Computed $X^2 = 12.327$ DF=3 Sign=0.00634 Tabulated $X^2(0.05) = 7.815$

For the above distribution, the following hypotheses have been formulated:

H_0 :There exists no association between level of education and family planning practice among men.

H_1 :There is a significant relationship between level of education and family planning practice among men.

The value of X^2 computed is greater than the X^2 tabulated at 0.05 level of significance.

The null hypothesis is rejected and the alternative accepted. Education therefore has a statistically significant association with men's use of family planning. Looking at the table above, current practice of family planning is highest (90.2%) among those men with the highest level of education and is lowest among the least educated.

3.6.3 Current Use of any Family Planning method by Exposure to Mass Media

Table 3.8 Current Use by Radio Listnership

CURRENTLY USING ANY METHOD	LISTENS TO RADIO AT LEAST ONCE A WEEK:		
	YES	NO	TOTAL
YES	1112(74.0)	82(59.9)	1194(72.8)
NO	391(26.0)	55(40.1)	446(27.2)
TOTAL	1503(91.6)	137(8.4)	1640(100.0)

Number of missing observation:696 Computed $X^2 = 12.663$ DF=1 Significance=0.00037 Tabulated $X^2(0.05) = 3.841$

Table 3.8.1 Current Use by Television Viewing

CURRENTLY USING ANY METHOD	WATCHES TV AT LEAST ONCE A WEEK		
	YES	NO	TOTAL
YES	473(79.0)	720(69.2)	1193(72.8)
NO	126(21.0)	320(30.8)	446(27.2)
TOTAL	599(36.5)	1040(63.5)	1639(100.0)

Number of missing observations:697 Computed $X^2 = 18.183$ DF = 1 Significance = 0.00002 Tabulated $X^2(0.05) = 3.841$

Table 3.8.2 Current Use by Newspaper reading

CURRENTLY USING ANY METHOD	READS NEWSPAPER AT LEAST ONCE A WEEK		
	YES	NO	TOTAL
YES	778(74.2)	339(71.1)	1117(73.2)
NO	271(25.8)	138(28.9)	409(26.8)
TOTAL	1049(68.7)	477(31.3)	1526(100.0)

Number of missing observations:810 Computed $X^2 = 1.603$ DF = 1 Significance = 0.20551 Tabulated $X^2(0.05) = 3.841$

For the distributions shown in the three tables above i.e. radio listnership, TV viewing and newspaper reading, the hypotheses for testing are:

H_0 :Exposure to mass media has no influence on men's practice of family planning.

H_1 :Exposure to mass media has a significant effect on men's practice of family planning.

In the case of the first two measures of exposure to mass media (radio and TV), the computed value of X^2 is greater than the tabulated value at 0.05 level of significance. For the other measure(reading newspaper), the computed chi-square is less than the tabulated value at the same level of significance. We therefore reject the null hypothesis and accept the alternative on account of radio and TV only but apply the reverse on account of newspaper reading. This means that while regular access to both radio and TV is likely to influence men's practice of family planning, the same

is not true for newspaper reading.

Table 3.8.3 Current Use of any Family planning method by Age

CURRENTLY USING ANY METHOD	AGE GROUP(IN YEARS)							TOTAL
	20-24	25-29	30-34	35-39	40-44	45-49	50-54	
YES	236 (66.3)	215 (70.3)	222 (74.2)	167 (79.9)	179 (81.7)	111 (74.0)	65 (63.7)	1195 (72.8)
NO	120 (33.7)	91 (29.7)	77 (25.8)	42 (20.1)	40 (18.3)	39 (26.0)	37 (36.3)	446 (27.2)
TOTAL	356 (21.7)	306 (18.6)	299 (18.2)	209 (12.7)	219 (13.3)	150 (9.1)	102 (6.2)	1641 (100.0)

Number of missing observations:695 Computed $X^2=27.447$ DF=6 Significance=0.00012 Tabulated $X^2(0.05)=12.592$

The hypotheses for testing in respect of the above distribution are:

H_0 :There exists no relationship between age and male use of family planning.

H_1 :There exists a statistically significant relationship between age and male use of Family planning.

The computed x^2 value is greater than the critical value at 0.05 level of significance.

The null hypothesis is rejected and the alternative accepted at 95 percent level of confidence. Thus, the observed differences in current use among men at various ages are significant. As illustrated in the above table, current use increases with advancing age upto age-group 50-54 when it falls to the lowest (63.7). It is highest among men in the age-group 30-34 to 45-49 years.

Table 3.8.4 Current Use of any Family Planning method by Current Marital Status

CURRENTLY USING ANY METHOD	CURRENTLY MARRIED	NEVER MARRIED	SEPARATED	DIVORCED	WIDOWED	TOTAL
YES	900(77.1)	274(67.3)	12(38.7)	6(26.1)	3(23.1)	1195(72.8)
NO	267(22.9)	133(32.7)	19(61.3)	17(73.9)	10(76.9)	446(27.2)
TOTAL	1167(71.1)	407(24.8)	31(1.9)	23(1.4)	13(0.8)	1641(100.0)

Number of missing observations:695 Computed $X^2=76.979$ DF=4 Significance=0.0000 Tabulated $X^2(0.05)=9.488$

The computed chi-square value is far greater than the tabulated value at 95

percent level of significance. The null hypothesis stating that there is no association between marital status and use of family planning has been rejected and the alternative confirmed. Thus, men's marital status is statistically associated with their practice of family planning. Current use of family planning is highest among the currently married (77.1%), followed by the never married(67.3) and is lowest among widowers(23.1%).

Table 3.8.5 Current Use of any Family Planning method by Type of Marriage

CURRENTLY USING ANY METHOD	MONOGAMY	POLYGyny	TOTAL
YES	822(77.2)	78(76.5)	900(77.1)
NO	243(22.8)	24(23.5)	267(22.9)
TOTAL	1065(91.3)	102(8.7)	1167(100.0)

Number of missing observations:1169 Computed $X^2 = 0.02678$ df = 1 Significance = 0.87000 Tabulated $X^2(0.05) = 3.841$

The following hypotheses have been formulated for testing in respect to the distribution above:

H_0 : Men's type of marriage has no association to their use of family planning.

H_1 : Men's type of marriage has a significant association to their use of family planning

Since the value of X^2 calculated is less than the value of X^2 critical, the null hypothesis is accepted and the alternative rejected. Thus the observed differences in use among polygynous and monogamous men are not significant. Men in polygynous unions are just as likely as monogamous men to practice family planning.

Table 3.8.6 Current Use of any Family Planning method by Current Family Size

CURRENTLY USING ANY METHOD	0-3 CHILDREN	4-5 CHILDREN	6+ CHILDREN	TOTAL
YES	659(68.1)	226(81.3)	307(78.5)	1192(72.8)
NO	309(31.9)	52(18.7)	84(21.5)	445(27.2)
TOTAL	968(59.1)	278(17.0)	391(23.9)	1637(100.0)

Number of missing observations:699 Computed $X^2=27.492$ DF=2 Significance=0.0000 Tabulated $X^2(0.05)=5.991$

H_0 : There is no significant association between current family size and men’s practice of family planning.

H_1 : There is a statistically significant association between current family size and men’s practice of family planning.

Since the computed chi square value is greater than the tabulated value at 95% level of significance, we therefore reject the null hypothesis and conclude that there is a significant relationship between family planning use and current family size.

Table 3.8.7 Current Use of any Family Planning method by Preferred Family Size

CURRENTLY USING ANY METHOD	0-3 CHILDREN	4-5 CHILDREN	6+ CHILDREN	ANY NUMBER/ GOD KNOWS	TOTAL
YES	564 (72.8)	451 (73.3)	119 (70.8)	61 (73.5)	1195 (72.8)
NO	211 (27.2)	161 (26.7)	49 (29.2)	22 (26.5)	446 (27.2)
TOTAL	775 (47.2)	615 (37.5)	168 (10.2)	83 (22.6)	1641 (100.0)

Number of missing observations:695 Computed $X^2=0.437$ DF=3 Significance=0.93255 Tabulated $X^2(0.05)=7.815$

There does not seem to be any significant difference by preferred family size in current use of any family planning method among men. The chi square results show that there is no significant relationship between current use of family planning and preferred family size. We therefore fail to reject the null hypothesis that denies the existence of such a relationship.

Table 3.8.8 Current Use of any family planning method by Usual Place of Residence

CURRENTLY USING ANY METHOD	URBAN	RURAL	TOTAL
YES	252 (70.0)	943 (73.6)	1195 (72.8)
NO	108 (30.0)	338 (26.4)	446 (27.2)
TOTAL	360 (21.9)	1281 (78.6)	1641 (100.0)

Number of missing observations:695 Computed $X^2 = 1.855$ DF = 1 Significance = 0.17321 Tabulated $X^2(0.05) = 3.841$

H_0 : There exists no association between place of residence and men’s practice of family planning

H_1 : there exists a statistically significant relationship between place of residence and men’s practice of family planning.

Since the computed chi square is less than the tabulated (at 0.005 level of significance, we fail to reject the null hypothesis and conclude that there exists no significant relationship between current use and place of residence. Men living in the rural area as just as likely as their counterparts living in urban areas to use or not to use any family planning method.

Table 3.8.9 Current Use of any Family Planning method by Religion

CURRENTLY USING ANY METHOD	CATHOLIC	PROTESTANT	MUSLIM	TRADITIONAL	TOTAL
YES	443(73.8)	654(73.7)	40(64.5)	58(63.0)	1195(72.8)
NO	157(26.2)	233(26.3)	22(35.5)	34(37.0)	446(27.2)
TOTAL	600(36.6)	887(54.1)	62(3.8)	92(5.6)	1641(100.0)

Number of missing observations:695 Computed $X^2 = 7.287$ DF = 3 Significance = 0.06330 Tabulated $X^2(0.05) = 7.815$

H_0 : Religion has no influence on men’s use of family planning.

H_1 : Religion has a significant influence on men’s use of family planning.

The calculated chi-square value is less than the tabulated value at 0.05 level of significance. The null hypothesis is accepted and the alternative rejected at 95% level of confidence. There is no significant relationship between family planning use and religion.

3.7 Results of Multiple Logistic Regression Analysis

3.7.1 Introduction

This section presents the results of the logistic regression, the main objective of which is to determine which variables have a significant effect on men's knowledge, attitude and practice of family planning. In order to determine such variables, three logistic models were fitted using the stepwise regression procedure. This method selects and includes variables into the regression model on the basis of their level of significance. First, each of the independent variables was recoded and specified in the form of dummy variables as earlier described.

Thus, for model one (see Table 3.8.9), that tested knowledge of family planning source, education was the most significant variable and was therefore the first to be planted onto the model. The other models were similarly developed as shown in tables 3.9 and 3.9.1.

Table 3.8.9 Logistic Regression estimates on the Influence of selected independent variables on men's knowledge of family planning

VARIABLES	EQUATIONS							
	1	2	3	4	5	6	7	8
PRMED B Sig Exp B	1.1966 0.0000 3.3088	1.0915 0.0000 2.978	1.0245 0.0000 2.7858	1.0811 0.0000 2.9480	1.0884 0.0000 2.9694	0.9703 0.0000 2.6388	0.9573 0.0000 2.6047	0.9434 0.0000 2.5687
RADIO1 B Sig Exp B		0.7989 0.0000 2.2230	0.7884 0.0000 2.1998	0.7748 0.0000 2.1702	0.7836 0.0000 2.1894	0.6641 0.0002 1.9427	0.5935 0.0010 1.8103	0.5968 0.0010 1.8103
MSLM B Sig Exp B			-1.0935 0.0000 0.3350	-1.0988 0.0000 1.5606	-1.0536 0.0000 0.3487	-1.0156 0.0000 0.3622	-0.9371 0.0002 0.3918	-0.8868 0.0004 0.4120
CURMAR B Sig Exp B				0.4451 0.0045 1.5606	0.4492 0.0042 1.5671	0.4661 0.0031 1.5938	0.4712 0.0029 1.6019	0.4699 0.0031 1.5998
PREF2 B Sig Exp					0.3992 0.0069 1.4907	0.3850 0.0094 1.4696	0.3595 0.0158 1.4326	0.3484 0.0195 1.4167
NPAPER1 B Sig Exp B						0.3855 0.0125 1.4703	0.4471 0.0043 1.5638	0.4807 0.0024 1.6173
WSTN B Sig Exp B							0.7267 0.0068 2.0683	0.6697 0.0133 1.9536
COAST B Sig Exp B								-0.3935 0.0418 0.6747
Constant Sig	0.7409 0.0000	0.1203 0.4186	0.2349 0.1234	-0.0900 0.6376	-0.2523 0.2089	-0.3081 0.1279	-0.3453 0.0896	-0.2883 0.1609

Source: computed from KDHS 1993 data

3.7.2 Discussion of results for model one

This model includes only those variables which were found to have some significant influence, either negative or positive, on men's family planning knowledge. These include: education, province/ region inhabited, exposure to mass media, religious affiliation, marital status, and preferred family size. They remain significant

throughout the whole equation and their effect is reflected after every additional variable is included. Few other variables were found to be wholly insignificant and were thrown out of the model. These were age, place of residence, type of marriage and current family size. This could have been partly due to multicollinearity i.e if their values, or rather what they were supposed to measure, is usurped by other more powerful variables, or they did not have an independent /direct effect on the dependent variable but worked through unspecified intervening factors.

This is consistent with earlier analysis of cross-tabulations which did not find any considerable difference in family planning knowledge between the different age groups. This marginal difference could have made the variable to be thrown out of the model. Similarly, no significant association was found between type of marriage and family planning knowledge. The chi square test also failed to confirm a proposed relationship, between knowledge and rural/urban place of residence. No relationship was found between knowledge and current family planning either.

The most significant variable in this model is primary level of education, which was found to be positively related to family planning knowledge. It remained significant throughout the equations. The logit coefficient due to this variable is 1.1966, significant at 0.0000. When the variable was introduced into the equation, it increased the odds of family planning knowledge by 3.3088 times as compared to no education (reference category). This implies that those men with primary level of education are much more likely to know about family planning than those with no education.

With this finding, the null hypothesis that there is no relationship between education and men's knowledge of family planning is rejected and the alternative confirmed. This is in agreement with earlier results of chi-square analysis. Education

upto primary level is enough to impact positively on men's knowledge of family planning.

The second most significant variable in this model is exposure to mass media. Listening to radio at least once a week has a positive influence on men's family planning knowledge. The regression coefficient due to this variable is 0.7989, significant at 0.0000. When it was introduced into the equation, it raises the odds of knowledge by 2.2230 times as compared to those with no access to radio. Radio is the major conveyor of family planning information in Kenya, and it reaches a wider audience than any other media.

Similarly, reading newspaper weekly also came out as significantly and positively related to family planning knowledge, though at a lesser significance level(0.0125). It has a logit coefficient of 0.3855. This is significant, but not as highly as that of radio. Nonetheless, reading newspaper increased the odds of family planning knowledge by 1.4703 times as compared to those who had no access to newspaper.

Thus the null hypothesis that there is no relationship between exposure to mass media and family planning knowledge is rejected and the alternative is accepted. It can therefore be deduced that men who are exposed to radio and newspapers are more likely than those who are not to know about family planning.

The category of religion that came out with significant was influence is Islamic religion. Islam, when added into the stepwise equation significantly reduces the odds of family planning knowledge by a factor of 0.3350 times. The odds of not knowing increase greatly to 1.5606 as marital status (currently married) is introduced into the equation, but decrease when preferred family size is brought into consideration, and picks up as additional variables are slotted in. The logit coefficient due to this variable

is -1.0935, significant at 0.0000. This means that there is a statistically significant negative association between this variable and men's family planning knowledge. Moslem men are less likely than traditional believers (the reference category) to know of family planning.

The null hypothesis that religion has no influence on men's knowledge of family planning is therefore rejected and the alternative confirmed. Religion has a statistically significant influence on family planning knowledge.

Marital status was introduced into the model in the fourth equation and was found to be significantly associated with men's family planning knowledge. Compared to the never married (reference) category, being married increases the odds of family planning knowledge by a factor of 1.5606 times. These odds keep increasing as additional variables are introduced. The logit coefficient for the variable currently married is 0.4451, significant at 0.0045. There is a significant positive relationship between married status and family planning knowledge.

The cross-tabulation results also revealed that knowledge of family planning source was highest among married men (74.9%). With these results, the null hypothesis that marital status has no significant influence on knowledge is therefore rejected and the alternative accepted. This finding implies that those who are currently married know more about family planning compared to those who are never married. It can be concluded that being married has a strong positive influence on men's knowledge of family planning.

There was a positive relationship between preference for a family size of 4-5 children and family planning knowledge. The regression coefficient for this variable is 0.3992, significant at 0.0069. The inclusion of this variable increases the odds of family planning knowledge by upto 1.4907 times as compared to preference for 0-3

children. However, the strength of influence and significance of this variable continues to fall as other variables are included into the equation.

The findings nevertheless confirm the hypothesis that the variable preferred family size has a significant influence on family planning knowledge. One who desires a specific number of children has a specific demographic goal to achieve and may be on the look out for the means to this end. The cross-tabulation results also find this category of men to have the highest knowledge of family planning(78.8%). On this account, the null hypothesis that preferred family size has no influence on men's preferred family size has been rejected, and the alternative confirmed. Men's preferred family size is likely to influence their knowledge of family planning.

Province or region inhabited was the last variable selected into the stepwise equation. While living in Western province contributes positively to men's family planning knowledge, living in Coast province has a negative association with family planning knowledge. This is in comparison to the reference category (living in Nairobi). The regression coefficient for the two variables are 0.7267 and -0.3935 for Western and Coast provinces respectively. While living in Western province increases the log odds of family planning knowledge by 2.0683 times, living in Coast reduces the odds by 0.6747 times compared to living in Nairobi. Infact it was the variable that reduced family planning by the greatest margin.

According to cross-tabulation results, 85.8% of the men living in Western province knew of a family planning source where they could obtain information and services. Coast province had the least percentage(64.3%). The hypothesis that province/ region inhabited by a man influences his knowledge of family planning has been confirmed by this result.

3.7.3 Model Two

Table 3.9 Logistic Regression estimates on the influence of demographic, socioeconomic and sociocultural variables on men's attitude toward family planning

VARIABLE	EQUATIONS								
	1	2	3	4	5	6	7	8	9
PREF4 B Sig Exp B	-2.0970 0.0000 0.1228	-2.4293 0.0000 0.0881	-2.2090 0.0000 0.1098	-2.2110 0.0000 0.1096	-2.1687 0.0000 0.1143	-2.6333 0.0000 0.0718	-2.6851 0.0000 0.0682	-2.5808 0.0000 0.0757	-2.6064 0.0000 0.0738
PREF3 B Sig Exp B		-1.4623 0.0000 0.2317	-1.2496 0.0000 0.2866	-1.3013 0.0000 0.2722	-1.2316 0.0000 0.2918	-1.7003 0.0000 0.1826	-1.7479 0.0000 0.1741	-1.7258 0.0000 0.1780	-1.7665 0.0000 0.1709
NPAPER1 B Sig Exp B			0.9526 0.0000 2.5924	1.2516 0.0000 3.4958	0.9995 0.0000 2.7168	0.9670 0.0000 2.6299	0.9552 0.0000 2.5992	0.8178 0.0001 2.2654	0.7908 0.0001 2.2051
RUR B Sig Exp B				0.9729 0.0000 2.6455	1.0227 0.0000 2.7806	1.0819 0.0000 2.9503	0.9843 0.0000 2.6758	0.9835 0.0000 2.6739	1.0567 0.0000 2.8767
PRMED B Sig Exp B					0.9640 0.0001 2.6221	0.9285 0.0001 2.5306	0.9208 0.0002 2.5112	0.8780 0.0003 2.4060	0.9193 0.0002 2.5074
PREF2 B Sig Exp B						-0.7783 0.0018 0.4592	-0.7892 0.0015 0.4542	-0.7624 0.0023 0.4665	-0.7446 0.0029 0.4749
NYZA B Sig Exp B							0.8469 0.0050 2.3325	0.9822 0.0014 2.6704	0.9146 0.0032 2.4958
RADIO1 B Sig Exp B								0.6607 0.0014 1.9362	0.7231 0.0005 2.0609
WSTN B Sig Exp B									-0.5919 0.0196 0.5533
Constant Sig	2.7736 0.0000	3.1059 0.0000	2.6010 0.0000	1.7306 0.0000	1.5539 0.0000	1.9838 0.0000	1.9975 0.0000	1.4848 0.0000	1.4708 0.0000

Source: Computed from KDHS 1993 Data

3.7.4 Discussion of Results for Model Two

When the selected independent variables were regressed with family planning attitude, five variables came out as significantly associated to men's attitude toward family planning, some positively and others negatively. These variables are preferred family size, exposure to mass media, educational attainment, rural residence and province/region inhabited.

(i) Influence of Preferred Family size

Those men who reported that they preferred a family size of "any" number of children, 6 or more, and 4-5 children were all less likely than those who preferred between zero and three children to approve of family planning attitude. The association here is negative.

When preference for any number of children was introduced into the model, it reduced the odds of family planning approval by a factor 0.1228 times to the reference category. The logit coefficients due to this variable is -2.0970, significant at 0.0000. The regression coefficients for preference of 6 or more and 4-5 children are -1.4623 and -0.7783 respectively.

The relationship between preferred family size and family planning attitude is such that the bigger the family size preferred, the lesser the probability that a person will approve of family planning. This shows the strong influence of socio-cultural factors on men's family planning attitude. In this particular case, men's preference for big family sizes comes out clearly as a major barrier to family planning approval. The null hypothesis that men's preferred family size does not have a significant influence on their attitude toward family planning is rejected. The influence is present, negative and significant.

(ii) Influence of Exposure to mass media

For the measures of this variable, only reading newspaper and listening to radio(at least once a week) were found to be significantly associated with men's family planning attitude.

Reading newspaper and listening to radio were the socioeconomic variables that came out with the most significant positive relationship to family planning attitude. The logit coefficient for newspaper reading was 0.9526, significant at 100% confidence level. Upon its introduction, the odds of family planning approval increase 2.99524 times compared to the category of not reading newspaper. It remains the variable that increased the odds of family planning approval by the greatest margin, 3.4958 times (see equation 4), and this is when rural residence is introduced. This shows that despite living in the rural area, if one is regularly exposed to mass media, he is likely to have a favourable attitude toward family planning. The regression coefficient due to radio listnership is 0.6607, and those who are exposed to radio are 1.9362 times more likely to approve family planning than those who have no access to radio.

Going by these results , we accept the hypothesis that exposure to mass media has a significant influence on men's family planning attitude. The influence here is positive.

(iii) Influence of Place of Residence

There is a significant positive relationship between those men who are living in the rural areas and family planning attitude. The regression coefficient for this variable is 0.9729, highly significant at 0.0000. This may not be consistent with past findings, but the cross tabulation analysis also failed to find a significant difference in men's

family planning attitude by rural/urban place of residence. The difference was very dismal, (only 2%), and therefore statistically insignificant.

(iv) Influence of Education

Men with primary level of education are upto 2.6221 times more likely to approve of family planning than their colleagues without education. The logit coefficient for this variable is 0.9640, implying a significant positive influence on attitude. The hypothesis that stated that education is positively related to family planning attitude has been confirmed.

(v) Influence of Province/region inhabited

The province or region which a person inhabits is likely to have some effect on his attitude toward family planning. For example, the analysis shows that while living in Nyanza province increases the odds of family planning approval by 0.3647 times as compared to the reference category (living in Nairobi province), men living in Western province were upto 0.5533 times less likely than those living in Nairobi to approve of family planning. The logit coefficients due to Nyanza and Western are 0.8469 and -0.5919 respectively. The null hypothesis that province has no influence on attitude is therefore rejected. .

Table 3.9.1 Logistic Regression Estimates on the influence of selected independent variables on Current Use of Family Planning.

VARIABLE	EQUATIONS											
	1	2	3	4	5	6	7	8	9	10	11	12
CURMAR B Sig Exp B	0.7156 0.0000 2.0453	0.7098 0.0000 2.0336	0.6139 0.0000 1.8476	0.6392 0.0000 1.8950	0.6343 0.0000 1.8857	0.5242 0.0000 1.6891	0.5804 0.0000 1.7867	0.5156 0.0001 1.6747	0.5237 0.0000 1.6882	0.4411 0.0012 1.5545	0.4379 0.0013 1.5495	0.4402 0.0012 1.5531
EASTN B Sig Exp B		0.8232 0.0000 2.2777	0.9589 0.0000 2.6087	0.9310 0.0000 2.5371	0.8110 0.0000 2.2501	0.9047 0.0000 2.4711	0.9529 0.0000 2.5933	0.9822 0.0000 2.6702	0.9020 0.0000 2.4645	0.9074 0.0000 2.4779	0.9036 0.0000 2.4684	0.9194 0.0000 2.5077
DIVOD B Sig Exp B			-2.0591 0.0000 0.1276	-2.0644 0.0000 0.1269	-2.0546 0.0001 0.1281	-2.2189 0.0000 0.1087	-2.1193 0.0000 0.1201	-2.1987 0.0000 0.1109	-2.1788 0.0000 0.1132	-2.2503 0.0000 0.1054	-2.2359 0.0000 0.1069	-2.2609 0.0000 0.1043
TV1 B Sig Exp B				0.5249 0.0000 1.6902	0.5680 0.0000 1.7647	0.5745 0.0000 1.7762	0.5761 0.0000 1.7790	0.5539 0.0000 1.7400	0.5232 0.0000 1.6875	0.5322 0.0000 1.7027	0.4836 0.0002 1.6219	0.4705 0.0003 1.6007
COAST B Sig Exp B					-0.6422 0.0000 0.5261	-0.6755 0.0000 0.5089	-0.6922 0.0000 0.5005	-0.6929 0.0000 0.5001	-0.7668 0.0000 0.4645	-0.7563 0.0000 0.4694	-0.7543 0.0000 0.4704	-0.7438 0.0000 0.4753
SPRTED B Sig Exp B						-1.5419 0.0001 0.2140	-1.5694 0.0001 0.2082	-1.6376 0.0000 0.1945	-1.6017 0.0001 0.2016	-1.6509 0.0000 0.1919	-1.6819 0.0000 0.1860	-1.6760 0.0000 0.1871
AGEGRP7 B Sig Exp B							-0.7431 0.0013 0.4756	-0.7077 0.0024 0.4928	-0.7186 0.0021 0.4874	-0.6352 0.0072 0.5298	-0.6344 0.0073 0.5302	-0.6068 0.0107 0.5451
WIDOD B Sig Exp B								-1.8880 0.0060 0.1514	-1.8435 0.0077 0.1583	-2.0807 0.0035 0.1248	-2.0036 0.0050 0.1349	-2.0472 0.0042 0.1291
NYZA B Sig Exp B									-0.5074 0.0069 0.6021	-0.4960 0.0085 0.6090	-0.4835 0.0106 0.6166	-0.4964 0.0088 0.6087

AGEGRP5 B Sig Exp B										0.4709 0.0190 1.6015	0.4793 0.0172 1.6150	0.4869 0.0157 1.6272
RADIO1 B Sig Exp B											0.4516 0.0221 1.5709	0.4298 0.0303 1.5369
MSLM B Sig Exp B ⁺												-0.4989 0.0367 0.6072
Constant Sig	0.4996 0.0000	0.3817 0.0001	0.4622 0.0000	0.2726 0.0133	0.3803 0.0008	0.4847 0.0000	0.4909 0.0000	0.5557 0.0000	0.6369 0.0000	0.6296 0.0000	0.2366 0.2643	0.2853 0.1823

Source: Computed from KDHS, 1993 Data

Table 3.9.1 gives 12 equations as they were developed in the regression model. The following variables were isolated as significant: marital status (currently married, divorced, separated and widowed); age (age groups 40-44 and 50-54); Exposure to mass media (TV and radio); province/region (Nyanza, Eastern and Coast); and Religion (Islam). These variables remained the most significant throughout the whole equation, and this is shown as each additional variable is selected and included.

3.7.5 Discussion of Results for Model Three

(i) Influence of Marital Status

The results of the logistic regression show that those men who are currently married are positively associated with men's current use of family planning. The regression coefficient due to the variable "currently married" is 0.7156. This was the first variable to be selected, and hence the most significant. Married men were up to 2.0453 times more likely to be using a family planning method than the never married. Divorced, separated and widowed status all have a negative influence on family planning practice. These are a category of men whose legitimate sexual activity has been interfered with and therefore may not be involved in regular sexual activity and are therefore less exposed to the risk of making a woman pregnant. The coefficients due to these variables are -2.0591, -1.5419 and -1.880 respectively. Divorced status reduced the log odds of family planning practice by a factor of 0.1276 times to the never married category. Separated and widowed status also reduce the odds of practice by a factor of 0.2140 and 0.1514 times respectively.

(ii) Influence of Province/region

While living in Eastern province is positively related to men's use of family planning, living in Coast and Nyanza provinces have a significant negative influence. The regression coefficients for Eastern is 0.8232, -0.6422, and -0.5074 respectively for Coast and Nyanza. The Exp B value for Eastern province is 2.2777, significant at 0.0000. This means that men living in Eastern province are 2.2777 times more likely to use a family planning method than men in Nairobi. This is in agreement with Njogu (1991) who found Eastern province to be one of the regions with high incidence of contraception.

On the other hand, men living in Coast province are 0.5261 times less likely to use a method compared to men living in Nairobi. Living in Nyanza reduces the odds of family planning use by a factor of 0.6021 times to the reference category. The null hypothesis that province or region of residence does not influence men's use of family planning methods has been rejected, and the alternative confirmed.

(iii) Influence of exposure to Mass media

Family planning use is also influenced by exposure to mass media, in this case, watching television and listening to radio, both of which were found to have a significant positive influence on the dependent variable (FP use). The regression coefficient due to TV watching and radio listening are 0.5249 and 0.4516. When the variable watching television at least once a week was introduced, the odds of family planning use rose by 1.6902 times, meaning men who have access to television are upto 1.6902 times more likely than those who have no access to television to use a method. Similarly for radio, those who listen weekly are upto 1.5709 times more likely to use a method than those

who do not listen.

These statistical figures confirm the hypothesis that exposure to mass media has a positive influence on men's use of family planning.

(iv) Influence of Age group

Analysis by age group shows that the different age groups had varying influence on men's use of family planning. Whereas the age group 40-44 was found to be positively associated with current use of family planning, the opposite was the case for the last age group (50-54). The logit coefficient for age group 40-44 is 0.4709 and when it was introduced into the equation, the odds of family planning practice increased by up to 1.6150 times in comparison to the reference category, age group 20-24.

For the age group 50-54, the regression coefficient is -0.7431 and its inclusion into the equation had a reducing effect of up to 0.4756 times on family planning use. This means that men in this category were up to about 48 percent less likely to be using a method. These results are consistent with Ezeh (1996) finding that family planning is highest among husbands in their 40s and falls thereafter (Ezeh et al, 1996). However, Rono (1997) did not find any relationship between age and family planning use among the Nandi of Kenya.

(v) Influence of Religion

Finally, the Islamic religion was found to have a significant negative influence on family planning use among men. The regression coefficient for this variable is -0.4989 and an Exp B of 0.6072, meaning that moslem men were up to 0.6072 times less likely to use

a method. The religion of Islam is often considered to be pronatal in character, and some adherents maintain that children are among the richest blessing Allah bestows. He will provide for the souls He permits to come into the world, and therefore any attempt to curtail fertility would be contrary to the wishes of Allah (God).

According to this view, one would expect that Moslems would be pronatalist in their attitudes toward fertility and therefore less likely to use family planning. This hypothesis seems to be substantiated by studies carried out in different parts of the world e.g Middle East, Central Asia and the Indian subcontinent (see Chaudhury, R.H. 1982, p 119). Such studies have shown high fertility for the Muslims in comparison to their non-muslim neighbours.

CHAPTER FOUR

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

4.1 Introduction

The present study set out to achieve four objectives: The first was to examine the influence of selected demographic, socio-economic and socio-cultural factors on male **knowledge** of family planning in Kenya. The second objective was to examine the influence of selected demographic, socio-economic and socio-cultural factors on male **attitude** towards family planning in Kenya. The third objective was to examine how the same selected factors impact on family planning **practice** among men in Kenya. The fourth and last objective was to isolate the most significant of these factors and their direction of influence on men's knowledge, attitude and practice of family planning in Kenya.

Being a three-fold study, it had three dependent variables, namely knowledge, attitude and practice. Knowledge was examined in terms of specific family planning methods known, and whether a respondent knew of a source where he could obtain family planning information and services. Attitude was measured in terms of whether or not an individual approved of the use of family planning methods to avoid, or delay pregnancy. Lastly, practice was measured by ever-use and current use of "any" family planning method.

To accomplish the general and specific objectives of the study, it was hypothesised at the conceptual level that there are certain demographic, socio-cultural and socio-economic factors that are likely to affect, modify or promote men's knowledge, attitude and practice of family planning. Operationally, these factors were taken as age, marital status, current family size, education, exposure to mass media (radio, television and

newspaper), place of residence, religious affiliation, type of marriage and preferred family size.

In this chapter, an attempt is made to show how far these objectives have been achieved, by first presenting the summary of major findings, with particular reference to the operational hypotheses, and secondly by suggesting how conclusions derived from such findings can reflect on recommendations for policy and further research, the eventual goal being to achieve improved family planning and effective deliberate birth control in Kenya.

4.2 Summary of Findings

The findings of this study are summarized as per the respective objectives and hypotheses.

4.2.1 Knowledge of family planning methods and source

The first set of operational hypotheses linked demographic, sociocultural and socioeconomic variables to knowledge of family planning methods and source, as had been specified in the operational model. Table 3.4 shows the percent of men who knew specific methods cross-tabulated against selected explanatory variables.

Viewed against all explanatory factors, knowledge of various family planning methods was found to be widespread and universally high. The majority of men had heard about specific methods. The data presented in Table 3.4 reveal that some knowledge of family planning is virtually universal among Kenyan men. Even among those with no formal education and among those living in rural areas, a good number reported that they

knew of some methods of family planning. This means public awareness of family planning is common among Kenyan men. However, knowledge of some specific methods such as foam and jelly, norplant, and to some extent vasectomy is relatively low.

The most well-known among the modern methods are the pill, injection, female sterilization, condom and the IUD (even though IUD is known to less than half the men interviewed in Nyanza). Rhythm is the best known traditional method, followed by withdrawal. This scenario was more or less similar when each of the explanatory variables was considered. Men were more likely to report that they knew of a female-based method like the pill and the IUD than a male method. This trend means that the burden of birth control will continue to bear heavily on the shoulders of women, even when male alternatives are safer. This is understandable since most family planning methods are female-based. Family planning service providers should intensively talk about all contraceptive methods whenever they address the public on family planning issues. When men are knowledgeable about the different family planning methods in terms of side effects and benefits, they can potentially play a supportive role to their spouses with respect to contraceptive adoption and sustained use.

All the explanatory variables, except age, type of marriage and place of residence, were found to have a significant relationship with family planning knowledge. By this result, objective one was achieved. A logistic regression analysis was then run to come up with the most significant factors and their direction of influence on men's knowledge of family planning source. The most significant variable isolated was education (secondary and post secondary). Men with secondary or post secondary education are more likely than those without education to know of a family planning source. This is true even in

empirical terms. The null hypothesis that education has no significant on men's family planning knowledge is therefore rejected, and the alternative confirmed. Education influences family planning knowledge significantly and positively.

Exposure to mass media (specifically listening to radio and reading newspaper) was also isolated as another variable with significant positive influence on family planning knowledge. In Kenya, radio carries more family planning information than any other media (KDHS, 1993). Further more, its information is simple and easy to comprehend. Newspaper and magazines also carry a lot of information on family planning. However, the association between watching television and family planning knowledge was found weak, and thrown out of the model. Indeed, until recently, television in Kenya did not carry any information on family planning methods. Nevertheless, the finding confirm the hypothesis that exposure to mass media has a significant influence on family planning.

The religious factor has however, been traditionally regarded as an important force in non-use of family planning, especially modern methods. This is particularly true for catholics and moslems, whose religion doctrines publicly oppose family planning. Of late, however, catholics have modified their stance by supporting natural methods of family planning. Even though modern Islamic scholars have argued that moslems are not significantly different from other religious groups in the use of family planning, this study found Islamic religion to be negatively related to family planning knowledge. The religion of Islam has been considered to be pro-natal in character (Chaudhury, 1982). Earlier cross-tabulation analysis did not find any significant knowledge differences between catholics and protestants.

Men who reported that they were currently married were found to be more likely

to know of family planning methods and source than their never married counterparts. This is very encouraging because these are a group of people who are in the process of raising families

Preferred family size (of 4-5 children) was found to have an increasing effect on family planning knowledge as compared to preference for 0-3 children. This is just about the average family size in Kenya. This shows that the relationship between knowledge and preferred family size is positive. The null hypothesis that preferred family size has no influence on men's family planning knowledge is rejected and the alternative confirmed.

Living in Western province also came out with a positive association to family planning knowledge as compared to living in Nairobi. In effect this means that men who live in Western province are more likely than those living in Nairobi to know of family planning methods and source. However, living in the Coast province was negatively related to family planning knowledge. These findings confirm the hypothesis that province inhabited influences men's knowledge of family planning.

4.2.2 Men's attitude toward family planning

The second set of hypotheses linked demographic, socio-economic and socio-cultural factors to men's attitude toward family planning. An overwhelming majority of men reported that they approved of family planning. This is in agreement with 1995 CAFS' research report. The same report indicated however, that when it comes to personal use, the proportion approving went down to. All the study variables except two (type of marriage and rural/urban residence) had a significant influence on men's attitude toward family planning. By this result, the second objective has been achieved, and the

set of hypotheses that linked demographic, socioeconomic and sociocultural factors to men's attitude (save for the two cases) are confirmed. Such factors as education, exposure to mass media, age, marital status, current family size, preferred family size and religion all came out as significantly influential.

The study findings also isolated four variables which had the most significant influence on men's attitude toward family planning attitude. These were preferred family size, exposure to mass media, rural place of residence, education and province/region inhabited. The most significant variable that was found to influence men's attitude toward family planning in Kenya is preferred family size. Preference for any number of children, 6 or more children and 4-5 were all found to have a negative influence men's family planning attitude. This finding identifies preference for bigger family sizes (4 children and above) as the single greatest barrier to approval among men. The bigger the family size desired, the less likely it is for a man to approve of family planning.

Exposure to mass media, specifically reading newspapers and listening to radio) came out as significantly and positively related to men's family planning attitude. Men who are regularly exposed to mass media are more likely than those who are not to approve family planning.

Men living in rural area are considerably just as likely as their counterparts living in the urban area to approve of family planning. Rural residence has a positive influence on family planning attitude. This shows that the family planning programme has made some successful inroads in the rural areas. The crosstabulation and chi square analysis had earlier found the difference to be insignificant. However, this particular finding should be interpreted with caution since the number of men interviewed in urban centres was

very small.

Whereas living in Nyanza was found to be positively related to family planning approval, the opposite was the case with living in Western province. What this means is that men in Nyanza province are more likely than their counterparts in Western to approve of family planning.

To this extent, the study findings have shown how demographic, sociocultural and socioeconomic factors influence men's knowledge, attitude and practice of family planning in Kenya. Kenyan men have a good knowledge and an equally favourable attitude toward family planning. The study proceeded to examine whether this high knowledge and considerably favourable attitude among Kenyan men has been translated into practice.

4.2.3 Men's Practice of family planning

The third set of hypotheses linked demographic, socio-economic and socio-cultural factors to men's use (practice) of family planning. Preliminary analysis revealed a large disparity between ever-use and current use of specific family planning methods as shown in Tables 3.7.5 and 3.7.6. This provides some clue on discontinuation rates of family planning practice among men in Kenya. Ever-use and current use of male sterilization was zero. Either the few men who have undergone the operation were not captured in the sample or they did not give honest answers, perhaps due to the shame and stigma with which our society treat male sterilization.

Though the condom registered the highest rate of current use among the modern

methods, this may not be taken as a sure pointer to deliberate practice of family planning because the condom serves a double role. Even though they are an important part of family planning programme in many countries, given the ease of their commercial distribution and social marketing, their usefulness in disease prevention has given it a poor image, where it is associated primarily with illicit sex and infidelity. The introduction of a condom into a primary relationship by a partner may be seen as an admission that he is having sex with other women, or as an accusation that the partner is sexually active outside the relationship.

Nevertheless, the observed discrepancies between ever-use and current use is an indication of the drop out rates in male practice of family planning. Preliminary results also revealed that about half of the men interviewed did not respond to the question of current usage of specific methods. This shows the uneasiness and discomfort with which men treat family planning issues when the spot light is directed at their personal life.

Current use of family planning was then subjected to chi square test of significance. The results confirm that there is statistically significant relationships between province/region inhabited, education, exposure to mass media (radio and TV), age, marital status and family size. However, the proposed associations between reading newspaper, type of marriage preferred family size religion and place of residence were not found to significant. Upto this point, objective three was partly achieved. Indeed demographic, socioeconomic and sociocultural factors have an influence on men's practice of family planning

A logistic regression model was fitted taking family planning practice as the dependent variable, to isolate the most significant variables that influence family planning

practice, and the direction of this influence. The results are shown on Table 3.9.1. The most significant variables isolated were marital status, province/region inhabited, exposure to mass media, age and religion. With these results, objective four was achieved.

Currently married men were more likely to use family planning. The nature of influence here is positive and significant. The same applies to living in Eastern province, watching television and listening to radio, and belonging to age group 40-44. However, divorced, separated and widowed status, living in Coast and Nyanza provinces, belonging to age group 50-54 and to the Islamic religion all had a significant negative influence on family planning practice.

4.2.4 Conclusion

Based on the above findings, the study concludes that knowledge of specific methods and source of family planning among men is encouragingly high. Well over 90 percent of the men interviewed mentioned of a method of family planning. However, this knowledge is heavily biased towards female based methods, especially the pill, IUD, Injections and female sterilization. Of course this is understandable given that most methods popularized by the family planning programme in Kenya are female based.

My submission here is that men have not been sufficiently exposed to male based methods of family planning. The condom is more often advertised as a disease prevention instrument than as a family planning method, male sterilization is still shrouded in mystery and is almost always confused with castration. For instance, studies have shown that men have no hesitation in seeking treatment for STDs, infertility and other sexual and reproductive health problems. However, this is not true for vasectomy (see Fapohunda

and Rutenberg, 1999).

Men may be ready to accept vasectomy, and other hitherto controversial methods only if they are appropriately and directly introduced to the idea. When information come to a man through his wife or partner, he may feel that he is being forced to accept the method. Surely for many men, vasectomy may not appear to be an attractive option, and to decide on it , they need to undergo a well-structured counselling programme. They need to be well informed of the benefits of the operation.

Attitude toward family planning is also adequately favourable, at least from the general outlook. A great majority of men reported that they approve of family planning. Whether this high approval is genuine still remain suspect. But a look at the ever use and current use level suggests that this approval must have been subject to certain pertinent conditions which the interviews did not probe further to unearth.

Against the background of high knowledge and favourable attitude, one would naturally expect equally high levels of use or practice of family planning. The fact that high knowledge and positive attitude have not been translated into practice implies that there could be a hitch that the programme has not discussed addressed. There is a large discrepancy between family planning knowledge and attitude on one hand, and practice on the other hand. Practice here is the ultimate interest of the family planning programme, because it is the one that will eventually impact on fertility, yet it is the most difficult to achieve since it requires a commitment based on consensus from two individuals. Even among men who had tried using some methods, the drop-out rate was alarmingly high, almost by half for most methods. This large gap that exists between knowledge and use of family planning methods is a clear indication that sociocultural constraints to family

planning, though weakening, are still a strong force to contend with (Gule, 1994).

This study has identified particular demographic, socio-cultural and socio-economic factors that work against family planning approval and use. These include desire for large family sizes(4-5 children, 6+ and any number), Islamic religion, age group 50-54, and living in Nyanza and Western provinces. It is important, therefore that these factors be adequately and appropriately addressed when designing or improving family planning programmes. It is only then that fertility behaviour of men will be modified, thus increasing the demand for modern family planning methods as a substitute for traditional methods that are less effective in reducing high fertility levels.

Simply put, the use of family planning among Kenyan men is not commensurate with their knowledge of methods and nature of attitude.

4.3 Recommendations

The following are the major recommendations emanating from the study:

4.3.1 For Policy Makers

(1) The study has shown that exposure to mass media, specifically listening to radio, reading newspaper and to some extent watching television have positive influence on men's knowledge, attitude and practice of family planning. Since radio and newspapers are relatively affordable and reach a wider audience in both rural and urban areas, they remain the best media through which the family planning programme can relay family planning information and other population policies. This study therefore recommends the

continued and/or increased use of radio and news papers as a channel for disseminating family planning information.

(2) The family planning programme should particularly intensify its efforts in three provinces, namely Western, Nyanza and Coast. Despite men living in Western province having good knowledge of family planning methods and source, they are less likely to approve family planning. Living in Nyanza had a positive influence on knowledge, but a negative influence on practice. Living in Coast province also impacted negatively on both knowledge and practice. High infant mortality could explain the inconsistencies in Nyanza and Western, while in the Coast, infertility and the influence of Islam could be at play. Such factors must be addressed.

(3) It was also found that education upto completed primary level was adequate to influence men's knowledge and attitude. This would be further enhanced by introducing family planning education as part of the home science subject in the primary education curriculum.

(4) Large preferred family size was a major barrier to family planning approval. The family planning programme should come up with special initiatives aimed at changing men's preferred family size, which is still high (well over 4 children) to enable men internalize the small family norm. There is need for the family planning programme to promote the concept of family size limitation, rather than to promote family planning solely for birth spacing purposes since this practice has been found to dampen the effect

of family planning on overall fertility (Acsadi and John-Acsadi 1990, cited in Gule, 1994).

4.3.2 For further research

(1) This study has identified two worrying gaps that further research should seek to clarify:

i) the gap between high knowledge and favourable attitude on one hand and low practice on the other hand, always called the KAP-gap.

ii) the gap between ever-use and current use of family planning methods.

It is proposed that further research to understand the causes of these disparities would go along way in assisting programme managers and policy makers to design and effect deliberate birth control programmes.

(2) Since the study was based on secondary data, it had to use the data despite its limitations and some very important variables were missed out, either because they were not captured by the questionnaire, or they were originally coded and entered wrongly. These include occupation, experience of infant/child mortality, and duration of use for those who reported ever use of particular methods. It would be necessary to design a comprehensive field study that would bring in more reliable data for all these variables.

(3) Research should also be carried out at micro-level to identify the main factors influencing male knowledge, attitude and practice of family planning in these respective areas. For instance, studies at the provincial level are recommended because they can help identify problems peculiar to specific areas, thereby inviting culture-specific

approaches, which can then be solved within the limited resources available.

(4) Methods of data analysis used in the study were basically statistical and quantitative. A variable such as attitude cannot be accurately expressed in quantitative terms. This study suggests that other methods be employed, especially the qualitative approach so as to capture certain information that may have been missed out.

Finally, this study does not claim to have exhausted all issues pertaining to the influences of demographic, socio-economic and socio-cultural factors on men's knowledge, attitude and practice of family planning in Kenya. However, it adds to the tally of previous related studies carried out by students, lecturers and both private and government organizations. It is hoped that the findings presented in this thesis will provide impetus for a more comprehensive study of the male factor in family planning in Kenya and elsewhere in the world.

REFERENCES

- Abdullah, N. (1984):**
"Contraceptive Use and Fertility in the Commonwealth Caribbean Countries". WFS Scientific Report No.60 pp14-34.
- Agarwala, S.N. (1962):**
Attitudes Towards Family Planning in India. Occasional Papers (5), Asia Publishing House, Bombay.
- Ashraf, L. and Stan Becker (1997):**
"Husband-Wife Communication About Family Planning and Contraceptive Use in Kenya", in International Family Planning Perspectives 23(2) pp15-20.
- Arnold, F. et al. (1975):**
The Value of Children: A Cross National Study, Vol.1. East-West Population Institute, Hawaii. U.S.A.
- Ayiemba, E.H.O. (1988):**
"The Kenyan Family and Attitudes Towards Family Formation". in Ominde, S.H. Kenya's population growth and development to the year 2000. Heinemann K. Ltd, Nairobi 1988.
- Beckman, L.K. (1982):**
"Measuring the Process of Fertility Decision-making" in Fox Green (ed) The Childbearing Decision, Fertility attitudes and behaviour. California.
- Bertrand, J. (1975):**
Case Studies on Attitudes of Family Planning. University of Chicago Press. Chicago.
- Bertrand, J. et al. (1990):**
"Attitudes Towards Voluntary Surgical Contraception among Health Workers in Zaire". Tulane School of Public Health and Tropical Medicine, New Orleans.
- Bongaarts, J. (1986):**
"The Transition in Reproductive Behaviour in the Third World" in J. Menken (ed), The World Population and U.S Policy; The Choices ahead. New York pp 105-132.
- Bongaarts, J. (1978):**
"A Framework for Analysing the Proximate Determinants of Fertility". in Population and Development Review, Vol.4 No 1 pp 105-132
- Brass, W. F. et al. (1995):**
"Analysis of Parity dependent fertility rates in Tropical Africa" paper presented at the J.C. Caldwell seminar on Demographic Transition. Australian National University, Canberra.

Caldwell, J.C. (1968):

Population Growth and Family Change in Africa: The New Urban Elite in Ghana. Canberra, Australian University Press.

_____ (1977):

"The Persistence of High Fertility: population Prospects in the Third World". Family and Fertility Change Series No.1 Australian National University

Caldwell, J.C. and Caldwell, P. (1987):

"The Cultural context of High fertility in sub-Saharan Africa" in Population and Development Review. Vol 13 pp 409-437.

_____ (1990):

"High Fertility in sub-Saharan Africa" in Scientific America 262 pp 118-125.

Central Bureau of Statistics:

Kenya Contraceptive Prevalence Survey 1984

Kenya Population Census, First Report Vol. 1. 1994 Govt Printer Nairobi.

Kenya Population Census, 1989

Centre for African Family Studies (CAFS) (June ,1995):

Determinants of Male Fertility and Sexual Behaviour in Kenya. CAFS Research Report Series No.2.

Chaudhury, H.R. (1982):

Social Aspects of Fertility-with Special Reference to Developing Countries. Vikas Publishing House Ltd. New Delhi.

Coale, A.J. (1967):

"The Voluntary Control of Human Fertility" Proceedings of the American Philosophical Society Vol.III No.3 p.168.

Coombs, L.C. and M.C. Chang (1981):

"Do Husbands and Wives Agree?, Fertility Attitudes and Later Behaviour" in Population and Environment. vol 4 109-127.

Cynthia, S. et al. (1996):

"The Language of Male Involvement" in POPULI, the UNFPA magazine 23(2).

Davis, K. and J. Blake (1956):

"Social Structure and Fertility: An Analytical Framework" in Economic Development and Cultural Change. 4, pp 211-235.

Danforth, N. and T. Jezowski (1994):

"Men and Family Planning" paper presented at National Council of International Health, Washington.

Dierdre, W. (1979):

"Hungary Population Decline Will Continue Unless More Women Stay At Home and Bear More Children" *International Family Planning Perspectives* 5(4)

Dodoo, F.N.-A. (1998b):

"Men matter: additive and interactive gendered preferences and Reproductive behaviour in Kenya" in *Demography* 35 (2), May 1998 pp 229-242.

(1998a):

"Marriage and Reproductive decisions: a comparative study in sub-Saharan Africa" in *Journal of Marriage and the Family*. 60 (February, 1998) pp232-242.

Dodoo, F.N.-A. et al. (1997):

"Do Men's Reproductive Preferences really point to a need to refocus fertility policy? in *Population Policy Review* 16:447-455.

Dodoo, F.N.-A. and P. van Landewijk (1996):

"Men, Women and the Fertility Question in Sub-Saharan Africa: An Example from Ghana" in *African Studies Review* vol 39 No 3 pp 29-41.

Dow, T. (1966):

Attitudes Towards Family Size and Family Planning in Nairobi. 1981 Perception of Family Planning and the Family Planning Programme Held by Rural Kenyan Women." *Studies in Family Planning* 14(2).

Ezeh, A.C. (1993):

"The Influence of Spouses Over Each Other's Contraceptive Attitude in Ghana" in *Studies in Family Planning* vol 24: pp 163-174.

Ezeh, A. C. et al. (1996):

"Men's Fertility, Contraceptive Use and Reproductive Preferences" in *DHS Comparative Studies* (18). Macro International.

Farouq, G.M. (1987):

"Family Size Preferences and Fertility in south-western Nigeria" in *Sex Roles, Population and Development in West Africa*, edited by C. Opong. Heinemann, London.

(1988):

Fertility and Development: An Introduction to Theory, Empirical Research and Policy Issues. ILO, Geneva.

Ferguson, A.G. (1992)

"Fertility and Contraceptive Adoption and Discontinuation in Rural Kenya" in *Studies in Family Planning*. 23(4) pp257-267.

Fapohunda, B.M. & Naomi Rutenberg (1999):

Expanding Men's Participation in Reproductive Health in Kenya. Regal Press, Nairobi. Kenya.

- Gachuhi, J.M. (1975):**
"Family Planning in Kenya and the Problem of Drop-Outs" I.D.S. Discussion Paper, University of Nairobi.
- Gadalla, F.M. (1978):**
Fertility and Family Planning in a Rural Egyptian Community. American University in Cairo Press, Cairo. Egypt.
- Gaisie, S.K. (1995):**
Demographic Transition: The Predicament of sub-Saharan Africa. The Australian National University, Canberra.
- Gbolahan, A.O. and James McCarthy.(1991):**
"Family Planning Knowledge, Attitudes and Practices of Males in Ilorin, Nigeria" in International Family Planning Perspectives 17(2) pp 50-59.
- Grady, W. L.(1995):**
Men's Perceptions About Their Role in Decisions About Sex, Contraception and Childrearing. Battele Memorial Institute, Washington.
- Graaf, H. I. (1979):**
"Literacy, Education and Fertility; Past and Present: A Critical Review" Population and Development Review 5(1)
- Gule, G. (1994):**
A Review of Family Planning in sub-Saharan Africa
African Population Paper No 2
- Haupt, A. (1990):**
"The Shadow of Infanticide" Intercom 11(1/2).
- Hawkins, K. (1992):**
"Male Participation in Family Planning; a review of programme approaches in the African Region". paper presented at a workshop on Male Participation in Banjul, the Gambia. 25-28 Nov 1991.
- Heer, D. and Hsin-ying Wu (1975):**
"The Separate Effects of Individual Child Loss, Perception of Child Survival and Community Mortality Level upon Fertility and Family-Planning" paper presented at the seminar on Infant Mortality in Relation to Fertility, Bangkok.
- Henin, R.(1982):**
Fertility, Infertility and Sub-Fertility in East Africa. P.S.R.I., University of Nairobi
- Hollerbach, P.E. (1983):**
"Fertility Decision- Making Process. A Critical Essay" in Determinants of Fertility in Developing Countries. Bulatao R. A. and Lee D.R. (eds). National Academy Press. Washington D.C.

Hulton, L. and Fakkingham J.(1996):

"Male Contraceptive Knowledge and Practice: What Do We Know?" in Reproductive Health Matters no.7

Ikamari, L.D.E. (1996):

Factors affecting child survival in Kenya. A thesis submitted for the degree of Doctor of Philosophy of the Australian National University. April 1996.

Immerwahr, G.(1977):

"Socioeconomic: How Much Economic and How Much Socio?", in the Economic and Social Supports for High Fertility, edited by L. T. Ruzicka, Canberra: Australian National University pp187-202.

International Planned Parenthood Federation (IPPF) (1996):

Just For Men; Involving Men in Sexual and Reproductive Health Programmes. in Challenges.

Junod I. and Kamoga (1965):

Family Planning in Selected Villages. Kampala.

Kaseje, D.O.(1987):

Factors Affecting Acceptance and Use of Modern Contraceptive Methods in Kenya.

Kenya, Govt of (1997):

Sessional Paper No.1 of 1997 on National Population Policy for Sustainable Development.

Khasiani, S.A. and Z. Muganzi (1988):

Family Planning knowledge, attitudes and practices of Health Personnel in Health Centres of Western Province, Kenya. Kenya-Finland Primary Health Care Programme.

Khasiani, S.A. (1989):

"Reproductive Health in Kenya". Wamama African Research and Documentation Institute, Nairobi.

_____ (1988):

"The family planning programme in Kenya:Current impact and future prospects" in Ominde, S.H. (ed) Kenya's population growth upto the year 2000. Heinemann K. Ltd, Nairobi 1988.

Kimani Murungaru (1982):

"Fertility and Family Planning in Kenya" MSc Thesis University of Nairobi.

Kirstan, H. (ed)(1992):

Male Participation in Family Planning;- a review of Programme Approaches in the Region" a paper presented at a Workshop on Male Participation. Banjul, Gambia.

- Koenig, M.A. et al.(1984):**
 "Husband and Wife Inconsistencies in Contraceptive Responses" in Population Studies, vol 38 281-298.
- Lightbourne, R. E.(1980):**
 Urban-Rural Differentials in Contraceptive Use. WFS Comparative Report.(10)
- Machera Mumbi, E. (1997):**
 Socioeconomic and cultural barriers to family planning among rural women in Kenya; a case study of Embu District. UAPS Study report No25 1997.
- Mamlock, M. (1982):**
 Knowledge and Use of Contraception in Twenty Developing Countries. Reports on the WFS (3). Population Reference Bureau, Inc.
- Mandelbaum, D.(1974):**
 Human Fertility in India. University of California Press, Loss Angeles.
- Mason, K.O. and M.A. Taj (1987):**
 "Differences between Women's and Men's reproductive goals in developing countries" in Population and Development Review, vol 13, 611-638.
- Mauldin, W.P. (1975):**
 "Assessment of National Family Planning Programmes in Developing Countries". Studies in Family Planning 6(2)
- McNamara, R. S.(1977):**
 Address on the Population Problem. Massachusetts Institute of Technology.
- Mbizvo, M. and D. Adamchak (1991):**
 "Family Planning Knowledge, Attitudes, and Practices of Men in Zimbabwe" in Studies in Family Planning. vol 22 pp 31-38.
- Minkler, M.(1970):**
 "Fertility and Female Labour force in India:A Survey of Workers in Old Delhi Area". Journal of Family Welfare 17(1) pp31-43.
- Mistry, M.B.(1990):**
 "Hindu-Muslim Fertility Differentials in India". Poona University Press, India.
- Mitra, S.N. et al. (1985):**
 "Measuring Contraceptive Prevalence: Responses from Husbands and Wives in Bangladesh" paper presented at the Annual meeting of the Population Association of America. Boston.
- Molnos, A.(1968):**
 Attitudes Towards Family Planning in East Africa. C. Hurst and Company Press, London.

Muigana, M. (1995):

"Male Attitude toward Family Planning" in Conveying Concerns: Women write about male participation in the family. A publication of the Population Reference Bureau. July, 1995.

Nag, M. (1984):

"Some Cultural Factors Affecting Costs of Fertility Regulation". Population Bulletin of the UN (17) pp 257-267.

National Academy of Sciences(1993):

Factors Affecting Contraceptive Use in Sub-Saharan Africa. National Academy Press, Washington.

National Council for Population and Development (NCPD):

Kenya Demographic and Health Survey (KDHS) 1989 and 1993.

Njogu, W. (1991):

"Trends and Determinants of Contraceptive Use in Kenya" in Demography 28: pp 83-99.

Ntozi, P. J. (1993):

The Role of Men in Determining Fertility among the Banyankole of south-western Uganda. Marianum Press, Kampala.

Ocholla-Ayayo, A.B.C.(1991):

The Spirit of a Nation. Shirikon Publishers. Nairobi,

_____ (1988):

"Cultural Codes and Population Change in Kenya" in Ominde, S.H., Kenya's population growth upto the year 2000. Heinemann K. Ltd, Nairobi 1988.

_____ (1985):

Cultural and Social Dynamics of Population Control in Africa south of the Sahara. P.S.R.I., University of Nairobi.

_____ (1988):

Socio-Cultural Environment and Family Planning in Kenya. (paper presented at a Dakar Conference on Information, Education and Communication of Family Planning in Africa. Dakar, Senegal.

Ominde, S. H. et al.(1983):

Kisumu Population Survey Report on Population, Health/Nutrition and Family Planning. P.S.R.I., University of Nairobi.

Ominde. S.H. (1988):

Kenya's Population Growth and Development upto the year 2000. Heinemann K. Ltd. Nairobi.

Omondi-Odhiambo (1988):

"Men and Family Planning in Kenya: An Exploration", Department of Urban and Regional Planning, The Florida State University, U.S.A.

Opia, M. K. et al.(1994):

"Changing the Attitudes and Behaviour of African Males Towards Contraception: Myths, Facts and Obstacles and Opportunities" seminar paper. Washington.

Oucho, J.O. and E.O. Ayiemba (1998):

"Determinants of Contraceptive Use in Kenya" a Preliminary report for the WHO Manila Workshop on Dynamics of Contraceptive Use in Developing countries. 26 Nov-9 Dec 1989, Manila Philippines.

Page, H. (1988):

"Fertility in sub-Saharan Africa" in International Union for the Scientific Study of Population, The State of African Demography. Liege, Belgium: IUSSP, pp 29-45.

Population Reference Bureau (1995):

Conveying Concerns: Women Write About Male Participation in the Family. Washington.

Robinson, W.(1992):

"Kenya enters the Fertility Transition" Population Studies (46) (1) 445-57.

Rono, K.P.(1998):

Family Size preferences and attitudes towards contraceptive use among men :the case of Kaptumo community in Nandi District of Kenya. UAPS study report No 34 1998.

Roudi, F.and Ashford L.(1996):

Men and Family Planning in Africa. Population Reference Bureau, Washington.

Sarah Salway (1994):

"How Attitudes Toward Family Planning and Discussion Between Wives and Husbands Affect Contraceptive Use in Ghana" International Family Planning Perspectives. 20(2) pp 44-47.

The John Hopkins School of Public Health (1996):

Meeting Unmet Need: New Strategies. vol xxiv (1) Series J(43). Population Information Programme. U.S.A.

Uche Isiugo (1994):

"Reproductive Motivation and Family Size Preferences Among Nigerian Men" Studies in Family Planning 25(3)

Van Keep, P.A. and Rice-Ray (1973):

"Attitudes Towards Family Planning in Mexico City" Studies in Family Planning 4(11) pp 305-307.

Wangui, M. M. (1986):

"Knowledge, Availability and Use of Contraceptives in Kenya" M.A. Thesis, P.S.R.I., University of Nairobi.

Warwick, D. (1982):

"Bitter Pills: Population Policies and their implementation in Eight Developing Countries" Cambridge University Press; Cambridge.

Weeks, J.R. (1994):

Population: An Introduction to Concepts and Issues. Wadsworth Publishing Press, California.

Williamson, E. N. (1976):

Sons and Daughters: A Cross-cultural survey of Parental Preferences. Beverly Hills, California.

APPENDICES

Appendix I

a) The Survey Questionnaire and Fieldwork Logistics

(i) The Survey Questionnaire

The survey utilized four types of questionnaires: a Household Questionnaire, a Woman's Questionnaire, a Man's Questionnaire and a Services Availability Questionnaire. This study is based on information collected from a subsample of men aged 20-54 using the Man's Questionnaire. The questionnaire was developed in English and then translated into Kiswahili and eight of the widely spoken vernacular languages in Kenya. Men were asked about their background characteristics, knowledge, attitude and use of Family planning methods, marital status, fertility preferences and awareness of AIDS.

(ii) Fieldwork

This study is based on information collected from a subsample of men aged 20-54 using the Man's Questionnaire. The questionnaire was developed in English and then translated into Kiswahili and eight of the widely spoken vernacular languages in Kenya. Men were asked about their background characteristics, knowledge, attitude and use of Family planning methods, marital status, fertility preferences and awareness of AIDS.

Appendix II

a) Formula for computing the Chi square

$$X^2 = \text{SUM OF } (O-E)^2 / E$$
 Where E = expected frequency for a cell and O = observed frequency for the cell.

According to the formula, the expected frequency for a cell is subtracted from the observed frequency for the cell, then the difference is squared and the result is divided by the expected frequency. The reason for squaring the difference is to get rid of the minus signs, otherwise the differences would sum up to zero. The squared differences are divided by the expected value for the cell to control for differences in the number of observations in the cells.

b) Conditions of Application of the Chi-square

The application of the Chi-square is subject to the fulfilment of certain conditions. These are:

- (i) that experimental data should be independent of each other
- (ii) that sample data must be drawn from the targeted population.
- (iii) that data must be expressed in original units.
- (iv) that sample data must contain at least 50 observations.
- (v) that there should be no less than 5 observations in any cell.

Appendix III

a) The logistic regression model

Logistic regression model is quite similar to the linear regression model except that the outcome variable for the logit is binary or dichotomous. In a single variable, the logistic model used is expressed as:

$$1/1 + e^{-(\beta_0 + \beta_i X)}$$

Where:

β_0 and β_i are coefficients estimated from the data

X is the dependent variable, and

e is the base of the natural logarithms, approximately 2.714

The major aim of the logistic regression analysis is to estimate the constant and the regression coefficients, i.e $\beta_1, \beta_2, \dots, \beta_i$, where the constant is also the intercept and represents the log odds when all the explanatory variables are zero.

The analysis here is based upon the binomial, and not the normal distribution, since this is the statistical distribution that describes the error.

b) Fitting the Logistic Regression Model

Let us take an example of fitting a logistic regression model to a set of data given that there are n observations of the pair (X_i, Y_i) where $i = 1, 2, \dots, n$, $Y_i =$ value of the dichotomous outcome variable, $X_i =$ value of the independent variable for the i subject and given that Y is coded as 0 or 1.

To fit the above equation, we first estimate the values of β_0 and β_i , these being the unknown parameters. In the OLS method, β_0 and β_i values are chosen to be those that minimise the sum of squared deviations of the observed values of Y from the predicted values based upon the model. But here, such a method would be insufficient because it carries a possibility of bringing about heteroscedasticity, i.e a non constant error term or variance. To escape this shortcoming, the logistic regression model uses the maximum likelihood method to estimate β_0 and β_i (the unknown parameters in a dichotomous outcome).

This method yields values for the unknown parameters which maximize the probability of obtaining the observed set of data, i.e the coefficients that make our observed results "most likely" are selected. This method is applied only after constructing the likelihood function(β) which expresses the possibility of the observed data as a function of the unknown parameters.

These maximum likelihood estimators of β_0 and β_i are the values which maximize the likelihood function. Thus the resulting estimators are those which agree most closely with the observed data. Since logistic regression model is non-linear, it should be noted that the parameter estimation referred to here is done by an alternative algorithm method.

c) Description of the Dummy variables used in Logistic Regression

Province was categorized into Nairobi(NBI), Central(CENT), Coast, Nyanza(NYZA), Eastern(EASTN), Rift Valley(RV) and Western(WSTN). Age, a key demographic variable considered in this study, was categorized into seven categories namely those belonging to age group 20-24(AGEGRP1); those belonging to age group 25-29 (AGEGRP2); those in the age group 30-34(AGEGRP3); those in the 35-39 age group(AGEGRP4); AGEGRP5 for those in the 40-44 age category; AGEGRP6 for those belonging to age group 45-49, and lastly AGEGRP7

for those who belonged to the age group 50-54.

Another demographic variable was Current family size, which was divided into three categories: those who had small family sizes of 0 to 3 children (SMALFAM), those who had medium-size families of 4-5 children (MEDFAM) and those who had big family size of 6 or more children (BIGFAM). The characterization of these family sizes are small, medium and big is arbitrary and solely for this study. It does not imply any standard. Marital status was defined into five categories: Never married (NEVMAR), Currently married (CURMAR), Widowed (WIDOD), Divorced (DIVOD) and Separated (SPRTED).

For the number of children a man reported that he preferred to have, there were four categories namely: prefers 0-3 children (PREF1), prefers 4-5 children (PREF2), prefers 6 or more children (PREF3), and finally, prefers any number of children, as many as God may decide (PREF4). Type of marriage was categorized into: monogamy (MONO) and polygyny (POLY). Exposure to mass media was divided into three forms as measured by three indicators i.e Television, Radio and Newspaper, namely, RADIO1 for listening to radio at least once a week, RADIO2 for not listening to radio; TV1 for watching television at least once a week, TV2 for not watching television; NPAPER1 for reading newspaper at least once a week and NPAPER2 for no access to newspaper.

Education was categorized into the following: no education (NONED), primary education (PRMED), SECED for secondary education and HIGED for post secondary education. Two categories were defined for place of residence namely: urban (URB) and rural (RUR). The sociocultural variable religion was defined into four categories as follows: catholic (CATH), Protestant (PRTEST), Muslim (MSLM) and Traditional (TRDTL).

A 1. Province/region inhabited

NBI- indicates Nairobi province. It forms the reference category

CENT- indicates Central province (Coded 1 if the case, 0 otherwise)

EASTN- indicates Eastern province (coded 1 if the case, 0 otherwise)

COAST- refers to Coast province (takes the value 1 if the case, 0 otherwise)

NYZA- refers to Nyanza province (takes the value 1 if the case, 0 if otherwise)

RV- indicates Rift Valley province. Coded 1 if the case and 0 if otherwise

WSTN- indicates Western province (coded 1 if the case, 0 otherwise)

B Demographic Variables

2. Age

AGEGRP1- indicates those men in the age group 20-24. This formed the reference category)

AGEGRP2- indicates those men in the age group 25-29 (coded 1 if the case, 0 if otherwise)

AGEGRP3- indicates those men in the age group 30-34 (coded 1 if the case and 0 if otherwise)

AGEGRP4- indicates those men in the age group 35-39 (coded 1 if the case, 0 otherwise)

AGEGRP5- indicates those men in the age group 40-44 (coded 1 if the case and 0 if otherwise)

AGEGRP6- indicates those men in the age group 45-49 (coded 1 if the case and 0 if otherwise)

AGEGRP7- indicates those men belonging to the age group 50-54. Coded 0 if the case and 0 if otherwise.

3. Marital Status

NEVMAR- indicates those men who reported that they were never married. It formed the reference category.

CURMAR- indicates those men who reported that they were married at the time of the interview.(coded 1 if the case, 0 otherwise)

WIDOD- indicates those men who were widowed at the time of the interview (coded 1 if the case, 0 if otherwise)

DIVOD- indicates those men who were divorced at the time of the interview (coded 1 if the case and 0 if otherwise).

SPRTED- indicates those men who reported that they were separated. Coded 1 if the case and 0 otherwise

4. Current Family Size

SMALFAM- indicates those men who reported that they had 0-3 living children. For the purpose of this research, this has been arbitrarily characterised as a small family size. It formed the reference category.

MEDFAM- indicates those men who had 4-5 living children at the time of the interview. It has been termed as a medium family size. It is coded 1 if the case, and 0 if otherwise.

BIGFAM- indicates men who had 6 or more living children. It takes the value 1 if the case and 0 if otherwise. It has been termed a big family size.

C. Socio-economic Variables

4. Education

NONED- indicates those men who have no education. It forms the reference category.

PRIMED- indicates those men who have primary education(coded 1 if the case, 0 otherwise)

SECED- indicates those men with who had secondary education (coded 1 if the case and 0 if otherwise)

HIGED- indicates those who reported having post-secondary(higher) education. It takes the value 1 if the case and 0 otherwise.

5. Place of Residence

URB- indicates those men who were living in the urban area at the time of the interview. This formed the reference category.

RUR- indicates men who were living in the rural area at the time of the interview. Is coded 1 if the case and 0 if otherwise.

6. Exposure to Mass media

RADIO1- indicates those men who reported that they were listening to radio, at least once a week. It is coded 1 if the case, 0 otherwise.

RADIO2- indicates those men who had no access to radio. This formed the reference category.

TV1- indicates those men who reported that they were watching television at least once a week.Coded 1 if the case, 0 otherwise.

TV2- indicates those men who had no access to television. It was the reference category.

NPAPER1- indicates those men who read newspaper at least once a week. Coded 1 if the case, 0 otherwise.

NPAPER2- indicates those men who had no access to newspaper. It formed the reference category.

D. Socio-cultural Variables

7. Preferred family size

PREF1- indicates those men who reported that they preferred a family size of 0-3 children. This was taken as the reference category.

PREF2- indicates those men who preferred a family size of 4-5 children. Coded 1 if the case, 0 otherwise.

PREF3- indicates those men who reported that they preferred "Any number of children, as God may deem fit". Coded 1 if the case and 0 if

otherwise.

8. Type of Marriage

MONO- indicates those men who were married monogamously at the time of the interview. This was taken as the reference category.

POLY- indicates those men who were married to more than one wife at the same time, at the time of the interview (polygyny). It takes the value 1 if Yes and 0 if No.

9. Religion

TRDTL- indicates those men who reported that they belonged to African traditional religion. It formed the reference category.

CATH- indicates those men who belonged to the Catholic faith. Coded 1 if Yes and 0 if No.

PRTEST- indicates men of the protestant faith. Takes the value 1 for Yes and 0 for No.

MSLM- indicates men who belonged to the Islamic religion. Coded 1

if the case and 0 if otherwise.