

**FACTORS INFLUENCING ADOPTION OF MODERN FAMILY PLANNING  
METHODS BY MARRIED WOMEN IN KWANZA DIVISION, TRANS-  
NZOIA COUNTY, KENYA.**

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**DECLARATION**

This research project report is my original work and has not been submitted to any other University.

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## **DEDICATION**

To my father the late Peter Sirengo Wafubwa and loving mum Priscilla who invested heavily in my education, gave me moral support, prayed for me and encouraged me to go for nothing but the best. Also to my hubby Steve, my children Queell, Jasmine and Joe who are my source of inspiration.

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## ABBREVIATIONS AND ACRONYMS

CPR	- Contraceptive Prevalence Rate
DHS	- Demographic Health Survey
GOK	- Government of Kenya
KPSA	- Kenya Population Situation Analysis
KNBS	National Bureau of Statistics
PSRI	Population Studies Research Institute
TFR	Total Fertility Rate
FP	Family Planning
MGDS	Millennium Development Goals
UNFPA	United Nations Population Fund
UNDESA	United Nations Department of Economic and social Affairs
NCPD	National Council for Population and Development
ICPD	International Conference on Population and Development
CEDAW	Convention on the Elimination of all Forms of Discrimination Against Women
NHRS	National Reproductive Health Service.
WHO	World Health Organization
SSA	Sub Saharan Africa
FPAK	Family planning Association of Kenya
USAID	United States Agency of International development
HPI	Health Policy Initiative

## ABSTRACT

The governments of Kenya together with other stakeholders involved in the provision of family planning services have put in place various strategies and policies to increase uptake of family planning services. This is aimed at increasing contraceptive prevalence, reducing Total Fertility Rate (TFR), reducing unmet need for family planning services as well as reducing maternal and child deaths. Despite the various strategies and policies, total fertility remains high at 4.6% while the national contraceptive adoption level is at 46% far below the projected rate of 70% by vision 2030 and the unmet need for contraceptive stands at a national level of 26%. Kwanza division has a low CPR indicated by high maternal and child deaths. The purpose of this study was to examine the factors influencing adoption of modern family planning methods by married women in Kwanza Division, Trans-Nzoia County, Kenya. The dependent variable for the study was adoption of modern contraceptives by married women. Independent variables were couples desire for large families, women economic status, community attitude and women's close social networks. The study adopted a descriptive study design. The theoretical framework that guided the study was the Diffusion of Innovations Theory and the Social Networks Theory. The target population was 28,787. The sample size for the study was 397 married women which was obtained using the Krecjie and Morgan Table (1970). The sampling procedure adopted was multistage random cluster sampling. Data was collected using interview guides. Data was analyzed using frequencies, percentages, multiple regression, spears rho and presented on tables. The findings of the study will be important in designing the post 2015 agenda by the government and other stakeholders involved in provision of reproductive health services in Kenya. The findings of the study indicate that by taking the coefficient of determination, couples desire for a large family as a factor contribute 28.4 % variability in adoption of modern family planning practices also a statistical significant relationship between economic status and adoption of modern family planning practices by married women was observed. The study recommends that national and county governments should strive to improve transition rates from primary to secondary school to raise the education levels among women which would promote better understanding of reproductive rights and the benefits of modern family planning methods by women.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the Study

The widespread adoption of modern family planning methods represents one of the most dramatic changes of the twentieth century. The growing use of contraceptives around the world gives couples the ability to choose the number and spacing of their children and has tremendous socio economic benefits. Yet despite the impressive gains, contraceptive adoption is still low and the need for contraception high in some of the World's poorest and most populous places (Smith & Ashford, 2009).

The right to contraceptive information and services is grounded in basic human rights (United Nations population Fund 2008). Also the International conference on Population and Development (ICPD) held in Cairo in 1974 and The Convention on the Elimination of all Forms of Discrimination Against women (CEDAW) 1979 recognize the rights of couples and individuals to be informed and to have access to effective and acceptable methods of family planning. Osotimehin and starrs (2015) in a research on maternity noted that women who plan their births, stay healthy, complete their education, work more, accumulate higher income and raise healthier and better educated children..

Attempts to control population increase are as old as mankind. Evidence from medical history indicates that our fore bears spaced their children through traditional means which were handed down either verbally or in writing from generation to generation as far back as the Stone Age. Before the introduction of modern methods of family planning, Africans had their own traditional methods of fertility regulation. Nigerian culture for instance used myths, rituals and herbs in attempts to regulate women

fertility. Although many of these traditional methods of family planning have no harmful effects on a woman's health some have dangerous counterproductive effects on a woman's health (Aninyei, Onyesom, Ikuhor, Uzuegbu & Ofili (2008). Nonetheless the complete effectiveness of many traditional methods has remained doubtful. Much as traditional methods are still used as primary methods of fertility control in African societies, modern family planning is thought to influence fertility worldwide.

According to the most recent data available on contraceptive prevalence among women of reproductive age in recent Demographic Health surveys (DHS), modern contraceptive prevalence among married women in Asia varied from 14% in Azerbaijan, 20% in Armenia, 22% in Pakistan, 34% in Philippines, 35% in Cambodia, 49% in India (West off, 2012).Sub-Saharan Africa has the highest average fertility rates in the world. In 2009 the Total Fertility Rate (TFR) or the average number of births per woman was 5.1, more than twice that in South Asia, 2.8 times that of Latin America and 2.2 times that of the Caribbean ( World Bank ,2009).Adoption of modern family planning methods in Africa has been traditionally low and cultural resistance to modern family planning methods high (Caldwell& Caldwell 1987). According to the United Nations Department of Economic and Social Affairs (2009) the Contraceptive Prevalence Rate (CPR) varies widely across Africa from 1.2% in Somalia to 60.3% in South Africa. Geographic variation in family planning use was apparent with countries in Southern Africa reporting the highest level of contraceptive use followed by countries in East Africa. With a few exceptions, West and Central African countries reporting the lowest rates of adoption of modern family planning methods.



Low contraceptive use and high unmet need for family planning has resulted in an increase in unintended pregnancies which are associated with negative health consequences such as increased infant and maternal ill health and death. The 2008 / 2009 Kenya Demographic Health Survey (KDHS) reveal that, about 43% of all births in Kenya are mistimed (Kenya National Bureau of Statistics, 2010). Kenya has comparatively good and facilitative policy frameworks on population issues. It was the first country in Sub Saharan Africa to establish a National Family Planning Programme in 1967 (Ajayi & Kevole, 1998). The National Council for population and development NCPD was established in 1982 to guide population policy and coordinate all research activities in the country (Republic of Kenya, 1987). The efforts of the government, Non Governmental organizations (NGOs) and donors in promoting easily available and accessible Family Planning (FP) services has paid off as recent Demographic Health Studies in Kenya show that knowledge of contraceptive use is nearly universal and that over 90% of men and women are aware of at least one method of family planning (KNBS, 2010).

Despite the knowledge of modern family planning, unmet need for contraception remains at approximately 26% which has been largely attributed to limited male involvement in modern family planning endeavors, inadequate service provision, poor access to family planning commodities, lack of support for family planning practices as well as lack of women empowerment on reproductive health , persistent desire for large families by couples and negative attitude towards modern family planning (Republic of Kenya, 2004). Besides the high population growth rate estimated at 2.9% in 2010 remains a key challenge in attainment of the goals of Kenya vision 2030 which targets a Contraceptive Prevalence Rate of 70% (National Council for Population and Development, 2012). While modern contraceptive use increased from

about 27% in 1993 to 39 % in 2009 there is an increasing trend in reporting fear of side effects and health concerns as important reasons for non use among younger women under the age of thirty (KNBS 2010).

To date Kenya's population is estimated to be 37.8 million with a current growth rate of 2.9% per annum which is considered to be high (National reproductive Health services, 2009- 2015). Currently the CPR stands at 46% (KDHS, 2008) .The unmet need of modern FP is 26 % with the rural areas reporting higher unmet need than urban areas. KDHS (2008/2009) reveals that 53% of married women in urban areas are more likely to use modern contraceptives as compared to 47% of the rural counterparts (KNBS, 2010). Whereas evidence from literature around the world reveals a near universal knowledge of modern family among women of reproductive age, this has not translated into complete utilization of modern contraceptives by married women. This is clearly reflected by the unmet need for contraceptives of 26% in Kenya and a CPR of 46% which is way below the projected CPR of 70% by the Kenya Vision 2030. From the literature reviewed it is evident that knowledge about modern family planning methods is high among couples (90%). However this has not equally translated into uptake; this study seeks to identify factors that influence the uptake of modern family planning by married women in Kwanza Division, Trans-Nzoia County.

## **1.2 Statement of the Problem**

Globally there still exists wide variations and slow pace of decline in fertility in spite of the decline in fertility throughout the world over the years (Munshi & Myaux, 2006). The slow decline in fertility is attributed to low contraceptive adoption among women of reproductive age (15-49 years). This could be attributed to among other

factors couples desire for large families, women economic status, women's close social networks and community attitude towards modern family planning.

Family planning saves lives and can improve the health of women, children and the society as a whole. According to Bernstein et al (2006) gaining control of one's reproductive choices and fertility has health benefits for both mother and child. In 2000, about 90% of global abortion related and 20% obstetric related mortality and morbidity could have been averted by the use of effective modern contraceptives by women wanting to either postpone or stop having children. Frequent pregnancies can lead to maternal deaths. Children of deceased mothers are likely to be farmed out to relatives, forced on the streets and to die. Children born within eighteen months of each other (live births) are at a greater risk of fetal death, low birth weight, prematurity and being of small size for gestational age in both rich and poor communities (Bernstein et al 2006).

As much as the government, Non Governmental Organizations and International agencies have put in place measures to ameliorate rapid population growth, high fertility rates and low adoption of modern contraception methods has remained a major challenge in Kenya since independence (Republic Of Kenya, Kenya Population Situation Analysis, 2013). The current population growth rate is 2.9% per year which is considered high (National Reproductive Health Survey, 2009). The contraceptive prevalence rate is 46% with women in rural areas being the most disadvantaged. The Total fertility rate still remains high at 4.6% (KDHS 2008/20009). Further the State of Kenya population Report shows that approximately 1.1 million currently married women would like to delay or stop child bearing but are not using any modern contraceptives and another 1.8 million have unplanned births each year (NCDP 2012).

Trans-Nzoia County is one of the fifteen highly populated counties in Kenya characterized by high infant mortality rates of 58/1000 and maternal mortality rates of 333/100,000 which could be attributed to low contraceptive adoption rates in the county. The county is also far from achieving the fourth and fifth Millennium Development Goals that are enhanced through the use of modern contraceptives (Trans-Nzoia County Integrated plan 2013-2017). The current study therefore sought to establish factors influencing adoption of modern family planning methods by married women in Kwanza Division, Trans-Nzoia County, Kenya.

### **1.3 Purpose of the study**

The purpose of the study was to investigate factors influencing the adoption of modern family planning methods by married women in Kwanza Division, Trans - Nzoia County, Kenya.

### **1.4 Objectives of the study**

The following objectives guided the study

- i) To determine the extent to which couples desire for large families influence the adoption of modern family planning practices by married women in Kwanza Division, Trans- Nzoia County.
- ii) To investigate the extent to which women economic status influences the adoption of modern family planning methods by married women in Kwanza Division, Trans -Nzoia County.
- iii) To establish the extent to which women close social networks influence the adoption of modern family planning practices by married women in Kwanza Division, Trans-Nzoia County.

- iv) To investigate the extent to which the attitude of the community towards modern family planning methods influence the adoption of modern family planning methods by married women in Kwanza Division, Trans-Nzoia County.

### **1.5 Research Questions**

The study sought to answer the following research questions.

- i To what extent does couples desire for large families influence the adoption of planning methods by married women?
- ii How women close social networks influence the adoption of modern family planning methods by married women?
- iii To what extent does women economic status influence the adoption of modern family planning methods by married women?
- iv To what extent does the attitude of the community about modern family planning methods influence the adoption of modern family planning by married women?

### **1.6 Research Hypothesis**

The study tested the following hypothesis;

1 .H0: Couples desire for large families has no influence on adoption of modern contraceptives by married women.

H1: Couples desire for large families influence adoption of modern contraceptive methods by married women.

2. H0: Women economic status does not influence adoption of modern contraceptives by married women.

H1: Women economic status influence adoption of modern contraceptives by married women.

3. H0: Women's close social networks do not influence adoption of modern contraceptives by married women.

H1: Women close social networks influence adoption of modern of modern family planning methods by married women.

4. H0: Community attitude towards modern contraceptives does not influence adoption by married women.

H1. Community attitude towards modern contraceptives influence adoption of modern family planning methods by married women.

### **1.7 Significance of the study**

Access to and use of contraceptives may improve economic outcomes and reduce poverty by allowing women to optimally time births, increase women's investment in education and participate in the labor market during their reproductive age (Ashraf, 2006). Government efforts through the Ministry of Health and the NCPD should be intensified to increase awareness and uptake of modern family planning methods in order to increase the participation of women in economic activities and to strengthen their economic security and well being as well as that of their families. It is hoped that the findings of this study will be of use to the Ministry of Health and the government as a whole in recognizing that family planning has a crucial role in addressing economic development among women. The findings of this study will also be important in helping National and County governments to reverse the stagnation in the adoption and use of modern family planning methods through vigorous information campaigns against misconceptions about modern family planning methods which may hinder uptake of modern contraceptives. The findings will thus

be important in helping the government to attain its population goals enshrined in vision 2030 and the National Council for population and Development in developing responsive programmes to address women contraceptive needs.

The findings of the study may also be of use to the post 2015 development frameworks in family planning by Non Governmental Organizations, government and Community Based organization which must recognize the lack of control that women and girls have over their own bodies which pose as a hindrance to the adoption of modern family planning methods.

### **1.8 Limitations of the Study**

The study population consisted of married women in rural areas most of whom had low literacy levels. This forced the researcher to use interview schedules which was time consuming. The topic on reproductive health is viewed as sensitive by some respondents which could result to unwillingness to participate in the study by some respondents and dishonest responses by others. To address this problem the researcher created rapport with the respondents and assured them of confidentiality that information being collected was purely for study and is important for policy making about women reproductive health issues. Also the researcher ensured that interview items were structured in such a way that respondents were comfortable to give responses without feeling that their privacy is being intruded. Financial and time constraints caused the researcher to limit the area of study to Kwanza division as opposed to the whole of Kwanza Sub County.

### **1.9. Delimitation of the study**

The study was carried out in Kwanza Division, Trans-Nzoia County and only focused on responses from married women as units of analysis. The study findings were only

based on adoption of modern family planning methods as opposed to traditional and natural family planning methods.

#### **1.10. Basic Assumptions of the study**

The study was guided by the following assumptions; that the respondents will be ready to spare their time to participate in the study and give views without prejudice. Respondents have adequate knowledge on modern family planning methods to give meaningful responses relevant to the study.

#### **1.11. Definition of Significant Terms**

**Factors:** influences that contribute to the adoption of modern family planning methods. They include: couples desire for large families, women's close social networks, women economic status and community attitude about modern family planning.

**Community:** A social group of any size whose members reside in a specific locality, share government and often have a common cultural and historical heritage.

**Cultural factors:** established beliefs, values and traditions that influence adoption of modern family planning methods ; these are preference for large families, preference for sons and polygamy

**Close Social networks:** friends, relatives and spouses

**Economic status:** the economic realities that influence a married woman's adoption of modern family planning they include education, income and occupation.

**Attitude:** the respondents' personal feelings or emotion in favor of or opposition to modern family planning methods.



**Modern family planning:** modern methods of birth control which are condoms, pills, injectables, IUDs, sterilization and vaginal methods.

**A married woman:** a woman living with a man in a marriage.

**Adoption:** acceptance and use of modern family planning methods.

**Contraceptive prevalence rate:** the percentage of women of reproductive age (15 - 49 years) who are currently using modern family planning, among those in the same age group who are married.

**Unmet needs:** the gap between demand for modern family planning and use of modern family planning.

**Family planning:** a way of thinking and living that is adopted voluntarily upon the basis of knowledge, attitudes and responsible decisions by individuals and couples in order to promote the health and welfare of the family and contribute effectively to the social development of a country.

**Large families:** Number of children above the replacement level of 2.1 children (NCPD 2012).

**Polygamy:** a form of marriage in which a man is simultaneously married to more than one wife.

### **1.12 Organization of the Study**

This study was organized in five chapters. Chapter one dealt with the background of the study, statement of the problem, purpose of the study, objectives of the study, research hypothesis, significance of the study, assumptions of the study, limitations of the study, delimitations of the study and definition of significant terms. Chapter two consists of the literature reviewed organized according to the objectives of the study, theoretical framework and conceptual framework of the study.

Chapter three consists of research methodology which consists of research design, target population, sample size, sampling procedure, methods of data collection, research instruments reliability and validity, methods of data analysis, operational definition of study variables and ethical issues. Chapters four include data analysis, data presentation interpretation and discussion. Chapter five dealt with the summary of the study findings, conclusions and recommendations

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter presents a review of literature with particular attention to the various variables of this study which are the factors influencing adoption of modern family planning methods by married women. The chapter presents an in depth analysis of these factors which include: couples desire for large families, women's close social networks pressure, women economic status and community attitude towards modern contraceptives. It also contains the theoretical framework as well as the conceptual framework.

#### **2.2 Overview of Contraceptive Adoption**

Contraceptive use has increased in many parts of the world especially in Europe, North America, Asia and Latin America but continues to be low in sub-Saharan Africa. Globally adoption of modern contraception rose slightly from 54% in 1990 to 57% in 2012. However, Africa as a whole has lagged behind other world regions in the adoption and expansion of FP (Rondi, 1996). Despite the knowledge of modern FP methods, a wide gap exists between knowledge and attitude towards adoption of modern family planning methods. Attitude towards modern family planning determines whether or not it is adopted (Khalijah 1988). Although majority of married women in Africa know about FP methods it is estimated that an average of 22 % or 1 out of 10 use modern family Planning methods. Caldwell and Caldwell (1987) shows that culturally, large families are socially favorable in Africa a factor which motivates many married couples to have many children. In this respect before women would

only use contraceptives when they attain a certain number of children which they consider ideal .

Regionally, the proportion of women aged 15- 49 reporting use of modern contraceptive plateaued between 2008-2012. This was with significant variations among countries (World Health Organization Fact sheet 2013) .Moreland and Tailbird (2006) in an analysis of the contribution of modern contraceptives in meeting the Millennium Development Goals showed that satisfying unmet need for FP in Kenya could avert 140,040 maternal deaths and 434, 306 child deaths by the Millennium Development Goals target date of 2015 (Republic of Kenya 2007b). Moreover Hawkins (1995) observed that family planning services offer various economic benefits to the household, the country and the world at large. Further, adoption of modern family planning contributes to reduction in population growth, poverty and preservation of the environment (Shane& Sarah 1997). Singh, Darroch, Vlascoff and Nadeau (2004) observed that high fertility rate which in many cases is attributed to low contraceptive prevalence rate impedes economic growth.

The rate of population growth in Sub Saharan Africa is one of the highest in the world (2.8 %) compared to the rest of the world (United States Agency of International Development/Health Policy Initiative 2007). To address this challenge many countries in Sub Saharan Africa (SSA) including Kenya focused its attention on birth control measures. In Kenya FP services have been in use since 1957 when the Family Planning Association of Kenya (FPAK) started operating clinics within the Ministry of Health. Despite the policies that have been developed by the government to reduce population through contraceptive adoption the World Fertility Survey (1997)

showed that Kenya had one of the highest fertility rates in the world of eight children per woman which revealed dismal adoption of modern family planning methods.

Results of Kenya Demographic Health Survey (1993) revealed that Kenya had realized phenomenal decline in fertility. Observers felt that social norms in favor of small families had increased adoption of contraceptives and were well established and irreversible. However KDHS (2003) revealed that adoption of modern FP had stalled and flurries of activities had ensued to ensure that Kenya is repositioned in family methods Planning adoption and use. Malalu, Koskei, Too and Amoni (2014) argue that perceived lack of support from health care clinics, marital status, desire for more children, myths and misconceptions about modern family planning and socio economic status of women are barriers to adoption of modern family planning. Addressing some of the barriers to the use of modern family planning will significantly influence uptake of modern family planning methods and positively contribute to socio economic development.

### **2.2.1 Couples Desire for large Families and the adoption of modern Family**

#### **Planning by married women.**

The National Council for Population and Development (2012) in an analysis of contraception use in Kenya argues that, much as contraceptive use has increased, there is persistent unmet need for contraception as the family sizes of four children remain above the replacement level of 2.1 presenting a continuing fertility challenge. Further NCPD (2012) notes that large ideal family size is a cultural factor associated with low use of contraceptives. Caldwell and Caldwell (1987) asserts that large families are seen as socially favorable and infertility is viewed negatively causing women to use modern birth control measures for child spacing instead of limiting

family size. Moreover, Njoroge (2011) in a study on social cultural factors influencing adoption of modern family planning methods in Teso District argues that high esteem for large families has an important influence on women adoption of modern family planning practices. Women who were not using modern family planning had a desire for more children to satisfy societal expectations of a married woman in the community. In a study in Bombolulu, Wambugu(2013) asserts that large families were seen as a source of pride and nursing mothers were elevated to a status above ordinary women hence the desire to give birth to many children by married women. Further, children were considered a source of cheap labor and prestige in the society. Many respondents were of the opinion that working children add to family income and are a kind of pension plan looked for support during old age.

Studies in South Asia on the relationship between family size and composition on contraceptive adoption reveal that many countries in South Asia (Nepal, India and Bangladesh) demonstrate a strong cultural preference for sons which influence fertility desires. Desire for another child decreased and contraceptive use increased as the number of sons increased (Jayaraman, Vinod, Mushra, Fred & Arnold, 2009). Son preference which has been documented in various traditional cultures around the world may also influence contraceptive use among women in cultures where women desire a large number of sons. Women who had not yet had a son typically did not practice contraception until they had at least one son (Rubeai, Abdallah& Grey 1983)

In Taiwan women who already had sons were more likely to use reliable methods of modern family planning methods than those who had no sons (Wang&Lethbrigde1991). Studies in India concluded that continued child bearing

driven by son preference accounted for 7 % of all births in the country (Chandhuri, 2012)

Rurdranhand et al (1995) in a study on family planning in rural Indias Bihars State reveals that acceptance of family planning was influenced by opposition from husbands and in-laws and desire for at least two sons. Similar conclusions were reached by Dabral& Malik (2004) who noted that couples with fewer sons were more likely to continue having more children within shorter intervals and were not likely to adopt modern family planning methods. Moreover Isiugo (1994) on social cultural context of high fertility among the Igbo women in Nigeria concludes that the Igbo strong son preference tradition influenced the desire for more children and hindered adoption of family planning practices among women. Igbo women with son preference norms had 1.7 more children. Studies from Bangladesh, India, Nepal, Pakistan and Sri Lanka have confirmed the wide spread presence of son preference in South Asia and its impact on reproductive attitudes (Jayaraman, Mishra&Arnold,2009). Studies conducted in Bangladesh and elsewhere on effect of sex composition of children on contraceptive use evidently showed that in general women without a son were less likely to be using a family planning method than those who had at least one son (Obermeyer1996). Families with a high proportion of sons among their surviving children may feel less demographic pressure and therefore free to discontinue child bearing. Son preference has an adverse effect on contraceptive use among women at lower parities and could be a significant force to reducing further the country's fertility rate. Khan ,Parveen and Khanum,( 2000) in a study on the role of son preference on modern contraceptive use in Bangladesh concluded that sex composition of the surviving children is found to be significantly associated with the current use of modern contraceptives. Women with two sons were 1.4 times

likely to be using modern contraceptives compared with women having two daughters. The observation shows a significant association between the preference for sons and contraceptive use.

Polygamy, a form of marriage in which a man is simultaneously married to more than one wife is widely practiced in Africa, in some lowlands of South America and in the middle East (Chamie, 1986 & Tabutin, 2005). (Blance and Gage 2000) in a study on the relationship between polygamy and fertility among married women in United Arab Emirates shows that a positive relationship exists between polygamy and fertility. The positive association can be explained by the model of polygamy which states that men marry additional wives mainly to satisfy the desire for large families. Thus, one of the main reasons for men to have multiple marriages is to have more children

Bascheri (2013) writing on the effects of polygamy on contraceptive use in Malawi insists that women in polygamous marriages are less likely than their counterparts in monogamous marriages to use modern contraceptives. Women in polygamous marriages had a higher intention to adopt modern contraceptives methods compared to those in monogamous marriages but the translation of intention into behavior is low in polygamous marriages. This is attributed to the fact that men marry additional women to get more children. Reat (2007) writing on the perception of polygamous marriage in Sudanese society observed that men practiced polygamy with a motive of having many children from the many wives. Women in polygamous marriages therefore had a negative perception towards practice modern of family planning methods mainly influenced by their husbands.



(Ozcan 2010) argues that women in a polygamous family may compete in the number of children they have because it may raise their social status and increase their share of inheritance, this may contribute to non adoption of modern Family planning methods. (Yihunnie, Ayalu and Arede, 2013) in a study on geographical variation and factors influencing modern contraceptive use among married women in Ethiopia conclude that women in polygamous relationships were less likely to adopt modern contraceptives than those in monogamous relationship. This may be due to the nature of the relationship where there may be competition for more children among women with the same husband.

### **2.2.2 Women economic status and adoption of modern family planning methods by married women.**

Analysis of the relationship between economic growth and fertility indicate that increase in gross domestic product is associated with higher rates of contraceptive adoption. Socio-economic development is believed to modify the incentives to have children, diffuse new ideas about child bearing through society and provide women with better access to contraceptives (Bryant, 2007). The main economic determinants of fertility discussed here include educational level, income and occupation.

Education plays an important role in acceptance and use of contraception. It is often assumed that better educated couples, being more exposed to family planning information are more likely to use modern contraception. Data from the Demographic Health Surveys of various countries demonstrate a positive relationship between education and the use of family planning (Robey, Rustein, Morris & Blackburn 1992). Rutenberg (1991) analyzed world fertility in a survey that involved twenty five countries and found a positive relationship between women education and

contraceptive uptake. Education is considered a key component of modern family planning among women and investing in the education of women yields dramatic returns in the health of women and children.

The education status of women has appeared to be a significant predictor of family planning practice. Bertrand, seiber and Escandero (2000) in a study in Mayan concludes that education affects the distribution of authority within households which in turn affects fertility and use of family planning services. Further, Heaton and Forste (1998) on the impact of education on marriage, contraception and fertility in Columbia, Peru and Bolivia reveal that successive increment in education is associated with increased use of contraceptives and lower fertility. The positive correlation between education and adoption of modern family planning was noted in Peru and Columbia. However a negative relationship between education and uptake of modern family planning methods was noted in Bolivia where increment in education did not increase adoption of modern family planning methods. Such inconsistencies in findings on the relationship between education and adoption of modern family planning calls for more research in a different geographic setting to ascertain the relationships.

Bongaarats (2010) in a study in thirty Sub-Saharan countries to analyze the effects of educational differences on infertility found out that women with secondary or higher education have an average lower fertility than women with no education (3.4 Vs 6.3 births per woman). This is also the case in desired family size (3.7 Vs 5.6 births per woman). The most plausible explanation for these shifting relationships is that better educated women marry later and more often use contraceptives more effectively, have great autonomy in reproductive decision making and are more motivated to

implement demand because of the higher opportunity costs of unintended child bearing.

According to the Kenya Demographic Health Survey (2008-2009), the total fertility rate decreased from a high of 6.7 children for women without education to 3.1 for women with at least secondary school education. The survey further revealed that women who almost completed primary education had almost two fewer children compared with women who had no education. Similar findings were reached by Dabral and Malik (2004) in a study which showed that women with a higher education had better knowledge of modern family planning and could use non- terminal methods more effectively.

However, Wachira (2001), in a study on contraception in Kenya reveals that women with secondary education and above had a higher level of contraceptive use than higher education. In a study in Bangladesh a curvilinear relationship was noted (meaning that with a modest level of education fertility is likely with higher level of education fertility tends to decline. Wambugu (2013) in a study on socio-economic factors influencing adoption of modern family planning in Bombolulu, revealed that 37% of the respondents understood the need for modern contraceptives while 63% of them did not understand the need for modern contraceptives. This was largely attributed to their level of education.

Many studies found that women who participate in paid employment and especially those pursuing demanding careers limit their fertility and either have relatively few children or none (Buding& Hakim 2003). The work status of women is often considered to be an important determinant of contraceptive adoption. Employment especially where a woman has to work outside the home is viewed as an index of commitment and involvement in non familial roles. It has been observed that female

employment outside home often leads to a desire for small families and thereby increasing the acceptance rate of contraceptives.

Occupation of women is an important socio-economic indicator that influence their contraceptive behavior . A study done in India established that working women are more inclined to adopt modern family planning as compared to housewives. 68% of working women used permanent methods of family planning as compared to only 40% of the housewives, 27.7% of women employed in white collar jobs adopted permanent methods of modern family planning compared to 17% of agricultural laborers hence this study findings indicate that the occupation of women is strongly associated with their family planning behavior Kumari(2005), Kuar and Singh (1982) writing on acceptance of family planning practice among rural clientele in India assets that respondents with low formal education, those with low household materials possession, adopted family planning methods to a lesser extent

However, Uddin et al (1985) in a study on rural – urban differentials in contraception use in Bangladesh reveals that socio-economic differentials by employment status show that women who were not employed had the highest adoption of modern family planning than those who were employed.

Nwonsu et al, (2011) writing on factors influencing the practice of modern family planning in rural communities of Abia state, Nigeria, revealed that acceptance of modern family planning was lowest among peasant farmers 5.2%. Farmers needed many hands in cultivating crops and this limited their use of modern family planning.

Sharma and Smith (2005) revealed that in the absence of an income source, usage of family planning would decline. The study finding showed that out of the total number

of women using modern contraceptives 31% had an average monthly income of 20,000 and above while 28% had an average monthly income of between 15,000 and 20,000, 7% of users had an average monthly income of less than 5,000. Similarly Utomo, Almaeso and Park (1993) in a study on contraceptives adoption in Nigeria show that women who generated their own income had a higher probability of adopting modern family planning services. 57.8% of the users of modern contraceptives had their own income as opposed to 42.2% who had no source of income and relied on spouses.

### **2.2.3 Women's close social networks and adoption of family Planning methods among married Women.**

Theoretical analysis of contraceptive choice and fertility dynamics show that social interactions can help to explain changes in patterns of fertility or contraceptive behavior (Casterline & Palloni, 2001). Bongaarts and Watkins (1996) suggest that social networks may work through social influence and social learning by providing examples of behavior that may be considered and copied. The type social networks believed to have a notable effect on a woman's contraceptive decision include: peers, spouses as well as relatives and other members of the community. Valente, (1997), Kohler and Berhmand (2003) on changes in contraceptive use in rural areas in Nyanza revealed that social interaction have substantial effect on contraceptive use in rural areas in Kenya. It was observed that women in their social interactions discuss about family planning methods and in so doing information spreads.

Studies in Nigeria and other West African countries revealed that some married women claimed it was difficult for them to use family planning because their friends were not using it. The women were reluctant to be the first in their social groups to

use modern family planning. Abiodun and Balogun (2009) also assert that partners or family members influence a married woman's use of modern family planning. Moreover Malau, Koskei, Too and Amoni (2000) in a study in Baringo asserts that approval of friends is an important determinant of uptake of modern contraception by women. Stephenson, Baschieri, Clement, Hennik and Adise (2007) in a study on context influences of modern contraceptives use in six countries in Africa (Ivory Coast, Burkina Faso, Ghana, Kenya, Malawi and Tanzania) concluded that married women expressed fear of using modern family planning without their husbands approval as this would lead to withholding sex or even divorce. Similar findings were reached in a separate study in Tanzania by Esabelle (2012) that husbands support was a key factor in acceptance of modern family planning. Further Njoroje (2001) writing on social cultural factors influencing adoption of modern family planning in Teso District holds that men had the ultimate say in matters concerning fertility and contraception.

Furthermore, Tsui and Stephenson (2000) in a study in post conflict Angola cite male opposition and women's limited decision making power as important to contraceptive adoption. Also among post abortion care clients in Zanzibar it was perceived that partner support trumped all other factors in determining women intention to adopt modern family planning (Esber 2014)

#### **2.2.4 Community attitude towards modern contraceptives and adoption of modern family planning methods.**

Attitude towards the use of family planning determines whether or not it is practiced. While majority of community members approve of family planning there are variations across the continent (Khalija, 1998).

Davis and Blake (1986) in a study in Nigeria observed that a general negative attitude towards family planning hindered the uptake of family planning and that attitude was remarkably influenced by the religion of the people which is deeply rooted in their culture. A case study done in Kenya indicated that Muslims had the highest level of desire for more children (56.6%) whereas Catholics and Protestants were 42% and 43% respectively (Wachira 2001). The case study affirms that community attitude towards family planning is determined by the community cultural norms such as religion, customs and beliefs as well as gender roles.

Graff (2012) writing on family planning in Uganda noted that negative attitude is an important barrier to adoption of family planning with worries about side effects such as infection, disruption of menstrual bleeding and risk to future fertility being common.

Generally men in West Africa with the exception of Ghana are less likely to have a positive attitude towards family planning than men in other parts of Africa. In most countries women are more likely than men to approve of modern family planning. The Demographic health survey of Mali showed that only 23% of men in the households approved family planning compared to 71% of wives despite the fact that husbands had considerably more knowledge of family planning than their wives (Hishah 1998).

Education is cited as the strongest predictor of the community's attitude towards family planning. This is evident in the 2008-2009 KDHS where approval of family planning was more in better educated men as was in monogamous marriages. Research in many countries show that men who live in urban areas approve of family planning more than their counterparts in rural areas. (Rondi & Ashford, 1996).

According to Audu, Yahya and Bassi (2006) some women do not use modern family planning methods because of the community's negative attitude, myths and beliefs that surround the use of modern family planning methods. Moreover, studies have hypothesized that socio cultural values such as attitude towards the use of contraceptives and gender power balance in households have a strong effect on contraception and unmet need (Ndarahuye, Brock & Hooimeijer, 2009).

### **2.3 Theoretical Framework**

The study will be guided by the Diffusion of Innovations Theory which was advanced by Rogers (1995) and the Social Networks Theory by Rogers & Kincaid (1981). The theories will be used to explain psychological and social components of adoption of modern family planning methods by married women. Bongraats & Watkins(1996) concluded that once contraceptive behavior has been adopted by a community within a society then social interactions can be a powerful force that accelerates the rate of transition to the rest of the society. Conclusions from contemporary research are indirect and are based primarily on inference that spatial patterns of fertility decline by country imply that diffusion of contraceptive practices must be occurring by means of interpersonal communication among individuals (Bocquet & Jokai, 1995, Bixby & Casterline 1993).

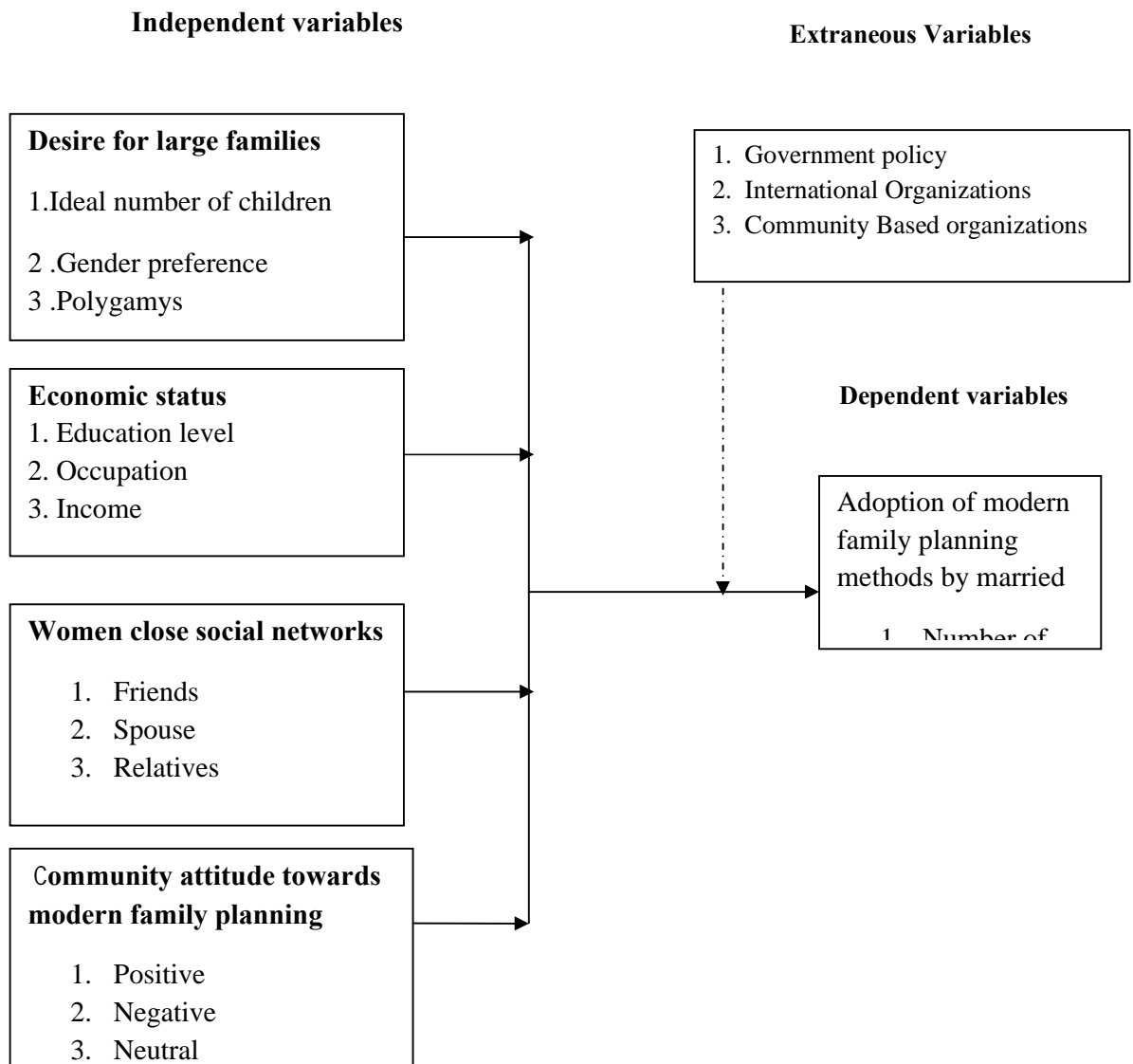
The diffusion of innovations theory states that adoption of new behavior is a five stage innovation decision process from knowledge to persuasion, decision, implementation and confirmation. Communication and persuasion is considered to be primarily determined by interpersonal communication, persuasion is determined by the physical attributes of the innovation and its compatibility with ones values and beliefs. If the expected advantages are realized after implementation then the decision



is confirmed and use of innovation continued. A measure of ideation derived from the diffusion theory would include a combination of knowledge, beliefs about the positive and negative attributes of the innovation and discussion of the innovation with one's family, peers and change agents if they exist and their social approval. The social networks theory has been used to extend the classical diffusion theory in response to criticisms that it is predominantly an individual psychological approach to behavior change (Kincaid & Rogers 1981). Individuals who are at the periphery of local networks such as within villages, communities and organizations are less likely to hear about an innovation, will hear about it much later and will not have as much opportunity for social comparison nor exposure from the social influence from others.

The social networks Theory purports that those individuals who are centrally placed within local social networks are more likely to hear about innovations earlier and to have more opportunity of social comparison and influence. Similar propositions apply to cliques within social networks. A clique is a relatively bounded set of individuals who interact more with one another than with those outside the clique. Isolated cliques could be expected to adopt innovations later than cliques interconnected with other cliques by means of liaisons. Adoption of contraceptives by married women can therefore be understood from the point of view of the diffusion of innovations theory and the social networks theory where individual knowledge and compatibility of modern contraceptives with one's values would play a big role in adoption or non adoption of modern contraceptives. The social networks theory shows how interpersonal communication between individuals such as peers, relatives and social groups would facilitate the transmission of knowledge about modern family planning which could in turn influence attitude towards adoption of modern family planning

## 2.4 Conceptual Framework



**Figure1: Conceptual Framework**

**Source: Author (2015)**

The conceptual framework presented in Fig 1 shows the relationship between variables of the study. The adoption of modern family planning methods by married women is influenced by several factors which include couple's desire for large families. Couple's desire for large families is a deeply rooted culture in many developing countries. The desire for large families is enhanced by cultural norms such

as polygamy and preference for sons. The economic status of women is also considered an important determinant of contraceptive adoption by married women; the economic factors discussed here are the educational level of women, occupation and the level of income. Another variable for adoption of modern family planning by married women's is women's close social networks which are friends, relatives and spouses. Interactions in with ones social networks in society may facilitate diffusion of information on modern family planning.

Community attitude towards modern family planning may also influence adoption of modern family by married women. Positive attitude towards family planning by couples is believed to promote adoption of modern family planning. On the other hand negative attitude is thought to discourage couples from using modern family planning methods. The extraneous variables which may have a moderating effect on the effect of the independent variables on the dependent variables are government policy, international organizations and community based organizations. Married women may be influenced by government policies on modern family planning, activities of International Organizations as well as Community Based organizations operating within the community in making family planning decisions.

## **2.5 Research Gap**

Most of the previous studies reviewed concentrated on demographic variables as determinants of adoption of contraceptives among married women and contraceptive prevalence. This study goes further to investigate the influence of women's close social networks adoption of modern family planning.

Prior studies reviewed on couples desire for large families as a determinant for fertility and contraceptives use by married women have been undertaken in North

Africa, Middle East and South Africa (Malawi). This study is based in Trans-Nzoia County, Kenya a different social setting from the previous studies. The different settings may result in a different relationship than that found in previous studies.

Inconsistencies in findings on the relationship between economic status and uptake of modern contraceptive adoption by married women as noted in a study by Bertrand, seiber and Escandero (2000) in Mayan call for further research in a different setting to ascertain the relationship between the variables.

## **2.6 Summary of Literature Review**

Literature was reviewed on the factors that influence contraceptive adoption by married women. These include literature on the relationship between couples desire for large families, women's economic status, women's social close influence and community attitude on adoption of modern family planning among married women.

Literature shows that women's close social network is critical in adoption of modern Family Planning among married women. Couples desire for large families enhanced by polygamy and sex preference is also an important determinant for adoption of modern family planning.

## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.1 Introduction**

This chapter presents research designs, target population, sample size and sampling procedure, research instruments, instrument validity and reliability, data collection procedure, pretesting instruments, data analysis techniques and ethical consideration

#### **3.2 Research Design**

This study was conducted using the descriptive survey design. A descriptive survey is a research design by which a researcher attempts to collect data from members of a population in a bid to determine the current status of the population with regard to one or more variables. A descriptive survey is suitable for studies where data is intended to describe the existing conditions (Simiyu 2009). The design determines how each of the independent variables either increase or decrease the probability of occurrence of the dependent variable.

#### **3.3 Target population**

Borg and Gall (2009) describe a target population as all members of a real or hypothetical set of people, events or objects to which we wish to generalize the results of our research. The study was carried out in Kwanza division, Trans-Nzoia county. The target population consisted of all married women households in Kwanza Division which are 28784 (KNBS 2010).

### 3.4 Sampling Procedure and Sample Size

The sample size was determined by the use of the Krejcie and Morgan (1970) table.

The sample size was as tabulated as on Table 4.1 below:

**Table 3.1: Sample size**

<b>Categories</b>	<b>Target population</b>	<b>Sample</b>	<b>Percentage (%)</b>
Married women	28,784	358	100
<b>Total</b>	<b>28,794</b>	<b>358</b>	<b>100</b>

#### **Sampling Procedure**

The study adopted the multistage random cluster sampling technique to select the study respondents. This technique is used frequently when a complete list of all members of the population is not available in conducting household surveys. It was done as follows; Random cluster sampling was used to pick three wards out of four wards in Kwanza Division. The names of the four wards were written on pieces of papers and three papers containing the names of the wards to be studied were randomly selected. The wards obtained were Kwanza, Bidii and Kapomboi. . At the second stage random cluster sampling was again done to select villages from the wards. Two villages were selected from the wards where the study was undertaken. The total number of villages selected was six. Married women households consisting from the selected villages were studied. The unit of analysis was a married woman. To identify households with married women the snow ball technique was applied; this was because there was no sampling frame for married women households. After the initial household was identified, the respondents assisted in identifying another

household with a married woman. This went on and on until the entire sample was studied.

### **3.5 Data Collection Procedure**

Data was collected using interview guides. Interviewing was preferred because some of the respondents were illiterate. The interviewer also had the opportunity to ascertain the validity of the data collected. This was through non verbal communication by the respondents which gave the study a better insight of the factors that influence adoption of modern contraceptives by married women. The use of interview guides also allowed the researcher to explain the purpose of the study and to clarify questions which may not have been clear to the respondents (Mutai, 2007)

### **3.6 Piloting**

Piloting was done using the test retest method after preparing the interview schedules and questionnaires and before the actual data collection. Ten households were selected from the sampled villages through random sampling. In total 30 households were studied during the piloting study. Piloting was done with the sole purpose of deleting any weaknesses in the study items and to find out if the questionnaires were clear to the respondents. Some of the unclear questions were restructured and others that were not necessary were deleted. This also helped the researcher to establish the validity and reliability of the research instruments.

### **3.7 Validity of the instruments**

Validity is the degree to which results obtained from the analysis of data actually represent the phenomena under study (Kerlinger 2007). The instruments were evaluated for content validity that is the extent to which the interview guides which include appropriate vocabulary, sentences structure and whether the questions are

suitable for the intended respondents. The instruments were scrutinized by my supervisors to determine whether the instruments adequately address the objectives of the study. Validity of the instruments was also established during the pilot study.

### **3.8 Instrument Reliability**

Reliability is the degree to which a research instrument can yield consistent results after repeated trials. Reliability of the interview guides was ascertained through a pilot study in which the interview guides were pre tested to a sample group similar to the actual sample

This was important in finding out any deficiencies in the questions and correcting them before the actual interview guides were used for study. The data collected during the pilot study was analyzed with an aim of testing the research instruments to be used as well as the research questions to determine whether they achieved the deserved objectives of the study.

### **3.9 Data analysis Techniques.**

Data collected was subjected to qualitative and quantitative analysis. Qualitative data comprised of answers to open ended questions while quantitative data comprised of data from closed ended questions and categorized data.

Quantitative data was collected and analyzed using Statistical Package for Social Science (SPSS) software to generate descriptive statistics such as percentages and frequency tables where applicable. While quantitative was categorized according to themes and objectives in relation to the opinion, views and perceptions of the respondents. Both quantitative and qualitative data was then further analyzed using chi-square, multiple regression analysis, and correlation coefficient and presented on tables.



### 3.10 Ethical considerations of the Study

Ethical consideration was assured by ensuring that the respondents' identity was anonymous and that they were made to understand the purpose of the research. They were asked not to write their names on the questionnaires. The respondents were assured that information obtained from them will be confidential and it would only be used for the intended purpose.

The researcher obtained research authorization from the relevant government body to ensure legal compliance in the research process.

The researcher therefore ensured that data is collected with due regard to ethical consideration. All citations were referenced to conform to the ethical reporting of research results (APA, 2009).

### 3.11 Operational Definition of Study variables

**Table 3.2 Operational Definition of Study variables**

<b>Objectives</b>	<b>Variables</b>	<b>Indicators</b>	<b>Measurement</b>	<b>scale</b>	<b>Data collection method</b>	<b>Type of analysis</b>
To establish the extent to which desire for large families influence contraceptive adoption.	Couples desire for large families	Ideal number of children Son preference Polygamy	Ideal number of children	Nominal	Interview	Quantitative
To establish the extent to which women economic activity influence adoption of modern	Economic activities	Education level Occupation Income	Economic factors	Nominal	Interview	Quantitative

contraceptives						
To investigate the extent to which women's social networks influence adoption of modern contraceptives by married women	Women's close social networks	Friends Spouses Relatives	Number of women influenced by friends, spouses and relatives in contraceptive behavior	Nominal	Interview	Quantitative
To establish the extent to which community factors influence adoption of modern contraceptives by married women	Community attitude	Positive Negative Neutral	Number of women influenced by community attitude in contraceptive behavior	Nominal	Interview	Quantitative
To investigate factors influencing adoption of modern contraceptives by married women	Dependent Variable Adoption of modern family planning by married women	Factors influencing adoption of modern contraceptive	Factors influencing adoption of modern family planning	ordinal	Interview	Quantitative

## CHAPTER FOUR

### DATA ANALYSIS, PRESENTATION AND INTERPRETATION

#### 4.1 Introduction

This chapter analyzes, presents and discusses results of the study showing how some selected factors influence adoption of, modern contraceptives among married women in Kwanza Division, Trans-Nzoia County. This study was based on the following objectives; to determine the extent to which couple's desire for large families influence adoption of modern family planning practices by married women in Kwanza Division, Trans-Nzoia County, to investigate the extent to which women economic status influence adoption of modern family planning methods by married women in Kwanza Division, Trans-Nzoia County, to establish the extent to which women close social networks influence the adoption of modern family planning methods by married women in Kwanza Division, Trans-Nzoia County and lastly to investigate the extent to which community attitude towards modern family planning methods influence adoption of modern family planning methods by married women in Kwanza Division, Trans-Nzoia County. Data was collected and presented using frequency distribution tables and percentages. For all the objectives, the chi square statistic was calculated to test the significance in the relationship between variables. This was further followed by finding the correlation coefficient between the dependent and the independent variable.

#### 4.2 Response Rate

Table 4.1 below shows the response rate in each targeted cluster. A total of 397 (100%) interviews were carried out in the selected wards. An almost equal number of interviews 132 were conducted in the selected wards. In Bidii ward out of the 132

interviews that were carried out 115 (87.12%) were appropriately filled and were valid for data analysis. In Kwanza Ward, 133 interviews were carried out and 119(89.47%) of the interview schedules were correctly filled and used for data analysis. In Kapomboi ward 132 interviews were carried out, 124(93.93%) interview schedules were appropriately filled and used for data analysis. A total of 358 interview schedules were correctly filled and used for data analysis which translates to 85.85 % response rate.

**Table 4.1: Response rate**

<b>Ward</b>	<b>No. of interviews</b>	<b>No. of Responses</b>	<b>Percentage</b>
Bidii	132	115	87.12
Kwanza	133	119	89.47
Kapomboi	132	124	93.93
<b>Total</b>	<b>397</b>	<b>358</b>	<b>85.85</b>

Although there is no single recommended figure for the response rate most writers indicate that generally 60% is rated as marginal, 70% reasonable, 80% is good while 90% would be excellent Munday (2002). A response rate of 85.85% would thus produce reliable results.

#### **4.3 Demographic characteristics of the respondents**

This section presents data on demographic characteristics of the respondents in terms of age, length of stay in marriage and contraceptive status and number of children.

The characteristics were necessary in shedding light on the respondent's background which would be important in understanding the respondent's contraceptive behavior.

#### 4.3.1. Age Distribution of the respondents

The study found it necessary to analyze the age distribution of the respondents as age is a significant factor in contraceptive decisions.

**Table: 4.2 Age Distribution of respondents**

<b>Age of respondents</b>	<b>Frequency</b>	<b>Percentage</b>
-25years	74	20.67
26-35years	153	42.74
36-45years	139	36.87
<b>Total</b>	<b>358</b>	<b>100</b>

Table 4.2 reveals that majority of the women, 42.74% were aged between 26-35 years, respondents, 20.67% were less than 25 years while 36.9% were aged between 36-49 years. The age distribution of the respondents show that majority of the respondents were in their middle ages within which many women are actively involved in child bearing. Younger women with no children and who had not attained their desired number of children are less likely to use contraceptives compared to older women who had several children.

#### 4.3.2. Women's length of stay in marriage.

The researcher found it necessary to establish the length of stay of the respondents in marriage. This would be an important determinant of contraceptive uptake since it is

associated to the number of children a woman had which could influence contraceptive decisions. The findings are presented on Table 4.3 below.

**Table: 4.3 Respondents length of stay in marriage**

<b>Length of stay in years</b>	<b>Frequency</b>	<b>Percentage</b>
Below 1year	24	6.05
2-5years	75	22.17
6-10 years	120	34.15
Above 10 years	139	37.27
<b>Total</b>	<b>358</b>	<b>100</b>

Looking at the data on Table 4.3 above, majority of the women 37.27% had been married for more than 10 years. 34.51% had been married for between 6- 10 years and only 24 6.05% had been in marriage for less than 1 year. Yet another 22.17% had been married for between two to five years. Contraceptive use was likely to be high among women who had stayed in marriage for more than 10 years since majority are likely to have attained their desired number of children.

#### **4.3.3. Respondents' number of children.**

The study sought to establish the number of children the respondents had. This was found necessary as it could influence women's fertility intentions in relation to use of modern family methods. The findings are presented on the Table 4.4 below.

**Table 4.4. Respondents number of Children.**

<b>Number of children</b>	<b>Frequency</b>	<b>Percentage</b>
1-2	69	19.3
3-6	111	31.0
Above 6	188	52.5
<b>Total</b>	<b>358</b>	<b>100</b>

The finding on the table 4.4 indicates that most of the respondents, 52.5% had more than six children. 31.0% had between 3-6 children whereas a small percentage 19.3% had between 1-2 children. It is expected that women with many children may be more willing to use family planning methods than those with few children since they may have attained their ideal number of children.

#### **4.3.4. Respondents current contraceptive use status**

The researcher deemed it necessary to establish the contraceptive prevalence of the respondents. This analysis was important in understanding the factors which influence uptake of modern contraceptive methods by married women. The responses are shown on Table 4.5 below.

**Table 4.5. Respondent’s current contraceptive use.**

<b>Current use of contraceptives</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	165	46.1
No	193	53.9
<b>Total</b>	<b>358</b>	<b>100</b>

Findings on Table 4.5 indicate that 46.1% of the respondents were currently using modern family planning methods. This percentage of contraceptive users is almost similar with the National average of contraceptive use in Kenya estimated at 46%. 53.1% of the women indicated that they were currently not using any modern contraceptive method. Contraceptive use in the area is still low compared to the projected 70% by 2030 necessitating research on the factors influencing contraceptive use by married women in this area. The unmet need for modern family planning in the study area is higher than the National average of 26%. This calls for concerted efforts to increase the uptake of modern contraceptives by married women particularly in rural areas.

#### **4.4. Findings of the study based on the objectives.**

Although the government has put in place measures to curb high population growth through provision of modern contraceptive services, low rates of acceptance and use of contraceptives has been persistent. The contraceptive prevalence rate still stands at 46% which is low compared to the projected adoption rate of 70% by 2030. This situation calls for a comprehensive analysis of the factors influencing adoption of modern contraceptives upon which policy can be formulated to enhance contraceptive adoption. It is upon this background that the current study sought to investigate some



selected factors influencing use of modern contraceptives which include couples desire for large families, women economic status, women close social networks and community attitude. Data was collected, analyzed and presented on tables and discussed basing on the various objectives of the study.

#### 4.4.1. Couples Desire for large families and contraceptive adoption

Fertility preferences are central to any investigation concerning contraceptive adoption. Determining the extent to which fertility intensions predict contraceptive behavior is important for population policy and implementation for family planning programs. It is upon this background that this study sought to investigate the extent to which couples desire for large families influence adoption of modern FP by married women. In order to achieve this objective the researcher sought the views of married women about their desired number of children, gender preference and if women in polygamous marriages compete to get children polygamy in relation to adoption of modern family planning methods. The findings are presented on table 4.6 below:

**Table 4.6 Couples desire for large families n=358**

Statement	Frequency	Percentage
Number of children desired		
1-3	31	8.7
4-6	268	74.9
More than 6	59	16.5
Preference for sons over girls		
Yes	43	12.01
No	315	88.0
Competition to get children		
Yes	219	61.2
No	139	38.8

The findings indicate that majority, 74.85% of the couples desired between four to six children while 16.48 desired more than six children and a small number of women 8.66% desired one to three children. The National Population Development Council defines more than two children as a large number. From the findings 91.3% of the couples desired four children and more which indicates a general desire for many children. Desire for large families could be attributed to the high value placed on children. Children are seen a symbol of social status, prestige as well as a source of wealth and so couples with more children feel respected and wealthy. These findings are in agreement with findings of earlier studies by Wambugu (2013), Njoroge (2011) who cited high esteem for many children as the actual factor that influence female adoption of modern family planning methods as children are viewed as a source of heritage, help, respect, a source of labor and a kind of pension plan during old age.

Analysis of gender preference revealed that 88% of the respondents did not have preference for children of any gender and lack of sons could not prevent them from using modern contraceptives. 12.01% of the respondent's preferred male children and indicated that they would not stop bearing children until they had the desired number of sons. The gender neutral attitude among respondents could be attributed to the realization that children of both sexes fill a crucial gap in the social, economic and cultural life of a people and the belief that all children are a gift from God. Majority of the respondents felt that lack of sons could not be a hindrance to contraceptive use. Preference for sons to daughters does not therefore play a significant role in uptake of modern contraceptives. The findings are inconsistent with Jayaranah, Vinod, Mushra, Fred and Arnold (2009) and Chandhuri (2012) who in their earlier studies in Asia observed that adoption of modern family planning methods decreased with lack of

male children and that women without a male child continued to give birth until they had at least two sons.

On the question of whether women in polygamous marriage compete to get children, majority 61.2% of the respondents said that women in polygamous marriages compete to get children a situation which accounts for low contraceptive use among women in polygamous marriages. 38.8% indicated that women in polygamous marriages compete to get children. The findings indicate that polygamy is an important determinant for modern contraceptives adoption since it is believed that men practice polygamy to get more children which could discourage use of contraceptives by polygamous couples. These findings concur with Bascheri (2013), Ozan (2010) and Reat 2007 who in their studies observed that women in polygamous marriages are less likely than their counter parts in monogamous marriages to use modern contraceptives, as there is a tendency among women in polygamous marriages to compete to get many children to increase their share of inheritance.

The study also investigated the perceptions of the respondents about the extent to which couples desire for large families influence adoption of modern contraceptives. 82.40% of the respondents indicated that desire for large families influenced uptake of contraceptives by married women to a very great extent, 7.25% indicated that couples desire for large families influence adoption of modern contraceptives to a great extent while 8.65% of the women showed that couples desire for large families influenced adoption of modern contraceptives to a moderate extent. Yet another 1.95% said that couples desire for large families only influenced adoption of modern contraceptives only to a small extent. The findings indicate that majority of the respondents 89.65% indicated that that couples desire for large families influence

adoption of modern contraceptives to a great extent hence it is a significant factor in the adoption of modern contraceptives. The findings are shown on table 4.7 below.

**Table 4.7 Extent to which couples desire for large families influence adoption of FP methods**

<b>Perception</b>	<b>Frequency</b>	<b>Percentage</b>
Very great extent	302	84.35
Great extent	26	7.26
Moderate extent	09	2.52
Small extent	31	8.65
<b>Total</b>	<b>358</b>	<b>100</b>

To further examine the extent to which couples desire for large families influence adoption family planning methods the researcher tested the following hypothesis using the chi-square statistic at an alpha level of 0.05.

Ho: Couples desire for large families has no influence on adoption of modern family planning methods by married women. The results are summarized on Table 4.8 below

**Table 4.8: Chi-square results on extent to which couples desire for large families influence contraceptive adoption.**

	<b>Chi-Square</b>		
	Value	Df	Asymp. Sig. (2- sided)
Desire for large families	25.356	1	.000
Number of valid cases( N)	358		

The value of chi-square statistic is 25.356, which is within rounding error and is highly significant ( $p < .001$ ). This implies that couples desire for large families had significant influence on adoption of modern family planning practices by married women. The null hypothesis is therefore rejected implying that couples desire for large families influence adoption of modern family planning methods by married women.

Besides the Chi-square statistic the researcher used Spearman's rank order to show the relationship between large families and adoption of modern family planning methods. The results are summarized on Table 4.9 below.

**Table 4.9. Showing the relationship between large families and adoption of modern family planning practices.**

		Adoption of modern family planning practices
Spearman's	Large families	
rho	Correlation Coefficient	-.543**
	Sig. (1-tailed)	.000
	N	358

\*\* . Correlation is significant at the 0.01 level (1-tailed).

The results show a negative correlation coefficient of  $-.543^{**}$  which implies that as desire for a large family increases; there will be reduced adoption of family planning methods by married women. By taking the coefficient of determination, couples desire for a large family as a factor contribute 28.4 % variability in adoption of modern family planning practices.

#### 4.4.2 Economic status and adoption of modern family planning by married

##### women

Knowledge of women's economic realities and identification of the obstacles that women may face in achieving their reproductive goals is important in formulating programmes that are responsive to women's needs for reproductive health. It is in this light that the study sought to determine the extent to which the economic status of married women influences adoption of modern family planning. In order to achieve this objective the researcher established the economic status of the respondents based on the level of education, monthly income and occupation

**Table 4.10: Indicators of women economic status and contraceptive adoption**

**n=358**

<b>Statement</b>	<b>Frequency</b>	<b>Percentage</b>
level of education		
No education	37	10.34
Primary	143	39.99
Secondary	107	30.44
Tertiary	69	19.27
Approximate monthly income in ksh		
Below 5000	229	63.41
Between 10,000-50,000	105	29.33
Above 50,000	24	6.70
Occupation		
Not employed	217	60.61
Employed	71	19.83
Self employed	70	19.55

The data on Table 4.10 indicate that majority, 39.9% of the respondents had completed primary school while 10.34% were illiterate, 30.44% had secondary

education and 69% had tertiary education. More educated women were more likely to be gainfully employed and to get enough money to purchase family planning commodities, besides they are also less likely to be affected by illusory fears about the negative effects of modern contraceptives such as damage to reproductive organs, barrenness and protracted ill health which mainly hinder illiterate women from using modern contraceptives. Respondents with secondary education and above indicated that they understood the benefits of modern contraceptives and were also able to accurately interpret information about contraceptives which is important in contraceptive uptake. The findings of the study thus indicate that contraceptive uptake increase with increase in the level of education. The findings agree with earlier findings of previous studies by Lunani (2014), Wambugu (2013) and Dabral and Malik (2004) who observed that more educated women appreciated the benefits of modern family planning methods than illiterate women hence are more likely to use contraception than less educated and illiterate women.

Regarding income, majority of women, 63.42% had a monthly income of less than Ksh 5000 per month while 29.33% had income of between Kshs10, 000-50,000. A small number 6.70% had a monthly income of above Ksh.50, 000. The findings also show that most respondents were low income earners. Women with low income are less likely to use modern contraceptives since they may lack disposable income with which to purchase non basic items such as contraceptives, this may imply low contraceptive uptake among women with low income. The findings are in line with earlier findings of Smith and Shama (2005) and Otomo, Almaeso and Park (1993) who in their earlier studies established that with low income uptake of modern family planning declines.

The findings further indicate that majority 60.61% of women were not employed and mainly practiced subsistent farming, 19.8% were employed and 19.55% were self employed. Subsistence farming is associated with low income which could be an impediment to contraceptive use. Besides, most peasant farmers rely on family labor hence may bear more children to provide labor on farms The findings concur with Nwonsu et al (2011) who observed that adoption of modern family was lowest among peasant farmers as they needed more hands to work on the farm, had low levels of education, were ignorance about the benefits of modern family planning and had high level of adherence to cultural imperatives that require women to give birth till menopause.

The researcher further sought to establish the perceptions of the respondents about the extent to which economic status influence adoption of contraceptive by married women. The findings reveal that 81.84 % indicated that women economic status influence contraceptive uptake to a very great extent. 5.86% indicated that women economic status influence adoption of modern contraceptives to a great extent while 3.07% of the women said that women economic status influence adoption of modern contraceptives to a moderate extent yet 5.30 % of the respondents indicated that women economic status influence adoption of modern contraceptives to a small extent and 3.90% said that women economic status did not influence adoption of modern family planning at all. From the responses, 87.7% of the women indicated that economic status had a great influence on adoption of modern contraceptives hence a significant determinant of contraceptive uptake.



**Table 4.11: Extent to which economic status influence adoption of contraceptives.**

<b>Perception</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Very great extent	307	85.75
Great extent	21	5.86
Moderate extent	11	3.07
Small extent	19	5.30
<b>Totals</b>	<b>358</b>	<b>100</b>

Using the data obtained on the extent to which women economic status influence adoption of modern family planning methods the following hypothesis was tested using the chi-square statistic at an alpha 0.05 and the results presented on table 4.12 below.

H<sub>0</sub>: Women’s economic status does not influence adoption of modern family planning practices by married women.

**Table 4.12: Chi-square results on the extent to which women economic status influence adoption of modern family planning methods.**

<b>Chi-Square Tests</b>			
	<b>Value</b>	<b>Df</b>	<b>Asymp. Sig. (2-sided)</b>
Women economic status	25.557	1	.000
Number of valid cases	358		

The chi-square test at an alpha level of 0.05 yielded a value of  $\chi^2(1) = 25.557$   $p < .001$  at one degree of freedom showing that there was a significant association between women economic status with adoption of modern family planning practices by married women. The value of chi-square statistic 25.557 is within rounding error

and is highly significant ( $p < .001$ ), indicating that economic status had significant influence on adoption of modern family planning practices by married women, the null hypothesis is therefore rejected.

The study further identified the relationship between the dependent and independent by finding the value of the correlation coefficient using the spearman's rank order and the results presented on Table 4.13 below.

**Table 4.13: Showing the Relationship between economic status to adoption of modern family planning practices by married women.**

Spearman's rho		economic status as a Factor	adoption of modern family planning practices
		Correlation Coefficient	.695**
		Sig. (1-tailed)	.001
		N	358

\*. \*. Correlation is significant at the 0.01 level (1-tailed).

The results show that there is a statistical significant relationship between economic status and adoption of modern family planning practices by married women. It is clear that there is a relatively strong significant, positive relationship between economic status and adoption of modern family planning practices by married women, ( $r = 0.695^{**}$ ,  $p < 0.001$ ). The positive correlation implies that as women economic status rise, there will be increased adoption of modern planning practices by married women. By taking the coefficient of determinant, economic status as a factor contributes 48.3 % variability in adoption of modern family planning practices by married women.

#### 4.4.3 Women’s close social networks and contraceptive adoption by married women.

Much of the recent literature that endeavors to explain fertility behavior especially in sub-Saharan Africa suggests that an exclusive focus on individual women omits other important explanatory factors and may be misleading (Bruce et al 1995). Clearly women’s social interactions with partners, close family members, friends, health professionals, religious leaders and others influence their attitude and behavior with respect to fertility and related matters such as contraceptive use. The social networks theory used in this study further emphasizes that people do not make decisions in isolation but are influenced by those in their close social networks, It is upon this background that the study sought to establish the extent to which women’s close social networks influence adoption of modern contraceptives. To achieve this objective respondents view were sought on the influence of friends, relatives and spouses on adoption of modern contraceptive and the findings presented on table 4.14 below.

**Table 4.14 Indicators of close social networks on contraceptive adoption. n=358**

<b>Statement</b>	<b>frequency</b>	<b>percentage</b>
<b>Discussion with spouse</b>		
Yes	237	66.2
No	121	33.80
<b>Spousal approval</b>		
Yes	45	13.41
No	313	87.4
<b>Influence of friends</b>		
Yes	237	66.2
No	121	33.8
<b>Influence of close relatives</b>		
Yes	33	9.21
No	325	90.7

Regarding the question on whether women discuss modern contraceptives with their husbands, 66.2% said that they discussed family planning with their spouses while 33.80% indicated that they did not discuss contraceptives with their husbands. Discussion about modern contraceptives with husbands is paramount in contraceptive use since it is the beginning of a rational decision making process in adoption process. Good communication about contraceptives may remove uncertainties which many women may have about their spouse's perception about use of modern contraceptives. Discussion about family planning with spouses may lead to mutual decision making by couples about contraceptive behavior. The fact that most respondents 66.2% in this study discuss about modern contraceptives with their spouses, it implies that spousal communication is a significant determinant of contraceptive adoption by married women. Similar findings were observed by Esabella J.M (2012) who established that women who discussed about contraceptives with their spouses were more likely to use contraceptives than those who did not. This could be attributed to the fact that through discussions, negative myths, attitudes and beliefs held by spouses about modern contraceptives could be dispelled and this could enhance adoption of contraceptives.

Regarding the question on whether women would use modern contraceptives if their husbands disapproved, majority, 87.43% said that they could not use contraceptives without their husband's approval while a small number 13.41% indicated that that they could use contraceptives whether their husbands approved or disapproved. This implies that adoption of contraceptives would significantly decrease with spousal disapproval of contraceptive use. These findings agree with earlier studies by Malau, Koskei, Tuo and Amoni (2000) and Shultluck (2011) who asserted that men in developing countries are the decision makers about family size and consequently contraceptive uptake. Lack of women voice on contraceptive matters could be

attributed to the fact that most women especially in the rural areas have low socioeconomic status and entirely depend on their husbands a scenario that impedes them from raising their voice above men on matters of fertility. Besides, the power imbalance at the family level always favors men.

Regarding the question on whether women's current contraceptive status was influenced by their friends, 66.20% said that they discussed about contraceptives with their friends during their day to day interactions while going about their activities. 33.80% said that they did not discuss about modern contraceptives with their close friends. Further findings show that 66.% of the respondents contraceptive use status was influenced by friends. Only a minority 33.8% reported that friends did not influence their contraceptive behavior. The findings indicate that friends play a significant role in influencing contraceptive behavior. This could be due to the fact that people may feel the pressure to conform to what their friends are doing so that they feel accepted by their friends. This finding are in line with earlier findings by Valente & Berhmand (2003) that women discuss about modern family planning with their friends and in so doing information spreads which may enhance contraceptive adoption.

Findings on the impact of close relatives on women contraceptive adoption reveal that 90.7% of the women indicated that their current status of contraceptive use was not influenced by close relatives while 9.21% of the respondents said that their current contraceptive status was influenced by their friends. From the findings close relatives do not play a significant role in adoption of modern family planning methods by married women. These findings are inconsistent with earlier findings by Imo et al (2013) who cited opposition by relatives as a hindrance to contraceptive adoption. The minimal influence of relatives could be attributed to the weakening of the

extended families ties which allowed frequent interactions of couples with their close relatives. Also the topic on family planning in some communities is considered a taboo and may not be freely discussed by relatives.

Further, the respondents sought to establish the extent to which women’s close social networks influence adoption of modern contraceptives. The responses are shown on Table 4.15 below.

**Table 4.15: The extent to which women’s close social networks influence contraceptive adoption by married women**

<b>Perception</b>	<b>Frequency</b>	<b>Percentage</b>
Very great extent	224	62.6
Great extent	31	8.7
Moderate extent	19	5.3
Small extent	83	23.8
Total	358	100

The data on Table 4.15 show that, 62.6% of the respondents showed that women’s close social networks influence adoption of modern family planning methods by married women to a very great extent. 8.65% indicated that women’s close social networks positively influence contraceptive adoption to a great extent while 5.30% indicated that women’s close social networks influence adoption of modern family planning methods by married women to a moderate extent and another 23.18% said that women’s close social networks influence adoption of contraceptives to a small extent. Basing on this findings women’s close social networks influence adoption of

modern family planning methods to a great extent hence it is a significant determinant of contraceptive adoption.

Using the data obtained on the extent to which women’s social networks influence the adoption of modern contraceptives by married women, the hypothesis below was tested using the chi-square statistic at an alpha 0.05 and the results presented on Table 4.16 below

Ho. Women’s close social networks do not influence adoption of modern contraceptives by married women.

**Table 4.16: Chi-square results showing the extent to which married women’s close social networks influence adoption of modern contraceptives**

	Chi-Square Tests		
	Value	df	Asymp. Sig. (2-sided)
Women’s close social networks	26.336	1	.000
Number of valid cases	358		

The chi –square statistic at 1 degree of freedom and 95% level of significance yielded a value of  $\chi^2 (1) = 26.336, p < .001$ .

The value of chi-square statistic of 26.336, which is within rounding error is highly significant ( $p < .001$ ), indicating that Married woman’s close social networks had a significant influence on adoption of modern family planning practices by married women hence we reject the null hypothesis that married women’s close social networks do not influence adoption of modern family planning methods by married women.

The correlation coefficient of women’s close social networks on adoption of modern family planning practices by married women was established using the spearman’s rank order and the results presented on Table 4.17 below.

**Table 4.17 Showing the Relationship between spouse close social networks and adoption of modern family planning practices by married women.**

Women close social networks		adoption of modern family planning practices
	Correlation Coefficient	.657**
	Sig. (1-tailed)	.000
	N	358

\*\* . Correlation is significant at the 0.01 level (1-tailed)

The correlation coefficient is ( $r = 0.657$ ,  $p < 0.001$ ) showing a relatively strong, relationship between women's close social networks and adoption of modern family planning practices by married women, the positive correlation implies that as women's close social networks increases; there will be adoption of modern family planning practices by married women.

#### **4.4.4 Community attitude towards modern contraceptives and adoption of modern family planning methods.**

There are substantial geographic variations in contraceptive use although the factors shaping these variations are little understood. These factors remain after accounting for individual and household factors. They include contextual factors affecting the life of individuals such as community level cultural beliefs, presence of quality reproductive health services, the physical characteristics of the area among others. This study seeks to establish the extent to which the community attitude towards modern family planning influence adoption of modern family planning methods by married women. To achieve this objective, the attitude of the community towards modern family planning was investigated and the results shown on Table 4.18 below.



**Table 4.18: Community attitude and adoption of contraceptive N=358**

Statement	Frequency	Percentage
Community attitude		
Positive	237	66.20
Negative	111	31.00
Neutral	10	2.7
Community a hindrance to FP		
Yes	203	56.7
No	147	41.06
No answer	8	2.23

Regarding the attitude of the community towards modern contraceptives, 66.20% of the women said that the community had a positive attitude towards modern family planning while 31.0% of the respondents said that the community had a negative attitude towards modern family planning. A small number 2.7% reported that the community had a neutral attitude towards modern family planning. The high positive attitude towards modern family planning by the community could be attributed to the near universal knowledge of modern contraceptives and knowledge of the benefits of modern family planning by most members of the community members. Negative attitude towards modern contraceptives by the community could be attributed to the perceived negative side effects of modern contraceptives. The attitude of the community towards contraceptives is strongly related to the cultural practices of the community such as fertility preferences, age at marriage, religious practices as well as gender roles and economic activities.

Regarding whether community attitude towards modern contraceptives hinder women's use of modern contraceptives, 56.7% of the women indicated that

community attitude hinder uptake of modern contraceptives while 41.06% said that community attitude does not hinder adoption of modern contraceptives. The finding shows that the community attitude has a significant influence on adoption of modern contraceptives. The findings are in agreement with earlier studies by Nsemuklia et al (1999) who in their study established that a positive relationship between adoption of contraceptives and community approval existed due to various underlying community processes such as prevailing cultural surroundings, gender roles, cultural expectations that dictate women to bear children throughout out their reproductive ages till menopause. Previous studies by Amin S, Basu A.M and Stephenson R (2002) also show that women may choose a particular method as a result of methods adopted by those in the community. In order to increase uptake of modern contraceptives, the community has to be sensitized on the benefits of modern family planning to the family and to National development.

The study further sought to establish the perceptions of the respondents on the extent to which the community's attitude influenced adoption of modern contraceptives, 82.40% of the respondents said that community's attitude influence adoption of modern family planning methods by married women to a great extent, 12.01% indicated that community attitude influence adoption of modern contraceptives to a great extent while 2.51% said that the attitude of the community influenced adoption of modern contraceptives to a moderate extent whereas 2.91% of the respondents indicated that community attitude towards contraceptives influence adoption of modern family planning methods to a small extent. The findings show that respondents strongly agreed that community attitude towards modern contraceptives influence adoption of modern family planning methods to a great extent hence it is a significant determinant of contraceptive adoption by married women.

**Table 4.19: Community's attitude and adoption of contraceptives by married women**

<b>Perception</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Very great extent	315	82.40
Great extent	43	12.01
Moderate extent	9	2.51
Small extent	11	3.0
<b>Totals</b>	<b>358</b>	<b>100</b>

The data obtained on the extent to which community attitude towards modern FP methods influence adoption of modern contraceptives by married women was used to test the following hypothesis using the chi-square statistic at 95 % level of significance and the results presented on Table 4.20 below.

Ho. Community attitude does not influence adoption of modern contraceptives by married women.

**Table 4.20: Chi-square results showing the relationship between community attitude towards modern contraceptives and adoption of contraceptives by married women.**

	Chi-square		
	Value	df	Asymp. Sig. (2-sided)
Community attitude	25.200 <sup>b</sup>	1	.000
No of valid cases	358		

The results of the chi-square statistic indicate that there was a significant association between attitude of community towards modern contraceptives with adoption of modern family planning practices by married women at  $\chi^2(1) = 25.200, p < .001$ . The value of chi-square statistic 25.200 is within rounding error and is highly significant ( $p < .001$ ), indicating that the attitude of community towards modern contraceptives

had significant influence on adoption of modern family planning practices by married women hence we reject the null hypothesis

Besides the chi-square statistic the researcher established the correlation coefficient between community attitude towards modern contraceptives and adoption of modern contraceptives and the results are as presented on Table 4.21 below

**Table 4.21: Showing correlation between community attitude and its influence to adoption of modern family planning methods by married women**

		adoption of modern family planning methods
community attitude	Correlation Coefficient	-.500**
	Sig. (1-tailed)	.05
	N	358

From Table 4.21, community attitude negatively influence adoption of modern family planning practices by married women at  $p < .05$ . Coefficient of determination,  $R^2$  was used to show the variability accounted for community attitude which cause variability in adoption of modern family planning methods by married women by 25%.

#### **4.5 Regression Analysis for Predicting adoption of modern family planning methods by married women.**

In this section the researcher sought to come up with a regression model for the four categories explaining the adoption of modern family planning methods by married women. This enabled the determination of how well multiple independent variables (variables characterizing each of the four categories) predict the value of a dependent variable. The dependent variable can be characterized as adoption of modern family planning methods by married women. Multiple regression was used to predict

adoption of modern family planning methods by married women in a situation in which desire for large families, women's close social network, economic status of women and community attitude as factors that influence adoption of modern family planning methods by married women. In multiple regressions the linear model takes the form of the equation:

$$Y_i = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + \dots + b_nX_n + e_i$$

Where  $y_i$  = the outcome variable (adoption of modern family planning methods by married women)

$b_0$  = is the Y-Intercept which is the adoption of modern family planning methods by married women with no factor influence.

$b_1$  = coefficient of couples desire for large family predictor ( $X_1$ )

$b_2$  = coefficient of women's close social network predictor ( $X_2$ )

$b_3$  = coefficient of women economic status predictor ( $X_3$ )

$b_4$  = coefficient of community attitude predictor ( $X_4$ )

$b$  values tells us the degree that each predictor affects the outcome; if the effect of all the other predictors are held constant

**Table 4.22 Showing Analysis of Variance (ANOVA) to Predict adoption of modern family planning methods by married women**

**ANOVA**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.466	1	.466	1.867	.173 <sup>b</sup>
	Residual	62.116	249	.249		
	Total	62.582	250			
2	Regression	2.861	2	1.430	5.940	.003 <sup>c</sup>
	Residual	59.721	248	.241		
	Total	62.582	250			
3	Regression	3.846	3	1.282	5.391	.001 <sup>d</sup>
	Residual	58.736	247	.238		
	Total	62.582	250			
4	Regression	4.085	4	1.021	4.295	.002 <sup>e</sup>
	Residual	58.497	246	.238		
	Total	62.582	250			

a. Dependent Variable: the adoption of family planning practices.

b. Predictors: (Constant), couples desire for large family as factor

c. Predictors: (Constant), large family as factor, woman close social network as factor

d. Predictors: (Constant), large family as factor, woman close social network, economic status as a factor

e. Predictors: (Constant), large family as factor, woman close social network, economic status as a factor, community attitude as a factor

Table 4.22 contains an analysis of variance (ANOVA) that tests whether regression is significantly better in predicting the outcome than using the mean as the best guess.

Specifically the F ratio represents the ratio of the improvement in prediction that results from analyzing with regression relative to the inaccuracy that still exists. For the 2<sup>nd</sup> model predicting large family, the F-ratio is 5.94 which is greater than 1 and is also highly significant at  $P < .05$ , we can interpret the results as meaning that regression significantly improved the ability to predict the adoption variable because the F-ratio is more significant. For the 3<sup>rd</sup> model predicting women's close network and large family where the F-ratio is 5.391 which is greater than 1 is highly significant at  $P = .001$ , we can interpret the results as meaning that regression has significantly improved the ability to predict the adoption variable with even an extra predictor because the F-ratio is more significant. For the 4<sup>th</sup> model predicting, large family, women's close social network, economic status of women as a factor and community attitude as a factor, the F-ratio is 4.295 which is greater than 1, also which is highly significant at  $P = .05$ , we can interpret the results as meaning that regression significantly improved our ability to predict the adoption of modern family planning methods by married women variable because the F-ratio is more significant. We can conclude that the prediction of regression increases with additional variable so long as their correlation is significant.

**Table 4.23 Coefficients Table in Regression**

<b>Coefficients<sup>a</sup></b>							
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
	B	Std. Error				Lower Bound	Upper Bound
Large family	-.018	.013	-.086	-1.366	.001	-.044	.008
Social network	-.013	.005	-.197	-2.722	.007	-.022	-.004
Economic status	-.020	.010	.527	-1.954	.052	-.040	.000
Community attitude	.006	.006	-.366	1.003	.317	-.005	.016
4 (Constant)	2.323	.315		7.378	.000	1.703	2.944

Dependent Variable: adoption of modern family planning methods by married women

Therefore it is possible to have a model that; adoption of modern family planning methods by married women = 2.323 (Constant) +  $-.086 \times$  large family) + ( $-.197 \times$  spouse close social network) + ( $.527 \times$  economic status) + ( $.366 \times$  community attitude)

In Table 4.23, large family as a factor with a standardized beta coefficient of  $-.086$  indicates that as large family increases by 1 std deviation, the adoption of modern family planning methods by married women decreases by  $-.086$  std deviations if the effects of other predictors are held constant. Social network as a factor with a standardized beta coefficient of  $-.197$  indicates that as social network increases by 1 std deviation the adoption of modern family planning methods by married women decreases by  $-.197$  std deviations if the effects of other predictors are held constant.



Economic status as a factor with a standardized beta coefficient of .527 indicates that as economic status increases by 1 std deviation, the adoption of modern family planning methods by married women increases by .527 std deviations if the effects of other predictors are held constant. Community attitude as a factor with a standardized beta coefficient of .366 indicates that as community attitude increases by 1 std deviation the adoption of modern family planning methods by married women increases by .366 std deviations if the effects of other predictors are held constant. The t-test shows that the b-values obtained are different from zero (relative to its standard error). The mean used to extract significant variables accurately represent the true mean, since the confidence intervals at 95% implying that the sample mean must be close to the true mean.

## CHAPTER FIVE

### SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter gives a summary of the findings, conclusions and recommendations on the factors influencing adoption of modern family planning practices in Kwanza Division, Trans-Nzoia County.

#### 5.2 Summary of the Study

This study sought to examine the factors that influence adoption of modern family planning by married women in Kwanza Division, Trans-Nzoia County, Kenya. The research questions and sought to find out to what extent couples desire for large families, women economic status, women's close social networks and community attitude towards modern contraceptives influence adoption of modern family planning methods by married women. The research hypothesis on the other hand sought to find out if there was a significant relationship between the dependent and the independent variables. The study adopted a descriptive survey design. The dependent variable of the study was adoption of modern family planning by married women. Independent variables were couples desire for large families, women economic status, peer pressure, and couples attitude. The theoretical framework that guided the study was the Diffusion of Innovations theory and the social networks Theory. The diffusions of innovations theory states that adoption of new behavior is a five stage process from knowledge, persuasion, decision making implementation, and confirmation. Communication is determined by interpersonal communication while persuasion is determined by the physical attributes of the technology and compatibility with ones values and beliefs. The social networks theory states that individuals do not make

decisions in isolation but by interacting with others in their social networks from whom they learn through social learning and social influence. The target population for this study was 28794 and the sample size was 397 married women.

The study gathered both quantitative and qualitative data. Data was analyzed using descriptive statistics including frequencies and percentages as well as inferential statistics using the chi-square statistic, correlation analysis and multiple regression analysis. Statistical Package for Social Sciences (SPSS) version 20 was used to generate inferential data. Data was then interpreted and presented on tables.

### **5.3 Summary of findings**

#### **5.3.1 Couples desire for large families and modern family planning methods.**

The study established that couples desire for large families was positively associated with adoption of modern family planning by married women. The more children a woman desired the more likely she was not to use modern contraceptives. This could be due to the high value of children as a source of labor, heritage, respect and help during old age. Majority 74.6% of the women desired between 4-6 children and 16.5% desired more than 6 children which imply a strong desire for many children by many women in the study area imply low contraceptive use by the women. Further, 87.9 % welcomed all children irrespective of their gender, the gender – neutral attitude is related to the belief that children are a gift from God. 61.17% of the respondents felt that women in polygamous marriages compete to get children which limit their use of family planning methods. 84.36 % indicated couples desire for large families influence the adoption of modern family planning to a very great extent. Moreover, chi-square statistic revealed a significant relationship between couple's desire for large families and adoption of modern contraceptives. The chi-square

statistic of 25.557 was within rounding error and highly significant at  $p < .001$  indicating a strong relationship between the variables.

### **5.3.2. Women economic status and adoption of modern contraceptives by married women.**

The study identified that the practice of modern family planning increased with increase in women's educational level, women's income and occupation. Women with secondary education and above demonstrated a good understanding of the benefits of modern family planning as well as an ability to interpret instructions on use of modern contraceptives which was directly linked to adoption and use of modern contraceptives. The study setting was an agrarian region where peasant farming was dominant. Farmers had low income which accounted for the high unmet need for family planning as only 59.9% indicated that the economic activities they engaged in enabled them access quality contraceptives of their choice. Further a correlation coefficient of 0.912\*\* revealed a strong positive relationship between women economic status and adoption of modern contraceptives which imply that as women economic status rise uptake of contraceptives also increase.

### **5.3.3. Women's close social networks and adoption of modern family planning**

The study established that friends had a significant influence on contraceptive adoption as 66.2% of the respondents indicated that they discussed modern family planning with their friends and that their current contraceptive status was influenced by friends. Spousal approval was a strong determinant of contraceptives adoption by married women. On the other hand only 33.8% of the women indicated that their contraceptive decisions were influenced by their relatives thus close relatives do not play an important role in contraceptive adoption. From the perceptions of the respondents 65.3% indicated that women's close social network influenced

contraceptive adoption to a very great extent. The chi-square statistic revealed a significant relationship between women's close social networks and adoption of modern contraceptives. Further, a correlation coefficient of 0.657 revealed a relatively strong relationship between women's close social networks and adoption of modern contraceptives.

#### **5.3.4 Community attitude towards modern contraceptives and adoption of contraceptives**

66.2 % of the respondents indicated that the community had a positive attitude towards modern family planning methods which could be attributed to knowledge of the benefits of modern contraceptives. Negative attitude towards contraceptives was cited as an impediment to contraceptive adoption and was attributed to misconceptions held by the community about the side effects of contraceptives. The chi-square statistic reveal that the relationship between community attitude towards modern contraceptives and uptake of contraceptives was significant at  $\chi^2(1) = 25.209$   $P < 0.001$ . The Chi-square statistic of 25.209 was within rounding error showing a significant association between community attitude towards adoption of modern contraceptives and married women's adoption of modern contraceptives

#### **5.4 Conclusions of the Findings**

The following are the conclusions drawn from the findings of the study by the researcher according to the objectives of the study:

##### **5.4.1. Couples desire for large families and uptake of modern family planning methods**

The unmet need for contraceptives was linked to couples desire for large families. Women who desire many children are hesitant to use modern family planning

methods during their reproductive years. Majority of respondents showed a desire for between four to six children and above. The chi-square statistic and correlation coefficient revealed a significant relationship between couple's desire for large families and adoption of contraceptives.

#### **5.4.2. Women economic status and adoption of modern family planning methods**

Low education level, low income and unemployment limit the ability of women to use modern family planning methods. More educated women with high income were more likely to purchase contraceptives of their own choice. Majority of the respondents indicated that economic status of married women influence adoption of modern family planning methods to a very great extent.

#### **5.4.3 Women's close social networks and adoption of modern family planning methods**

It was established that friends and spouses play a significant role in influencing adoption of modern family planning methods. The chi-square statistic revealed a significant relationship between women's close social networks and adoption of modern family planning methods.

#### **5.4.4. Community attitude and adoption of modern family planning methods**

The community generally had a positive attitude towards modern contraceptives owing to the knowledge about the benefits of modern contraceptives by community members. Respondents indicated that community attitude about modern contraceptives may encourage or discourage uptake of modern contraceptives.

### **5.5 Recommendations**

In light of the research findings, uptake of modern of contraceptives by married women in Kenya and in Kwanza Division in particular is affected by various factors.

In order to increase the uptake of modern family planning methods the following are recommended:

1. Sensitization on the importance of having small families should be done at all levels of governance by various stakeholders concerned with matters of reproductive health .
2. National and county governments should strive to improve transition rates from primary to secondary school to raise the education levels among women which would promote better understanding of reproductive rights and the benefits of modern family planning methods by women.
3. National and county governments to strengthen women economic empowerment programmes by providing sufficient information to women on the availability of such programmes and how they can benefit from them.
4. Sufficient and right information to be provided by stakeholders on modern family planning methods at all levels in simple language that can be easily understood to avert negative peer influence.
5. Emphasis should be put on encouraging men to use family planning instead of leaving the burden to women, by so doing contraceptive prevalence would increase.

#### **5.6 Suggestions for further Research**

1. The scope of the study was limited by time and resources and therefore the study was only done in three wards in Kwanza Division which exhibited homogeneous characteristics hence there was no much variations in findings. The researcher therefore suggests that similar studies should be done in other areas.

2. There is scanty information on the role of women's close social networks on uptake of modern family planning. More studies should be done to analyze the role of women's close social networks on uptake of modern family planning.
3. Since this study only focused on married women, other studies should be done on factors that influence family planning adoption by men and unmarried women.



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**APPENDICES**

**APPENDIX I**

**LETTER OF TRANSMITTAL**

**UNIVERSITY OF NAIROBI,  
COLLEGE OF EDUCATION AND EXTERNAL STUDIES,  
DEPARTMENT OF EXTRA MURAL STUDIES,**

Dear Respondents

I am a student of The University of Nairobi undertaking a research project on the factors influencing the adoption of modern family planning in Kwanza Sub County, Trans-Nzoia County. You have been selected to participate in this study. I therefore seek your permission to be allowed to collect information from you. The information collected will be treated with outmost confidentiality and will be used for research only. Your participation in this study will be highly appreciated.

Thank you in advance

Yours faithfully,

Jane Nekesa Wafubwa.

## APPENDIX II

### INTERVIEW SCHEDULE

I am undertaking a Master of Arts degree at The University of Nairobi. I am conducting research on the factors influencing adoption of Modern Family Planning methods by married women. Kindly assist me by responding to all items contained herein. The confidentiality of the information you will provide will be adhered to. Do not indicate your name anywhere.

#### SECTION A : RESPONDENTS DEMOGRAPHIC INFORMATION

1. What is your age?

- a) Under 25 Years [  ]
- b) 26-35 Years [  ]
- c) 36- 49 years [  ]

2. For how long have you been married?

- a) Below 1 year [  ]
- b) 2-5 years [  ]
- c) 6-10 years [  ]
- d) More than 10 years [  ]

3. How many children do you have?

- a) None [  ]
- b) 1-3 [  ]
- c) 4-6 [  ]
- d) More than 6 [  ]

4. Are you currently using modern contraceptives?

- Yes [  ]
- No [  ]

**SECTION B: STATUS OF MODERN CONTRACEPTIVE**

1 a) .Have you ever heard about modern family planning

Yes [ ]

No [ ]

b) If your answer to (a) above is Yes, where did you get information about modern family planning

Media [ ]

Friends [ ]

Husband [ ]

Health facility [ ]

Seminar [ ]

others [ ]

2. a) Are you currently using contraceptives ?

Yes [ ] No [ ]

b) If your answer to (a) above is Yes; what influenced your decision to use modern family planning .....

3. a) If you are currently not using modern family planning do you have intentions of using modern contraceptives?

Yes [ ]

No [ ]

b) Give reasons for your answer

.....

4. Which modern family planning methods are most commonly used by women in your community?.....

5. What do you think are the benefits of modern family planning?

.....

**SECTION C**

**Couple desire for large family size and contraceptive adoption.**

1a) What do you think is the ideal number of children

a)1-3 [ ]

b) 3-4 [ ]

c) More than 6 [ ]

2. Would you practice family planning before you attain your desired number of children?

Yes [ ] No [ ]

3a). Is your husband Polygamous?

Yes [ ] No [ ]

b) Do you think women in polygamous marriages compete to get more children

4. a) Do you prefer male children to female?

Yes [ ]

No [ ]

6. a) Would you stop having more children if you only had children of one sex?

Yes [ ]

No [ ]

Indicate your perceptions about each of the following statements by choosing any of the options: Very Great extent, Great extent, Moderate extent, Small extent.

NO	STATEMENT	Very Great extent	Great extent	Moderate extent	Small extent
1	Polygamy influence the adoption of family planning by married women				
2	Men marry many wives to get more children				
3	Women with few sons or no son do not stop getting children until they get the desired number of sons				
4	Women married to one man compete to get children				

#### SECTION D

##### Women economic status and adoption of modern family planning by married women

1. What is your level of education?

- a) Primary [ ]
- b) Secondary [ ]
- c) Tertiary [ ]

2 What is your occupation?

- a) Not employed [ ]
- b) Employed [ ]
- c) Self employed [ ]

3 What is your approximate monthly income?

- a) Less than Ksh.5,000 [    ]
- b) Between Kshs. 10,000 – 50,000 [    ]
- c) More than Kshs 50,000 [    ]

4 . Do you understand the benefits of modern family planning?

Yes [    ]

No [    ]

5. Can you properly follow instructions on family planning?

Yes [    ]

No [    ]

6 Does your income level enable you to access contraceptives of your own choice ?

Yes

No

7. Does your occupation enable you to access contraceptives

Please indicate the extent to which you agree with the following statements by choosing any one of the options. Very Great Extent. Great extent, Moderate extent, Small Extent.

No	Statement	Very Great extent	Great extent	Moderate extent	Small extent
1	A woman's education level makes women to use or not use modern family planning.				
2	A married woman's occupation determines contraceptive adoption				
3	A woman's income influence adoption of modern contraceptives				

**SECTION E**

**Women's close social networks and adoption of contraceptives**

1 a) Do you discuss about family planning with your friends?

Yes [  ]

No [  ]

2 Is your current contraceptive status influenced by your friends?

Yes [  ]

No [  ]

3. Does your husband approve of the use modern family planning methods?

Yes [  ]

No [  ]

4 a) Do you discuss about modern family planning with your husband?

Yes [  ]

No [  ]

b) Do your close relatives influence contraceptive decisions?

Yes [  ]

5a) Do you discuss modern family planning with your close relatives

Yes [  ]

No [  ]

6. Which of your close relatives do you discuss issues about modern family planning with?

Mother [  ]    Mother In-Law [  ]    Brother/Sister in-laws [  ]

Siblings [  ]



Indicate your perceptions about each of the following statements by choosing on any of the following options. Very great extent, Great extent. Moderate extent , Small extent.

NO	STATEMENT	Very great extent	Great extent	Moderate extent	Small extent
1	Friends can encourage or discourage the adoption of modern family planning				
2	Spousal approval is the main determinant of a married woman's adoption of modern family planning				
3	Close relative influence adoption of modern family planning by married women				

## SECTION F

### Community attitude and adoption of modern family planning by married women

1. What is the attitude of the community towards modern family planning?

Positive [ ]

Negative [ ]

Neutral [ ]

2 a) Do you think the attitude of the community modern contraceptives can hinder use of contraceptives by married women.

Yes [ ]

No

3. Why do you think the community would have a negative attitude towards modern contraceptives.....  
 .....

4. Does your community have any taboos about use of modern contraceptives?

Yes [ ]

No [ ]

Explain your answer.....  
 .....

Indicate your perception about each of the following statements by choosing any of the following options: Very great Extent, Great Extent, Moderate extent, Small extent

<b>NO</b>	<b>STATEMENT</b>	<b>Very great extent</b>	<b>Great extent</b>	<b>Moderate extent</b>	<b>Small extent</b>
1	Positive attitude influences adoption of modern family planning				

**APPENDIX III**  
**NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND**  
**INNOVATION**



**NATIONAL COMMISSION FOR SCIENCE,  
TECHNOLOGY AND INNOVATION**

Telephone: +254-20-2213471,  
2241349, 310571, 2219420  
Fax: +254-20-318245, 318249  
Email: secretary@nacosti.go.ke  
Website: www.nacosti.go.ke  
When replying please quote

9<sup>th</sup> Floor, Utalii House  
Uhuru Highway  
P.O. Box 30623-00100  
NAIROBI-KENYA

Ref. No.

Date: **10<sup>th</sup> June, 2015**

**NACOSTI/P/15/1154/6016**

Jane Nekesa Wafubwa  
University of Nairobi  
P.O Box 30197-00100  
**NAIROBI.**

**RE: RESEARCH AUTHORIZATION**

Following your application for authority to carry out research on *“Factors influencing adoption of modern family planning by married women in Kwanza Division, Trans Nzoia County, Kenya,”* I am pleased to inform you that you have been authorized to undertake research in **Trans Nzoia County** for a period ending **6<sup>th</sup> November, 2015.**

You are advised to report **the County Commissioner and the County Director of Education, Trans Nzoia County** before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.

**DR. M. K. RUGUTT, PhD, HSC.**  
**DIRECTOR-GENERAL/CEO**

Copy to

The County Commissioner  
Trans Nzoia County.

The County Director of Education  
Trans Nzoia County.



**APPENDIX IV**  
**RESEARCH PERMIT**

**THIS IS TO CERTIFY THAT:  
MS. JANE NEKESA WAFUBWA  
of UNIVERSITY OF NAIROBI, 1017-30200  
kitale, has been permitted to conduct  
research in Transzoia County**

**on the topic: FACTORS INFLUENCING  
ADOPTION OF MODERN FAMILY  
PLANNING BY MARRIED WOMEN IN  
KWANZA DIVISION, TRANS NZOIA  
COUNTY, KENYA**

**for the period ending:  
6th November, 2015**

**Permit No : NACOSTI/P/15/1154/6016  
Date Of Issue : 10th June, 2015  
Fee Received :Ksh 1,000**



*JANE*  
.....  
**Applicant's  
Signature**

*W. M. Mwangi*  
.....  
**Director General  
National Commission for Science,  
Technology & Innovation**

**CONDITIONS**

- 1. You must report to the County Commissioner and the County Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit**
- 2. Government Officers will not be interviewed without prior appointment.**
- 3. No questionnaire will be used unless it has been approved.**
- 4. Excavation, filming and collection of biological specimens are subject to further permission from the relevant Government Ministries.**
- 5. You are required to submit at least two(2) hard copies and one(1) soft copy of your final report.**
- 6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice.**



**REPUBLIC OF KENYA**



**National Commission for Science,  
Technology and Innovation**

**RESEARCH CLEARANCE  
PERMIT**

**Serial No. A 5288**

**CONDITIONS: see back page**