POLICY, PERCEPTION AND SOCIOCULTURAL DETERMINANTS OF MALE INVOLVEMENT IN FEMALE CONTRACEPTIVE UPTAKE: A CASE OF KOROGOCHO, NAIROBI COUNTY.

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DECLARATION

This project has not been presented in any other institution of higher learning or research institution for an academic award. It is my original work.

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This project has been submitted for examination with my approval as the University student supervisor.

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Dr. Martine Oleche

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DEDICATION

To Shannon, Judith, David, Mum and my sisters-This is for you!

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ABBREVIATIONS AND ACRONYMS

CBD	Central Business District
CDC	Centre for Disease Control
CME	Constructive Men's Engagement
CME	Continued Medical Education
CPR	Contraceptive Prevalence Rate
FP	Family Planning
FR	Fertility Rates
GSWCAH	Global Strategy for Women's, Children's and Adolescents' Health
HBM	Human Belief Model
HIV	Immunodeficiency virus
ICPD	International Conference on Population and Development
KDHS	Kenya Demographic Health Survey
K**H**EP	Kenya Health Essential Package
MoH	Ministry of Health
NHSSP	National Health Sector Strategic Plan
NOP	National Office of Population
NPPSD	National Population Policy for Sustainable Development
PAPM	Precaution Adoption Pocess Model,
RH	reproductive health
SCT	Social Cognitive Theory
STI	Sexually Transmitted Infections
TFR	Total Fertility Rate
TPB	Theory of Planned Behavior
TRA	Theory of Reasoned Action
UNPD	United Nations Population Division
USAID	United States Agency for International Develoment
WCW	World Conference on Women
WHO	World Health Organization
ZNFPC	Zimbabwe National Family Planning Council

ABSTRACT

Family planning is fundamental to health of the population especially women, their families, and community. Most of the contraceptive methods are highly effective in preventing unintended pregnancies and reducing maternal and child mortality. The study was conducted with the sole aim of establishing determinants of male involvement in female contraceptive uptake in Korogocho Nairobi County, Kenya. The specific objectives were; to determine various aspects of reproductive health policy implementation that influence male involvement in female contraceptive uptake in Korogocho, establish the male perceptions on contraceptives that influence male involvement in female contraceptive uptake in Korogocho, what are the socio-cultural factors that influence male involvement in female contraceptive uptake in Korogocho. The study collected primary data from married men in Korogocho where probit regression analysis was used to model the hypothesised relationship. From the study findings, the no of children in a family, government policy on RH funding, being a Muslim, and gender (sex of the child) preference significantly lowered the likelihood of male involvement in female contraceptives uptake. On the other hand, employment status, type of marriage as well as discussing FP with partner was increased the probability of male involvement in female contraceptives uptake in Korogocho Nairobi. To promote increased male involvement in female uptake of contraceptives across the country and especially within the informal settlements like Korogocho, the study recommends for community centred strategies including increased funding, modern methods of contraceptives as well as empowerment of local communities.

CHAPTER ONE: INTRODUCTION

1.1 Study Background

In many African countries, issues to do with family planning (FP) were considered taboo as children were considered gifts from God and also, they were required for labor force and for provision of care to their parents in their late years, and attempt at birth control was seen and considered sinful, (Agbo, Ogbonna, & Okeahialam, 2013). However, this opinion has now changed in favor of family planning in a way that individuals, families, communities now advocate for and seek for FP publicly and of a great interest is the involvement of men, (Agbo, Ogbonna, & Okeahialam, 2013). The rate of fertility in these countries is high, and this is attributed to contraceptive inaccessibility and generally low levels of female education among other causes such as unmet contraceptive needs (Nargund, 2009). Birth rate is an issue of concern for national government and in some countries policies by the national governments have been directed at minimizing birth rates by ensuring that women's rights and sexual and reproductive health are improved, (Nargund, 2009).

Countries with high fertility rates (FR) employ family planning as a public health intervention to significantly reduce hunger as well as poverty, (Abdi, et al., (2020). To reduce demographic pressure besides benefits relating to health, FP is crucial for economic development too, since family planning aids in slowing population growth, hence helping countries to elevate themselves out of poverty but men must be involved, (USAID/HPI, 2007). The significance of Constructive Men's Engagement (CME) in Reproductive Health (RH) has seen a popularity gain all over the world in the recent past. Those that were initially skeptical about CME are now being convinced otherwise due to the realization that: progress will always be slow if men are not involved actively in enhancing good health and family well-being and the indulgence of women; reproductive health related threats such as gender-based violence, will always face women; and that, men will be engulfed in the limiting spheres of socially defined masculine conventional behaviors (USAID, 2009).These in-grained behaviors; including risking, the issue of not seeking health, and being emotionally distant from children and women, and these habits affect men, women and children too, however, these harmful masculinity norms can be challenged and overturned or done away with, (USAID,HPI, 2007).

According to Ringheim & Fieldman-Jacobs, (2009), there are numerous programs from all over the world which are of the thinking that it is possible to engage men successfully in gender non-discriminating decision making, responsibility sharing on contraception, safe childbirth support, violence prevention, and safe guarding themselves and those that they love from human immuno-deficiency virus (HIV) and other infections transmitted sexually (STIs), (Ringheim & Fieldman-Jacobs, 2009). For these programs to gain an enormous pay off for everyone in the family, a larger audience must be informed on the impact of a discriminating society that have defined roles and expectations of both men and women behaviors. Therefore, if this goal is to be realized, works promoting CME must be cascaded to the level of policy making, such that numerous changes can be defined, implemented, and mandated (Ringheim & Fieldman-Jacobs, 2009).

A report by World Health Organization (WHO 2018), found out that, in order to realize basic rights of women and girls as well as men and boys, it is important that, the accessibility to affordable and high-quality health services and information on safer sex life is made a reality. To avoid adverse health and socio-economic consequences of un-intended pregnancies and have a satisfying sexual life, it is paramount that, there is an enhanced indiscriminate access to contraceptives to all adolescents and adults, (WHO) 2018). This general plea to have enhanced availability and accession to FP services as a right of women and girls and important to a healthy life has been enhanced through the mainstreaming of main global drives, example of the Sustainable Development Goals (SDGs) and the Global Strategy for Women's, Children's and Adolescents' Health (GSWCAH). On the same note, the United States Agency for International Development (USAID), reiterates that, if FP and reproductive health services can be accessed by all including women, men, couples, and adolescents, and the well-being and health of all people supported, there can be an overall gain economically, environmentally, and socially to families and communities at large, (WHO, 2018).

The desire to have men on board as core partners in family planning was birthed from the 1994 International Conference on Population and Development (ICPD) in Cairo and the World Conference on Women (WCW), in Beijing in 1995, (Ghosh, 1999). The Cairo Conference endorsed a Program for Action which was meant to lay and emphasis on the need to recognize men as core partners of women in all aspects

relating to reproductive health. Through this robust call to have men on board in reproductive health, male involvement has acquired different identities such as: responsibility of men, male persuasion, men as partners, men and reproductive health and men's participation, (Ghosh, 1999).

Ijadulona et al.,(2010) in their study posits that, women's preferences and opinions on the right size of family, gender of children that is preferred, ideal age gap between children, and method of contraception to use, are highly influenced by men's general knowledge and attitudes on family planning (Ijadulona, et al., 2010).With competition for scarce resources in mind, more activists of women's health have come together with proponents of CME to reiterate that indiscrimination in gender, shared powers and privilege, resources and responsibilities possessed by men and women would be achieved when men understand their benefits, and those of their wives' and children in more indiscriminatory relationships with women and girls, (WHO, 2008).

Mostly, contraceptive methods and services are often aimed at women, however, decision making role on (FP) methods use and the subsequent family size is primarily a role of men, (Nzioka, 2001). The utilization of FP by women is mostly influenced by their husbands and in the case that spouses disagree, this can be a deterrent because women might be faced with the fear of starting the seemingly difficult, under such circumstance, conversation about FP. However, the involvement of men as recipients or even as providers of information on sexual education, reproductive health, or spacing of children has been rare, (Okwor & Olasehe, 2010). Additionally, men have also been excluded or have been ignored, in some way from being active participants in many FP programs because FP is assumed to be the affair of the woman, (Wambui & Alehajen, 2009). Traditionally, household leadership is the role of men and they are therefore assumed to be the sole makers of decisions of the family and are expected to make decisions on FP use and how many children they would have as well as what is produced by the family too. On this note therefore, it is expected that men would initiate discussions on FP, and family size, while women are considered implementers of what has been decided and not decision makers (Wambui & Alehajen, 2009).

The 2014 Kenya Demographic Health Survey (KDHS), paints a downward slope in Total Fertility Rate (TFR). In 2003, fertility was recorded at 4.6 per woman from 4.9 births per woman in 2008-2009 and 3.9 in 2014, which is, a decline with one child over the past decade and the least of all TFRs in Kenya, (Kenya National Bureau of Statistics, 2014). These statistics have been reinforced by the observed rise in the Contraceptive Prevalence Rate (CPR) from 46 percent in 2008-2009 to 58 percent in 2014. However, there is a deficit in family planning services and an unmet need for married women at about 18 per cent, where 9 per cent of these married women is in need of spacing and a further 8 per cent want to limit child bearing, (KNBS, 2014).

The basic right for individuals and couples to decide freely and responsibly on the timing and the number of children to have can be achieved through the use of contraceptives, (United Nations, 2015). A high number of married women or those that have male partners all over the world use some kind of FP services,(United Nations, 2015). But, in the least developed countries contraception use is much lower, estimated to be around 40 per cent, and in Africa, it is even lower estimated at 33 per cent, (United Nations, 2015).

1.1.1 Trends in Contraceptive uptake

High rate of fertility and rapid growth in population have been considered more of barriers than stimulators of economic growth and development (Michuki, 2015). Rapid growth in population reduces the rate of capital accumulation, (Schultz, 2008). Social organization patterns are highly ingrained in cultural values and have for long been associated with the demand for large families leading to sustained high fertility in Africa (Ncece, 2012). By 2019, the world fertility rate averaged 2.4 children, compared to 3.9 children in Kenya which is relatively high (Ministry of Health, 2018) .

Trends in contraceptive choice in Sub-Saharan Africa (S-SA) indicate that, in many countries of the region, areas where FP is lowly accepted and use of FP programs weak, conventional method use tends to be higher, (United Nations, 2015). The United Nations Population Division (UNPD), (2017) estimates that, globally 63 per cent of reproductive age women,15-49, who are married or had sexual male partners were consuming some form of contraception in 2017. However, contraception use is

variant by region, with Africa having the lowest, estimated at 36 per cent and to nearly 75 per cent in the Caribbean and Latin America, (United Nations, 2017).

In Zimbabwe, after independence the reformation and expansion of the family planning program by the government was a great success. The National Family Planning Council in Zimbabwe (ZNFPC), came in agreement and created an understandng for FP among influencers such as faith-based groups, the economic community, the press, non-governmental organizations, and public servants (Lee, 1998).

In the 1980s, world's highest fertility levels were recorded in Rwanda at 8.6 per cent. FP availability was very limited and culturally dictated attitudes called for the admiration of many children and as a result, Rwandas CPR was very low, at 3-4 percent in 1988 (May, Mukamanzi, & Vekemans, 1990). This prompted the government through the National Office of Population (NOP) and the district mayors, to initiate FP services where innovative interventions were employed to improve accessbility and quality health services.Through this initiative, Rwanda witnessed a great revival from a seemingly dark conflict-torn past to today's achievements which have been seen as worth example by countries in the region, (National Research Council, 1993).

In 1967, Kenya adopted a population policy and this pited it as a pioneer in S-SA to put to use a population policy (Magadi & Curtis, 2003). Kenya has had the priviledge of modern birth control methods availability, through the Ministry of Health (MoH), the philanthropists, and also, non-governmental organizations, since 1957 (Blacker, Opiyo, Jasseh, & Sloggett, 2005). In Kenya, contraception by married women surged from 17 per cent in 1984 to 39 per cent in 1998, which is considered as one of the signficant rate in S-SA, (Magadi & Curtis, 2003). In 1996, the Kenyan government put to work the Sessional Paper N0. 1 of 1996 on National Population Policy for Sustainable Development (NPPSD), and in it, the government acknowledged population draw backs of un-met requirement for FP and high level of early pregnancies (Magadi & Curtis, 2003).

To enhance sufficient supply, promote demand and ensure inexpensive FP services, the government through the MoH, came up with guiding principals and set standards for FP providers in 1991 (Ministry of Health, 2018). As a way of putting to check

growth in population, the government in the National Health Sector Strategic Plan II (NHSSP-II) of 2005-2010 specified the Kenya Health Essential Package (KHEP) that was aimed at dealing with a numerous issues to do with population growth such as; infections during pregnancy, malnutrition, FP and birth spacing. This initiative by the government to put to check the increase in population was further reiterated in the Vision 2030 and National Population Census report of 2010, through various government initiatives such as provision of free FP services, (KNBS, 2014).

1.2 Research Problem Statement

In Kenya, informal settlements or slums have witnessed a wide spread urban poverty, poor urban governance and limited opportunities of employment, (Donaten et al. 2017). An estimated 56 per cent of urban population of Kenyans live in slums and about 60 per cent of Nairobi residents are slum dwellers, (World Bank, 2020). Individuals living in slums, experience reduced professional advice on safe sex and other reproductive health services access and their sexual and reproductive health outcomes are comparatively poor (Zulu et al. 2008). Urban dwellers in Kenya have a great unmet contraceptive need, and this deficit is high among the poorest women, whose child-bearing is often mis-timed or un-wanted (Ezeh, et al. 2010).

The involvement of male in reproductive health decision making is important and also impacts positively on the acceptability of interventions to do with Prevention of Mother to Child Transmission (PMTCT) as well as improved contraceptive uptake, (Aluisio, et al., 2011). However, increasing men's engagement in family planning entails changing deeply entrenched gender norms(FHI 360, 2012).Through male involvement, a surge in FP uptake could be recorded as well as a continued use of FP methods through improved connubial communcation pathways of improved contraceptive know-how or improved male acceptance of contraception, (Hartmann, et al., 2012). FR and in-adequate supply for FP have however remained soaring in many S-SA countries inspite of obvious benefits of male involvement in the making of decisions to do with reproductive health, and this is attributed to lack of proper male involvement (Tuloro, et al.,2006). Decisions on contraceptive use discreatly or not use at all, has been attributed to resistance by the male partner or acceptance to family planning and their involvement or otherwise is a significant determiner of uptake and continuation, (Bankole & Singh, 1998). Therefore, this apparent contradictory bit of men as integral decisions makers to do with fertility while being

exclude from issues of reproductive health brings about lots of challenges in African context to addressing low contraceptive prevalence rates, (Mosha, Ruben, & Kakoko, 2013).

Knowledge and attitude about the number of children to have, children's' gender that one prefers, gap in years between children births, and the type of contraceptives to use, has been highly influenced by men, while it has a great significance on women's choice and decisions about contraceptives. However, previously, men have not been considered as core during studies to do with fertility and FP and programs have in the past focused on women only, and, FP services are initially and traditionally presented with only maternal and child health in mind, (Oyediran, Ishola, & Feyisetan, 2002). In spite of these, since the 1994 ICPD, and the 1995 UN WCW, there has been a rise in the interest of involving men in reproductive health. Also, objectives have also been focused towards male participation with an aim of improving contraceptive use and achieving demographic goals that would see improved gender equality and the fulfilment of various reproductive responsibilities (Oyediran, Ishola, & Feyisetan, 2002).

In his study, Omondi-Odhiambo, (1997), found that, although contraception has been practiced for many years, the views of men on reproductive health, sexuality, spacing of children, family size has not been seriously considered in surveys and studies to do with fertility or family planning, (Omondi-Odhiambo, 1997). Family Health International (FHI) found out that men are very interested in reproductive health than most people think, (FHI 360, 2012). Therefore, a long-term effort is required to understand the various influencers of male involvement in FP decision making of their spouses in Kenya and most especially in urban informal settlement areas, (Omondi-Odhiambo, 1997).

Most of the literature from Kenya, for example, Ochako, et al., (2015); Machiyama, et al., (2018); and Okech, Wawire, & Mburu, (2011), just to name a few, have looked at FP from the perspective of women, with the goal of bring down the burden of un-intended pregnancies and most of this works are done under the population studies perspective. However, Ochako, Temmerman, Mbondo, & Askew, (2017) carried out a study based on 2014 KDHS to determine the factors that are corelated with modern FP method use among men that are sexually active in Kenya. To the best of my

knowledge therefore, although there are a lot of literature on issues women and family planning, little has been done on the same topic on men and this study aims at contributing in reducing this disparity.

Lastly, according to the last KDHS data (2014), the total fertility rate in Korogocho is 3.7, quite higher than that of Nairobi, which is estimated at 2.7 children, and the CPR being 54 per cent (Machiyama, Mumah, Mutua, & Cleland, 2019). The youth dependency ratio of Korogocho is high and people live in extreme poverty, hunger and security issues (Rumsby, 2012). To be able to address challenge associated with unplanned or unwanted pregnancies, especially by married or in-relation individuals, it would be prudent to address some of the initial determinants of male involvement in contraceptive uptake to be able to fully involve men in these informal settlement areas. This study therefore, aimed at evaluating the implementation of government policies and programs to do with determinants of male involvement in female contraceptive uptake in Korogocho area of Nairobi County and how other factors such as individual perceptions and socially cultivated behaviors interplay with government interventions to influence male involvement in female contraceptive uptake.

1.3 Research Questions

This study sought to answer the main question of what the determinants of male involvement in female contraceptive uptake in Korogocho in Nairobi are. Specific questions entail:

i. What are the various aspects of reproductive health policy implementation that influence male involvement in female contraceptive uptake in Korogocho?
ii. What are the male perceptions on contraceptives that influence male involvement in female contraceptive uptake in Korogocho?
iii. What are the socio-cultural factors that influence male involvement in female contraceptive uptake in Korogocho?

1.4 Study Objectives

This study's main objective was to understand the various determinants of male involvement in female contraceptive uptake. Specific objectives include:

i. To understand the various aspects of reproductive health policy implementation that influences male involvement in female contraceptive uptake in Korogocho.
ii. To examine the male perceptions on contraceptives that influences their involvement in female contraceptive uptake in Korogocho.
iii. To investigate the socio-cultural factors influencing male involvement in female contraceptive uptake in Korogocho.

1.5 Study Justification

This study can be justified from the academic perspective and at policy perspective.

1.5.1 Academic perspective Justification

Academicians interested in researching on determinants of male involvement in female contraceptive uptake in informal settlement areas in Nairobi and other areas in Kenya and beyond, will find this study useful. Many of the studies carried out on determinants of male involvement in FP are only focused on males as contraceptive consumers but not as catalysts for female contraceptive consumption. Therefore, this study will be insightful to other researchers and policy makers interested in studying the influence of men on their wives' contraceptive uptake.

1.5.2 Policy Perspective Justification

An Understanding of the determinants of men involvement in female contraceptive use will enable policy makers to come up with programs that will be men oriented and that which carefully addresses their needs concerning FP in Kenya. Men's involvement in FP programs is an important strategy that would avail answers to some of the most pressing challenges in reproductive health. Men are core stakeholders in RH and can play a very major role in preventing early un-wanted and un-intended pregnancies and help bring down cases of unmet needs for family planning; this research will look into the need for strong partnerships amongst men and women for the sake of improving family health. Also, promising solutions to overcome or lessen these barriers must be sought. Findings will also be helpful in winning the much-needed active co-operation of men in on-going family planning programs and get them either to practice family planning themselves or support their partners in the same.

1.6 Study Scope and Limitation

This study's scope was Korogocho area in Nairobi County. The study targeted married men within Korogocho households. The study intended to explore the determinants of male involvement in female contraceptive uptake in Korogocho, therefore, it was limited to studying: what government policies and programs can be put in place to ensure men are fully involved in their spouse's contraceptive uptake in Korogocho to ensure government intention on development are achieved through controlled birth rate; assess how a husband's personal perceptions influence their partner's contraceptive uptake. Lastly, the study looked at socio-cultural aspects of a man's life and how they are likely to influence the involvement of a man in his spouse's contraceptive uptake.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

Literally works on factors that determine male involvement in female decision making and subsequent uptake of contraceptives were reviewed. The section critically looked at the literature to try create an understanding of: the possible policy interventions that could be formulated to encourage men to support their wives in contraceptive uptake; the perceptions of men on FP and how these perceptions influence a man's involvement in their spouse's contraceptive utilization and finally, the various socio-cultural characteristics and how they shape a man's role in their spouse's contraceptive uptake.

2.1.1 Policy, Contraception and Family Planning

Operational policies establish many of the nuts and bolts of contraceptive security, access and use. Policies also allow behavior change programs to operate. These programs reach the targeted consumer with information, so that they can decide about using family planning and also, ensure that they learn about reproductive health through structured and informed programs. Policies establish platforms through which family planning programs are designed and implemented. Additionally, Policies ensures that regulations, guidelines, training, financial support and supplies are in place to ensure that a contraceptive security policy is put into practice and achieves its goals.

Voluntary, high quality FP services can help curb rapid population growth and drive development (Kenya, 2015). Mostly, reproductive health policies, programs and services are geared towards women's reproductive health and their services are exclusively geared towards women. These services include, FP, curbing unwanted pregnancies, post-natal care, risky abortion and the improved safe motherhood. However, men's role in reproductive health and FP is often ignored by these programs and most contraception are women oriented only, (Dewi, 2009).

Kenya has embraced modern methods of contraceptives since independence and the health sector in collaboration with other stake holders has been in the fore front to ensure the realization of the provision of FP services to all in need. According to Michuki, (2015), looking at National Reproduction Health Survey (KNRHS) (2009-2015), apart from realizing the goals of vision 2030, given first priority and ranked as

important towards the realization of the now lapsed Millenium Development Goals (MDGs) re-named Sustainable Development Goals (SDGs) was access to reproductive health. Additionally, there exists many policies, strategies, guidelines, goals and targets set to steer reproductive health services provision, for example, the provision of Universal Health Care (UHC) in the BIG FOUR agenda. Also, the Kenya Constitution of 2010 provides for a principal legal structure that ensures a compendious rights-based approach to service delivery in the health sector, (Republic of Kenya, 2010).

There are various approaches that have been put across by Kenyan government to enhance access to reproductive health. These approaches include, health systems strengthening, improved efficiency, effectual and high standard reproductive health services. Additionally, approaches such as accessibility to reproductive health services at the community level and looking at vulnerable groups such as: physically challenged, the unreachable; emigrants working in industries and farms, asylum seekers, people displaced due to political unrest (IDPs), pastoral or nomadic communities, the poor and other valnerable populations such as the youth (NCPD, 2015).

2.1.2 Perception, Contraception and Family Planning

Truong, et al., (2020), in their study to quantify FP consumption and understand knowledge and personal beliefs on FP among communities affiliated with rural Companeros En Saud (CES) in the Madre Sierra Mountains in Mexico, found that, the main reasons that the study respondents did or did not continue using FP resulted from adverse effects, reactions or complications which were either known secondary effects or accepted myths about contraceptives, (Truong, et al., 2020).

Kriel, et al., (2019), posits that, men have a complex and evolving responsibility in FP and contraceptive uptake. Their study elucidates that, gender dynamics that are culturally influenced and adequate understanding of FP and contraceptions, are key in influencing male behavior and beliefs about contraceptive use, either positively or negatively. Further, the study found out that male oppposition to contraceptive use is as a result of limited understanding which in turn leads to misconceptions about the effects of contranception, physical abuse and male domination in relationships. Male opposition to contraceptive use, according to Kriel et al. (2019) was attributed to

some side effects, whether real of perceived, which included side effects such as increased wetness during intercourse and minimal sexual pleasure, (Kriel, et al., 2019).

Dougherty, et al., (2018), carried out a study to understand knowledge levels of and use of FP among men in rural Uganda, and they found out that, 99 per cent of their respondents reported awareness of family planning. As far as side effects about contraception are concerned, a majority of the men could name specific side effects which some were misconceptions such as high fertility risk, cancer and birthing children with defects. Results from a qualitative analysis by Kriel, et al., men reported that, abnormal uterine bleeding experienced by women using contraceptives was likely to lead to fatique and as an outcome these women would lose interest in sex,and this made their men to look for sexual pleasure elsewhere, (Kriel, et al., 2019). Adanikin, McGrath, & Padmadas, (2017), carried out a study through the analysis of the last three DHS in Nigeria and the results indicates that, despite programmatic interventions, there is slow progress in family planning uptake.

The reports elucidates that, while social, economic and religious impediments exist, social psychological factors, for example, negative perception about contraceptives by the male partner may affect spousal FP demand and use, (Adanikin, McGrath, & Padmadas, 2017). The perceptions that were reported from the study indicates that, two in five men reported that female FP users may engage in extra-marital sex and this perception influenced FP demand negatively.

Wambui et al., (2009), investigated FP perceptions among men considered as low-income earners in Western Kenya. The study found that, FP perceptions were manifold and that their know-how about contraception is poor and sometimes misunderstood. They associated modern methods with side effects, and thereby discouraging FP uptake. Additionally, low instances of FP uptake were because their culture, equated children to wealth (Wambui,., & Alehagen, 2009).

2.1.3 Socio-Culture, contraception and Family Planning

According to Bankole and Singh, (1998), there exists a wide understanding and acceptance of FP amongst men and women all over the world, (Bankole & Singh, 1998). Studies carried out globally show that there is a high understanding of modern methods of FP between spouses. At least 57 percent of married men have knowledge

of even a single method of modern contraception in Burkina Faso and 100 per cent of Brazilian husbands are knowledgeable of at least a modern method of contraception and for wives, the range is 57per cent in Cameroon to 100 per cent in Bangladesh, Brazil and Egypt, (Bankole & Singh, 1998).

Socio-cultural factors such as race, religion and education level play an integral role in influencing contraceptive uptake behaviors of an individual, (CDC, 2014). According to a study carried out by Black and others (2009), 89 per cent of white women have used the contraception pills compared to all other racial and ethnic groups. Use of FP pill is lower among women with less education and about 76 per cent of Catholic women utilize contraceptive services in comparison with 86 per cent of the Protestant groups. Another study carried out by the Canadian government found out that, women in the urban and those with some higher education, that is, college and university education, had a higher possibility of using contraceptives compared to those women residing in the rural areas, and those with high school education only, (Black, et al., 2009).

FP approval is variant all over, however, both men and women consider consumption of FP services, (Bankole & Singh, 1998). Agyei & Migadde (1995), in their study found out that, husbands highly influence contraceptive knowledge of their spouses. Husband's acceptance of FP and fertility preferences have a major role on the couples' reproductive behavior. A study carried out in Ghana shows that wives' contraceptives attitudes is related to their husbands' fertility preference towards family planning, (Pearson & Becker, 2014). According to Abdi et al. (2020), socio-cultural characteristics such as spousal communication, gender-relations and decision making, polygamy, preference for sons, child mortality, desired family size, religion, and fertility preference comprise the major sociocultural factors influencing family planning decision making, (Abdi, Okal, Serour, & Temmerman, 2020).

In conformity with the International Council for Population and Development Program of Action (ICPD), Kenya has developed various policies and strategies meant to enhance accessible sexual and RH for all; notably, the National Reproductive Health Policy (NRHP) of 2007 aimed at improving the RH wellbeing for all Kenyans; the 2010 Constitution of Kenya, article 43, which reiterates the right of every Kenyan to access the highest health standard; The national Health Strategic

& Investment Plan (NHSIP) (2013-17); Kenya Health Policy (2014-2030); Vision 2030; Population Policy for National Development (Sessional Paper No. 3 of 2012) and all these emphasizes the right to health care (Ministry of Health, 2018; NCPD, 2013).

The first reproductive health and development policy meant for adolescents (ARHD)in Kenya was developed in 2003. The policy emphasizes the improvement of the wellbeing and life for adolescents and Kenyan youth, (Republic of Kenya, 2015). The Kenya National Bureau of Statistics report (KNBS, 2014), indicates that, women of between 15-19 years had given birth previously, and this constitute at least 15 per cent, and, 18 percent are either pregnant for the first time or have had a live birth. The number of women who have started child bearing rises significantly with age, with this increase taking place from about three percent to 40 about percent amongst women of 15 and 19 years. Contraceptive use by this age-group is comparatively low, that is, 40.2 percent while in ages 20-24 who are mostly youth is 53.5 percent (Ncece, 2017). This high rate of fertility amongst the youth is associated to limited access to information relevant to reproductive health among other factors, (NCPD, 2015).

In 2012, the government initiated the Population Policy for National Development. This policy is earmarked in the Sessional Paper No. 23 of 2012; and aims at ensuring every Kenyan has a high-quality life through putting to check the growth of population to manageable levels with the resources that are available. The main focus of the policy is provision of a laid down procedure to steer national programs and activities to do with population for the next two decades, (NCPD, 2012). Overall, the policy is aimed at: reducing the rate of population so that there is cohesiveness with the growth of economy and social development goals as outlined in Vision 2030; seeing a reduction in fertility and mortality rates while making it possible for couples and individuals who would want to have children but cannot; availability of quality, affordable and equitable RH services, including FP; also, in coming up with and the implementation of socio-economic development programs as a measure influencing population dynamics in the long term, specifically focusing on reduction of poverty, research and technology, education , the environment, health and gender equity, indiscrimination and women empowerment; and finally, resource mobilization through budgetary allocations, international cooperation, and partnering of public-

private entities to guarantee sustainability of population programs and remarkable outcomes on population dynamics, (Kenya, 2012)

According to NCPD (2013), the Kenyan government has increased the national FP services budget, specifically through an increased budgetary allocation towards FP and it is expected that domestic financing for FP shall be maintained at 7 million dollars for the next two years and then double it there after; this would be tracked annually, (NCPD, 2013). Additionally, all 47 counties have an FP budget allocation by 2020 and these budgets are meant to ensure that FP services are offered in all government health facilities, (FP, 2019).

2.1.4 Challenges to Effective Contraceptive Uptake

Frost, Darroch, & Remez, (2008), carried out a a national survey to understand women's experiences on contraceptives and clinicians' delivery of relevant health services in the United States. The survey results on women experiences revealed a complex picture of women's motivation. Additionaly, Duke & Ames, (2008), in their work carried out a study to critically understand the factors that relate to un-planned pregnancies in the United States Navy, their content analysis of the collected data showed that when it comes to men and contraceptive use, the foci is always on sexually transmitted infection prevention and not birth control, (Duke & Ames, 2008).

Ahmed, Shokai, Abduelkhair, & Boshra, (2015), in their study on the conjectures sorrounding the consumption of FP services found out that perception stemming from religious beliefs, social stigma and taboo are major factors determining utilization of FP services. The study adopted a qualitative method to collect data and results indicate that people in the rural areas opted to a large family in order to increase the size of the family for some reason, (Ahmed, Shokai, Abduelkhair, & Boshra, 2015).

According to National Coordinating Agency for Population and Development Policy brief No. 13- 'Fufilling Unmet Need for Family Planning Can Help Kenya Achieve Vision 2030'- there exists various determinants that empede Kenyan women from using family planning and these include: issues related fertility such as; the desire to become pregnant, infrequent sex, infertility or menopause; Opposed contraceptive use by the woman, her partner or others, or perceived religious prohibition; inadequate knowhow about a method or the source of a method; Health concerns

related to the method of contraception, fear of side effects, cost, inconvenience, lack of access (NCPD, 2010).

2.1.5 Overview of Literature

The reviewed literature has covered a wide spectrum of factors thought to influence the involvement of men in their spouses contraceptive uptake. Some of the studies under review focused on rural woman and those that looked at the man, only considered man as a contraceptive consumer and not as a catalyst for contraceptive uptake by a spouse. The literature reveals characteristics such as an individual's education attained, taboo, marriage status, perceptions and proximity to health facilities as factors that influence contraceptive uptake. A critical analysis of the intended theory demonstrates a deep interplay of the theory assumptions and the possible factors thought by the investigator to influence male participation in female contraceptive uptake in Korogocho, therefore, this study aimed at testing the applicability of SCT constructs in contraceptive uptake and governmental involvement in terms of policy and program intervention in enhancing male involvement in female contraceptive uptake in Korogocho.

2.2 Theoretical Framework: Social Cognitive Theory (SCT)

2.2.1 Gender Equality and Public Policy Approaches

Women in Development (WID), Women and Development (WAD) and Gender and Development (GAD) are approaches that have been used to explain how society has been trying to shift the conversation on gender equality and inclusion of women in social, economic and political endeavors through public policy. The histoy of gender and feminism and how they inform public policy is a worth area of understanding which needs to be looked into critically if family planning endevours by governments are to be realized successfully. SCT as espoused by its proponent, Albert Bandura, does not pay much attention to the gender concerns that have been occassioned by the patriachal nature of society. This patriachal nature of the society is what has orchestrated the subjection of women as espoused by John Stuart Mill in, 'The Subjection of Women (1869)', he argues that, 'women and men are the same, and the only difference are the roles that each play in society. However, most societies are patriarchal thus, subjugating women and making them second-class citizens and it is this un-equal society that should not be tolerated because it is not anchored in science', (Mill, 1869).

Additionally, Friedrich Engel in, 'The Origin of family, private property and state', argues that inheritance of property by boy is what creates an unequal society that disadvantages women thus sexism, (Engels, 1902). To overcome sexism, conversations on greater inclusion of women in development have been fostered, for example, in the 1950-s and 1960-s, there was an increase in the call for inclusion of women in development and improvement of their welfare and this welfare was in form of family planning, hand-outs, maternal services and also food, (Carr, 1997). The idea was that, the benefits of industrialization would be passed down to benefit the home but through the man as the head of the house hold and this is what was referred to as Woman in Development (WID). However, this approach did not challenge the deeply entrenched status quo but continued to promote patriarchy.

In the 1970s, the realization that women were indeed neglected was rife and the realization that women were being regarded as passive recipients of development or mere subjects of development instead of actual participants of development to effectively achieve gender equality. Since WID had only focused on poverty eradication among women and therefore took the liberal approach as saw women as just mothers, caregivers and wives, it is then that the need to include women in economic affairs as pioneered by Ester Boserup led to the shift from WID to Women and Development (WAD). WAD approach advocated for the inclusion of the roles of women into the development agenda and discouraged the view that women's problems were far removed from men's problems and women were therefore viewed as economic resources for economic development.

1980's the conversation shifted from just focusing on women alone and the focus looked into both genders aiming at bridging the development gap. It is during this period that Gender and Development (GAD) approach was coined. GAD supported the equal participation of men and women in everyday activities, that is, social, economic and political aspects of development.

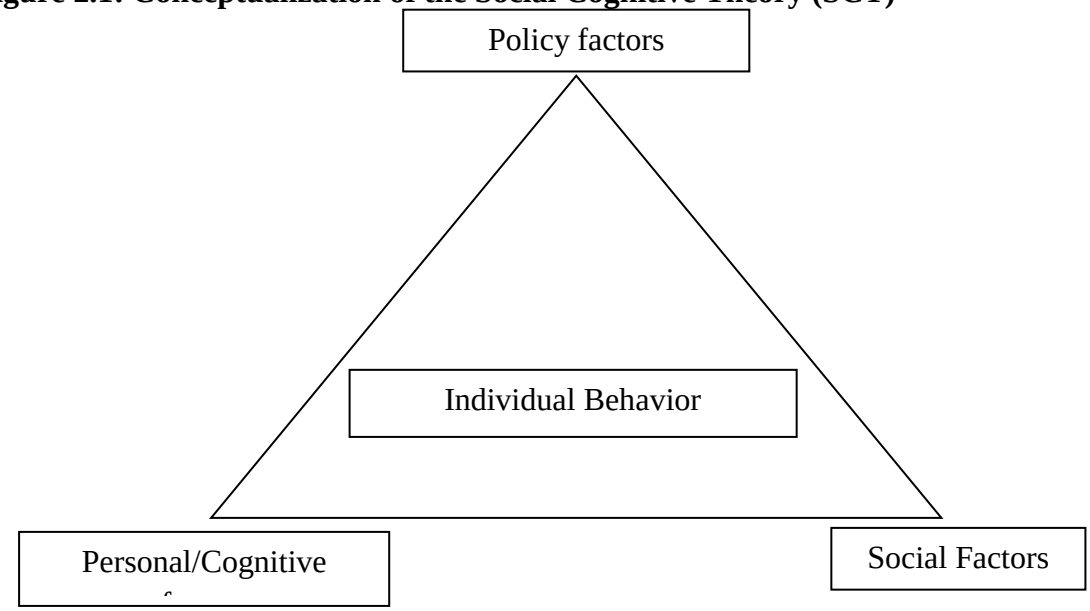
In conclusion, gender focused policies help reduce gaps in human capital and are needed for productive gains through closing gaps in access to economic opportunities, productivity and earning potential. Also, they ensure that there is equal representation in decision making in the society and the ability to take action. Therefore, gender equality as espoused by John Stuart Mill and Friedrich Engel must be an endeavor

that every society seeks to achieve and it should be an organic process that includes both men and women. This study therefore, incorporates the scholarly works of Stuart and Engel, to understand the underpinnings of a patriarchal society in public policy process because SCT as a theory only focuses on environmental, social and personal factors as influencers of behavior change overlooking the patriarchal nature of society.

2.2.2 Diagrammatic Representation of SCT

Theoretical frameworks aid in putting thoughts in an organized manner and in the planning of research, intervention, and analysis of a study (Montano & Kasprzyk, 2008). SCT as advanced by Albert Bandura provides an excellent layout to understand, quantify, and understand factors that influence behaviour. The core goal of SCT is to enhance an understanding of how and the reason people change personal behaviors related to health and the possible interacting environments that make them change. Initially, SCT operated on established elements of knowledge gain within the social environment and was therefore knows as the social learning theory, (Montano & Kasprzyk, 2008). The name Social Cognitive Theory was adopted after ideas from cognitive psychology were factored in, in the ambitious understanding of how humans synthesis information, their abilities and biases influencing learning from personal involvement, observation, and illustrative communication (Bandura, 1986). On advancement, SCT incorporated Sociology and Political Science ideas thus, enhancing the comprehension of how groups and societies function and adapt to situations, (Bandura, 1997).

Figure 2.1: Conceptualization of the Social Cognitive Theory (SCT)



Source: Own construction Based on Albert Bandura's Social Cognitive Theory

SCT emphasizes the influence of personal behavior through reciprocal determinism, that is, the interplay of personal and social environment in cultivating a behavior. SCT underscores that human behaviors an outcome of the dynamic interaction of personal, behavioral, and environmental influences (Montano & Kasprzyk, 2008). Even though it recognizes how environments shape behavior, SCT looks at people's endeavors to change and also build environments befitting the ends they personally want. In addition to human adaptability to their environment, SCT emphasizes people's ability for collective action. According to Bandura (1997), systematic protection and planned promotion of public health can be compared to an illustration of reciprocal determinism, achieved when societies get into controlling the environmental and social elements that influence health conduct and consequences (Bandura, 1997).

2.2.3 Where SCT was previously Used

Centre for Disease Control and Prevention (CDC) in the United States funded a community project aimed at seeing an increase in condoms among different groups of people that were considered exposed to a higher risk of being infected with HIV infections. The project was rolled out in five cities in America; Dallas, Denver, Long Beach, New York and Seattle. Those factored were mainly residents considered to be exposed to sexually transmitted diseases (STDs) at a higher rate in Dallas. In Denver as well as Long Beach, the target group was, drug users who injected drugs into their

body. In New York City and Long Beach, the program targeted sexual partners of injection drug users. Those that were gay discretely or relate with gay-ism were the main target in Seattle, while people engaging in commercial sex were targeted in Long Beach and Seattle.

To start with, an exploratory assessment on how to access the target groups was conducted. The next step was a qualitative discussion on the various reasons and how people use condoms and the subsequent formulation of befitting measures for program assessment. The study, involved a twenty-minute street interview, and the participants were randomly selected from the population. Financial inducements were used on people who answered questions anonymously on sexual behaviour and condom use. The survey was done over a period of three years and in a total of nine waves of surveying, more than 7,000 interviews were completed. In the meantime, similar surveys were conducted experimentally and communities with similar characteristics for a quasi-experimental evaluation of the effects of the project. The interviews looked at outcome expectations, self-assuredness beliefs, project messages exposure as well as other sources, the number of times of condom use and the duration of use with a spouse and other partners, and if participants had a condom during the interview. The outcome of the program was that, the numbers of respondents carrying condoms saw a significant increase in the communities where the experiments were carried out, as a result of reported exposure to the experiments. At the end, the project reported an increased condom use by individuals with non-main partners but not on condom use with main partners.

2.2.4 Assumptions of SCT

SCT has a number of assumptions which posits, among others that, the core determinant of a behaviour is the expected result, whereby, people act mainly to capitalize on the benefits and reduce the costs. SCT therefore, demonstrates that human expectations and values are subjective since their actions are not determined by the reality but by the perceptions they have. The capacity for thinking and seeing of the outcomes of distant goals motivates individuals in engaging in an action. Social outcomes are also a significant area that SCT lays emphasis on. The way one would feel and see themselves in the event of engaging in a behavior or not, motivates individuals and vice versa. Lastly, SCT assumes that, availability of structures and

resources in aiding a behavior is fundamental as this motivates and enhances behavior change through empowering or otherwise, (Bandura, 1998).

2.2.5 Implication of use of SCT on the study

SCT aided the study in determining the extent to which the dynamics of observational learning, reciprocal determinism, reinforcements, behavioral capability, expectations and self-belief influence male involvement in female contraceptive uptake in Korogocho.

Additionally, the use of SCT and the works of Mill and Engel, provided a holistic approach to understanding the various factors that determine or influence involvement of men in female contraceptive uptake in Korogocho and hence their suitability in this particular study.

2.2.6 Alternative Theories and why not adequate for the study

Whereas there are several theories that have been developed to study human behaviour including; Reasoned Action Theory (TRA), the Model of Health Belief (HBM), Planned Behavior Theory (TPB), and Precaution Adoption Pocess Model, these theories tend to focus on the individual ignoring the fact that there could be other factors that influence an individual's health behaviour. Other such factors include policy interventions and or environmental interventions.

2.2.7 Weaknesses of SCT

SCT endeavors at providing explanations for virtually all human phenomena, (Bandura, 1986) and has therefore been considered too broad and ambitious. Because of its breadth, its testing has therefore not been comprehensive in the same way that some other health behavior theories have been tested. Additionally, SCT does not look at the entrenched societal behaviors in influencing an individual's behavior, and that is the reason ideas from the works of John Stuart Mill and Friedrich Engel were included in the theoretical framework.

2.3 Definition and Operationalization of Key Concepts

Contraceptive Prevalence Rate- the percentage of women of reproductive age currently using or whose sexual partner is currently using at least one contraceptive method, regardless of the method used.

Contraceptive Uptake- the use of any family planning method to control child bearing**.**

Contraceptives- modern birth control methods.

Family Planning-the use of birth control and any other technique to implement plans such as **t**he planning of when one would want to have children, and the number of children to have.

Female- individuals with the natural capability of giving birth.

Fertility- natural capability of giving life.

Male- household heads of the male gender.

Male participation- the inclusion of men in the process of making decision nn the form of family planning services/contraceptives to adopt.

Total Fertility Rate- the average number of children that would be born to a woman over her life time if she was to survive from birth to the end of her reproductive life experiencing the exact current age-specific fertility rates through her life time.

2.4 Research Hypotheses

This study was designed to test the following hypotheses:

2.4.1 Null Hypotheses

H_1: reproductive health policy implementation does not influence male participation in female contraceptive uptake.

H_2: perception about contraceptives does not influence male participation in female contraceptive uptake.

H_3: socio-cultural factors do not influence male participation in female contraceptive uptake.

2.4.2 Alternative Hypotheses

H_1: reproductive health policy implementation influences male participation in female contraceptive uptake.

H_2: socio-cultural factors influences male participation in female contraceptive uptake.

H_3: perception about contraceptives influences male participation in female contraceptive uptake.

CHAPTER THREE: METHODOLOGY

3.1 Introduction

The chapter describes the different components of methodology, which include; research design, study site, target population, sampling frame, sample size, sampling technique, sources of data and data collection methods, reliability and validity, ethical considerations and data analysis. This study took a quantitative research approach as the methodology. A quantitative methodology was chosen because it would enable the researcher collect statistically valid data and since the sample size was large, the data collected would be more reliable if collected statistically as compared to other research methodologies.

3.2 Research design

A descriptive cross-sectional design was employed. This is a type of research design where a situation and possible factors related to the situation are measured at a particular stage and for a known population, (NEDARC, 2019). This design was applied in this research because it is considered the most applicable and preferred when associations between variables are sought and gives important data for recommendations. Also, descriptive cross-sectional design helps in the identification and testing of key multiple variables that can be established as data collection allows the use of numerous in-depth information in quantitative surveys, as there is direct contact with respondents (Creswell & Plano Clark, 2011). The design therefore enabled the researcher to acquire a representative sample of the large population while using a smaller sample, in addition to, estimating the relationship of the variables in a less biased way due to a huge participation rate. However, the design cannot be used to make accurate predictions where causal effects of behaviors are under investigation.

3.3 Study Site

The selection of Korogocho as the study site was largely purposive. Korogocho is ranked fourth in population density of all informal settlements in Nairobi, (NCPD, 2015). It covers an area of about 0.92 square kilometers, located to the North-East of Nairobi, and it is 12 kilometers away from the Nairobi Central Business District (CBD), hence its accessibility to the researcher in terms of time and resources. Korogocho borders Dandora dump site and it is one of the most highly populated

informal settlement areas in Nairobi. Korogocho has a density of 42,401 persons per kilometer square, according to, Kenya Population and Housing Census 2019 (GoK), 2019). There are three sub-locations in Korogocho namely: Githaturu, Nyayo and Korogocho.

According to the recent 2019 census survey, Korogocho has a total population of 36,900 over a space of 0.9 square kilometers. The total fertility rate for Korogocho is 3.7 and this is higher than the over roll fertility rate for Nairobi at 2.7, (GoK, 2015). The life expectancy is around 39 years, according to the 2014 demographic health survey report. Just like any other slum in Kenya, contraceptive prevalence rate in Korogocho is estimated at 34.3%, (Rumsby, 2012). Korogocho's population is largely cosmopolitan compared any other informal settlement area in Nairobiand this therefore means that it is highly representative of all informal settlements of Nairobi, hence its choice as the study site.

3.4 Target Population

Married men from Korogocho area comprised the target population, and the unit of analysis were households, where the husbands were the ones interviewed. The population of males in Korogocho is 18,967, and that of females is 17,933, according to the last Kenya national household survey (2019) and a total of 11,757 households (GoK, 2019). The sample population was drawn from the three sub-locations of Korogocho; Korogocho, Gitathuru and Nyayo.

3.5 Sample size and Sampling procedure

Out of the 11,757 households in Korogocho, Yamane (1967) formula was employed to calculate the sample size,

$$n = \frac{N}{(1+Ne^2)} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (1)$$

where; n= $\frac{11757}{(1+11757\times0.05\times0.05)} = 387, Therefore, n = 387$ households

n = corrected sample size

N = population size

e = Marginal error (MoE), e = 0.05

The population sample was selected from the available house-hold population through the use of non-probability sampling known as judgmental sampling technique. Then the researcher employed, convenience sampling to select the required number of respondents from the known population of interest. These are techniques used by researchers to select units to be sampled through the use of their own existing knowledge or professional judgement.

3.6 Sampling frame

Korogocho Resident Committee (KRC) has a membership of six members, members who are elected by the residents and they represent all sections of the Korogocho community, that is, it has members who are women, men, elders, youth, tenants and structure owners. KRC officials led by the area assistant chiefs guided the process of participant selection.

3.7 Data Source and data collection method

The instruments of data collection employed in the study included structured self-administered questionnaires and interviewer administered questionnaires. The questionnaire technique was preferred because they aid in reaching a large sample of the given population and at a low cost. Interviewer administered questionnaires were administered to individuals who could not fill the questionnaire and this ensured that no respondents failed to respond to the study questions just because they may not be able to read and write.

3.8 Reliability and Validity Data

A normality (diagnostic tests) test was done on the data to ensure that data is normally distributed hence, reliability, validity, accuracy and consistency.

3.9 Ethical considerations

An ethical clearance from the University of Nairobi was sought by the researcher and a written letter of informed consent was availed to the study subjects before they were involved in the data collection. Also, respondent's personal information has been treated with a lot of confidentiality and they were not required to identify themselves by name or any other possible identifier. Also, participation of subjects was on voluntary basis.

3.10 Data Analysis and Specification of the Model

Collected data has been analyzed using an econometric model known as Probit. The model is used to analyze quantitative data where the independent variables are binary.

This study employed binary probit regression model to analyze the determinants of male involvement in female contraceptive use. The dependent variable was the involvement of men in female contraceptive use which takes the value of 1= the man is involved in their wife's contraceptive use and 0= otherwise and the independent variable are the determinants of male involvement. Probit model was preferred since the variables are binary, (Greene, 2002). Through the adopting of the sad model, the study assumed that the error term was normally distributed.

The model assumes that, female contraceptive uptake is dependent on the male partner involvement whereby, the male involvement is determined by policy factors, perception factors, and socio-cultural factors among other control variables:

$Y=f(P,I,)$……... (2)

Where: Y= Male involvement in women contraceptive uptake

P= Policy factors

I= Individual Perception factors

Additionally, for a man to get involved in their spouse's contraceptive uptake they do so under various circumstances which are dependent on, governmental interventions through policy, individual perceptions, socio-cultural interactions and other prevailing factors, Green (2002), this can be explained as:

$I=Pp+Pi+Ps$…… (3)

Where: I= male Involvement

Pp=policy intervention factors

Pi= individuals perception factors

Ps= social/cultural factors

Contraceptive uptake function is expressed as:

C= *f*(p,i,s) ……..…… (4)

Where: p= policy factors, i= individual perception factors, and s= social cultural factors.

The following function can be derived using equation 1, 2 and 3:

Y=*f*(P, I) + Y_1(I-P_P+ P_i+ P_s) + Y_2(H- *f (p, i, s)*…….. (5)

Solving equation 4 above yields a demand function for involvement in spouse's contraceptive uptake as follows:

I_J= *f (Pp, Pi, Ps,* I, K) …… (6)

Where: K= other variables.

The probit specification is based on the probability of an individual to be involved in their spouse's contraceptive use, and it is assumed that the underlying response variable determines the contraceptive use.

Y_1=$X_i\beta_+\varepsilon$…… (7)

Where Y_1 is the dependent variable; male involvement in a spouse's contraceptive use; β_0 are regression coefficient to be estimated; X_i is a vector of explanatory variables that determine male involvement in female contraceptive use and ε is the random error term.

In order to interpret the sign and the magnitude of the coefficient, marginal effects are estimated and interpreted. The marginal effect for the probit model for continuous variables is derived from equation 2. Differentiating equation 2 with respect to the independent variables yields the probability density function given as:

$\partial P\ (Y=1|X)\ \partial X_k = \beta_k f\ (X\ \beta)$ …… (8)

Where: $f(\cdot) = \frac{\partial F\ (\cdot)}{\partial F\ (X\beta)}$

Where the marginal effect for discrete variables are computed using the formula;

$P\ (Y = 1)\ |X_k=1)$ -P $(Y=1|X_K=0)$ …… (9)

$=F\ (X\ \beta|X_K=1) - F\ (XB|\ X_K = 0)$…… (10)

The multivariate probit regression model for male involvement in female contraceptive uptake is derived from equation (4) to (10) and is indicated in equation (11).

$$Y=\beta_0+\beta_1AGE+\beta_2NCL+\beta_3ES+\beta_4EL+\beta_5PA+\beta_6AFFP+\beta_7FWR+\beta_8FWS+\beta_9FPC+\beta_{10}CLP+\beta_{11}CSE+\beta_{12}CCI+\beta_{13}CBD+\beta_{14}RSP=\beta_{15}WG+\beta_{16}REL+\beta_{17}CD+\beta_{18}RCG+\beta_{19}CGP+\beta_{20}MT+\beta_{21}PCU+\beta_{22}DCP+\varepsilon$$ …… (11)

Where: **Y** is Male Involvement in female contraceptive uptake; **AGE**= Years of age of the participant; **NLC**=Number of living children; **ES**=Employment status; **EL**= Education level; **PA=** Policy Awareness; **AFFP=**Aware of Free Family Planning; **FWR=** Government Facilities Within Reach; **FWS=** Government Facilities well Stocked ; **FPC=** Government Family Planning Campaigns**; CLP**=Contraceptive use leads to Promiscuity; **CSE**= Contraceptive use has side effects; **CCI**= Contraceptive use causes infertility; **CBD**= Contraceptive use leads to birth defects; **RSP**= Reduced sexual pleasure; **WG**= Where grew up; **REL**= Religion; **CD**= No. of Children Desired; **RCG**= Respondent's Children Gender; **CGP**= Children Gender Preference; **MT**=Marriage Type; **DCP**=Discusses Contraceptive with Partner; **PCU**= Use of Contraceptive by respondent's partner**; E**=Error term.

Table 3.1: Variables Description and expected signs

Variable	Variable Definition	Measurement	Expected sign
Dependent Variable			
Male Involvement in Female Contraceptive Uptake	Being involved in the partners contraceptive uptake	Binary 1= if involved, 0= not involved	
Independent Variables			
Demographic factors			
Age	The age of the respondent	Years	Positive
Number of children	Number of living children	Number	Positive
Employment status	Employment status at the time of survey	1= working. 0= otherwise	Positive
Education level	Level of education categorized as: no education, primary, secondary and higher education	1= No education 2= Primary 3= Secondary 4= College 5= University	Negative/ Positive
Policy Variables			
Aware of existence of government policy on reproductive health	Respondent is aware of government policy on reproductive health	1= town 0= otherwise	Positive
Aware of free provision of family planning in government health facilities	The respondent is aware of availability of various free planning services in government health facilities	1= yes 0= otherwise	Positive
Health facilities located within reach	The government health facilities are within reach/ close home	1= yes 0= otherwise	Positive
Health facilities are adequately stocked with appropriate contraceptives	The health facilities are well equipped with appropriate contraceptives	1= yes 0= otherwise	Positive
Free Family planning services campaigns by Government	The respondent has heard about free family planning services through government agents	1= yes 0= otherwise	Positive

Male Perception Variables			
Contraception causes promiscuity	The respondent believes that use of contraception would make his partner promiscuous	1= Yes 0= otherwise	Negative
Contraception and side effects	The respondent believes use of contraceptive by the partner would have side effects	1= yes 0= otherwise	Negative
Contraceptive use leads to infertility	The respondent believes use of contraceptive would make their partner infertile	1= yes 0= otherwise	Negative
Contraception and birth defects	The respondent believes use of contraceptive can make someone have children with birth defects	1= yes 0= otherwise	Negative
Contraceptives and sexual pleasure	Men married to women who use contraceptives experience decreased sexual pleasure	1= yes 0= otherwise	Negative
Socio-cultural variables			
Where grew up	Region where the respondent grew up	1= town 0= otherwise	Positive
Religion	Religion affiliations grouped into: Catholic, protestant, Muslim and no religion	1= No religion 2= Catholic 3= Protestant 4= Muslim 5= Others	Negative/Positive
Number of children desired to have/has	The number of children the respondent would want to have/has	1= three or less 2= more than three	Negative
Sex of the respondent's children	The sex of all of the respondent's children	1= boys 0= otherwise	Negative
Children gender preference	The respondent's gender preference for children	1=boys 0= otherwise	Positive
Type of marriage	The type of marriage the respondent is in	1= monogamous 2= otherwise	Negative/Positive
Discussion on contraceptive use	The respondent discusses contraceptive use with the partner	1= yes 0= otherwise	Positive
Partner contraceptive use	The respondent's partner uses contraceptive	1=using 0= otherwise	positive

Source: Author's own computation

3.11 Diagnostic Tests

The diagnostic tests were done to ensure that the data is normally distributed and to avoid specification bias in the model. The tests included normality test, multicollinearity test and heteroscedasticity test

3.11.1 Normality Tests

Normality test were done to test for normal distribution for a random variable underlying the data set. Data that would fit into a bell curve before running regression is presumed to be derived from a regular distribution. However, this is not always true in regression. A Shapiro Wilk test was conducted to inform whether the random sample came from a normal distribution. The test computed a value (W); small values suggest the sample is not normally distributed, (Gujarati, 2004).

3.11.2 Multicollinearity Test

A situation of Multicollinearity occurs when there is a high relation of two or more variables. This condition can be due to the model specification and also the population that is being sampled in a regression model and its presence weakens the statistical power of the regression model leading to wrong interpretation. Variation Inflation Factor was detected whereby, the factor should be below 10 if the regression is going to be perfect, (Rosser, 1993).

3.11.3 Heteroscedasticity Test

Heteroscedasticity means the presence of random variables such as the lack of equality in the variance of error terms for all the observations. This condition could be due to model specification and outliers leading to wrong estimated standard error. If present, the condition leads to linear, unbiased but inefficient Ordinary Least Square (OLS) as well as unreliable Confidence Interval. Hettest was used to test for heteroscedasticity (Breusch & Pagan, 1979; and Hair, et. al, 1995).

CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND DISCUSSION

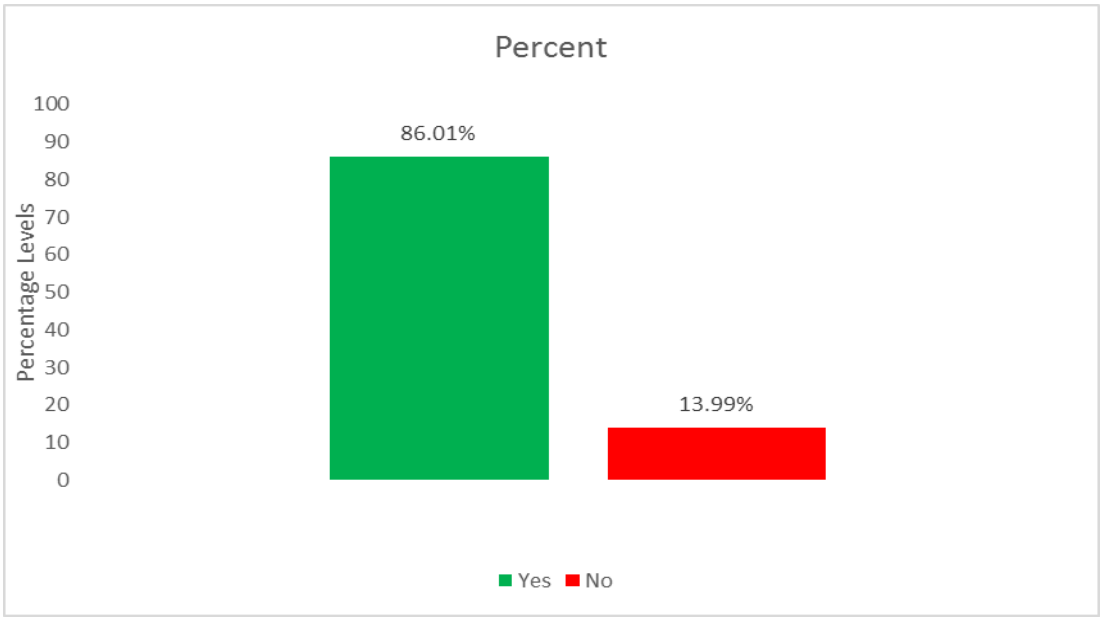
4.1 Introduction

The empirical results for determinants of male involvement in female contraceptive uptake will be presented in this section. The specific objectives include: to understand the various aspects of reproductive health policy implementation that influences male involvement in female contraceptive uptake in Korogocho, to examine the male perceptions on contraceptives that influences their involvement in female contraceptive uptake in Korogocho and thirdly, to investigate the socio-cultural factors influencing male involvement in female contraceptive uptake in Korogocho. The empirical outcomes are presented largely through tables and some figures.

4.2 Descriptive Statistics

The summary of the descriptive statistics of the study variables are presented in this section. Findings in figure 4.1 show that approximately 86 percent of the respondents indicated that their partners use some form of contraceptive. This implies that only 14 percent do not embrace any form of contraception.

Figure 4.1: Contraceptive Use Levels (%)



Source: Authors computation from the dataset

4.2.1 Socio-Demographic Characteristics

Table 4.1 shows results for demographic and other social factors. The study assessed age distribution of the respondents. Most respondents were aged on average 39 years old. Considering the youngest and the oldest, the youngest respondent was 18 years and the oldest was 70 years (see table 4.1). Respondents indicated that they had either three or four children on average where the least had one child and the highest had nine children. The study assessed employment status of respondents; where those employed were compared to those not employed. From the findings, 64 percent of the respondents were employed.

Table 4.1: Socio-Demographic Characteristics

Variable	Obs	Mean	Std. Dev.	Min	Max
Age	386	38.84715	10.55449	18	70
No of children	386	3.414508	1.779887	1	9
Employment Status	386	.6398964	.4806532	0	1
No education	386	.1295337	.3362255	0	1
Primary education	386	.3419689	.4749849	0	1
Secondary education	386	.3341969	.4723212	0	1
Higher education	386	.1943005	.3961748	0	1

Source: Author's computation from the dataset

Also, educational levels were assessed. A majority of the participants had either primary or secondary education represented with 34.2 percent and 33.4 percent respectively. This was followed by 19.4 percent with tertiary or higher education level whereas about 13 percent had no education.

4.2.2 Reproductive Health Policy Implementation (RHP)

The study examined the policy variable whereby about 52.3 percent of the respondents agreed that they were aware that the government has a policy on reproductive health funding whereas 86.8 percent were aware that family planning services are offered freely in public health facilities. More results are as shown in table 4.2.

Table 4.2: Reproductive Health Policy

Variable	Obs	Mean	Std. Dev.	Min	Max
Government Policy on RH funding	386	.5233161	.5001043	0	1
Awareness on family planning services	386	.8678756	.3390654	0	1
Distance to health Facilities	386	.6917098	.4623864	0	1
Health facilities equipped with medicines	386	.4559585	.498703	0	1
Heard of Free FP services	386	.8549223	.3526363	0	1

Source: Author's computation from the dataset

In addition, the results indicated that 69.2 percent of respondents lived far from public health facilities in their area. Also, less than half of the respondents that is 45.6 percent indicated that public health facilities were well equipped with medicines/contraceptives whereas 85.5 percent of the respondents had heard about the government offering free family planning services.

4.2.3 Perception Factors

From the findings (see table 4.3), it was shown that about 41.7 percent of the respondents believed that contraceptive use leads to promiscuity whereas approximately 80.6 percent and 33.2 percent of the respondents believed that contraceptive use has side effects and that it leads to infertility respectively. The study explored other perceptions whereby about 26.2 percent and 48.2 percent of the respondents indicated that use of contraceptives can lead to bearing children with defects and decreased sexual pleasure respectively. More details are as indicated in table 4.3.

Table 4.1: Perception Characteristics

Variable	Obs	Mean	Std. Dev.	Min	Max
FP leads to promiscuity	386	.4170984	.4937194	0	1
FP has side effects	386	.8056995	.3961748	0	1
FP leads to infertility	386	.3316062	.4714013	0	1
FP leads to bearing children with defects	386	.261658	.4401078	0	1
FP leads to decreased sexual pleasure	386	.4818653	.5003195	0	1

Source: Author's computation from the dataset

4.2.4 Socio-Cultural Factors

The study further explored various sociocultural factors regarding use of contraceptives (see table 4.4). Over half of the respondents (54.7 percent) grew in urban environment. On religious inclinations, the study revealed that 37.8 percent of the respondents were Catholics followed by the 26.7 percent and 17.4 percent who had no religion and Protestants respectively. Those who were Muslims were 13.2 percent and only 4.9 percent belonged to other religions.

Table 4.2: Socio - Cultural Characteristics

Variable	Obs	Mean	Std. Dev.	Min	Max
Childhood place of Residence	386	.5466321	.4984668	0	1
No religion	386	.2668394	.4428818	0	1
Catholic	386	.3782383	.4855769	0	1
Protestant	386	.1735751	.3792353	0	1
Muslim	386	.1321244	.3390654	0	1
Other religion	386	.0492228	.2166136	0	1
Desire for more children	386	.7331606	.4428818	0	1
Sex of your Children	386	.3445596	.4758412	0	1
Gender Preference	386	.1891192	.3921115	0	1
Type of Marriage	386	.1813472	.3858056	0	1
Discuss FP with partner	386	.7797927	.4149241	0	1

Source: Author's computation from the dataset

Findings also showed that majority (73.3 percent) of the respondents had intention of having more than three children as opposed to 26.7 percent who had an intention of having three or below three children. It was found that about 34.5 percent of the respondents had children who were girls only while the majority that is 65.6 percent had children of both gender that is boys and girls. On further assessment, only 18.9 percent of the respondents preferred a particular gender of child while over 80 percent did not have gender preference. The study also established that 81.9 percent of the respondents came from monogamous type of marriage while only 18.1 percent came from polygamous marriage. Lastly, the study revealed that 78 percent of the respondents took an initiative to discuss family planning topic with their partners.

4.4 Diagnostic Tests

4.4.1 Normality Tests

Normality test was done to test for normal distribution for a random variable underlying the data set. This study used Shapiro Wilk test which informed on whether the random sample came from a normal distribution. As can be observed from table 4.5, most of the variables used had p values which were more than 0.05 level hence normally distributed. Similar conclusions were arrived at in the study conducted by Orayo, (2014).

Table 4.1: Shapiro Wilk Test for Normality

Variable	Obs	W	V	z	Prob>z
Contraceptive use	386	0.97602	6.394	4.407	0.00001
Age	386	0.97616	6.357	4.394	0.00001
No of children	386	0.96956	8.118	4.974	0.00000
Employment	386	0.99825	0.466	-1.813	0.96505
Education	386	0.99904	0.256	-3.234	0.99939
Government Policy on RH funding	386	0.99984	0.043	-7.494	1.00000
Awareness on family planning services	386	0.97381	6.984	4.617	0.00000
Distance to health facilities	386	0.99626	0.997	-0.006	0.50253
Health facilities	386	0.99930	0.186	-3.999	0.99997

equipped with medicines					
Heard of Free FP services	386	0.97737	6.035	4.270	0.00001
FP leads to promiscuity	386	0.99852	0.395	-2.204	0.98624
FP has side effects	386	0.98659	3.577	3.028	0.00123
FP leads to infertility	386	0.99533	1.246	0.522	0.30099
FP leads to bearing children with defects	386	0.99062	2.502	2.178	0.01470
FP leads to decreased sexual pleasure	386	0.99963	0.099	-5.504	1.00000
Childhood place of Residence	386	0.99979	0.056	-6.832	1.00000
No religion	386	0.97757	5.980	4.249	0.00001
Desire for more children	386	0.99383	1.646	1.184	0.11826
Sex of your Children	386	0.99596	1.077	0.175	0.43050
Gender Preference	386	0.98201	4.796	3.724	0.00010
Type of Marriage	386	0.98071	5.144	3.891	0.00005
Discuss FP with partner	386	0.98976	2.730	2.386	0.00851

Source: Author's computation from the dataset

4.4.2 Multicollinearity Test

The study computed correlation coefficients as presented in the correlation matrix (table 4.6) to determine presence or absence of Multicollinearity. Based on the correlation coefficients obtained, the study concluded that all pairs of variables were moderately correlated. Following Machio (2008), most correlations were below 0.5 in absolute values except correlation coefficients for one pair (contraceptive use and discussing contraceptive with partner) which was 0.6688 in absolute value. According to Mukras (1993), the difference is insignificant and thus the pair was retained in further analysis.

As could be observed in the correlation matrix, the following variables were positively correlated with contraceptive use: employment (ES), education (EL), policy awareness (PA), aware of free FP (AFFP), govt. facilities are within reach (FWR), govt. facilities are well stocked (FWS), govt. family planning campaigns (FPC), where grew up (WG), respondent's children gender (RCG), marriage type (MT), discusses contraceptive with partner (DCP), number of children desired (CD), and

children gender preference (CGP). The rest independent variables had negative correlations. Table 4.6 shows more other details.

NB: PA- awareness on the government policy on reproductive health funding, AFFP-awareness on free family planning services, FWR-public health facilities in the area are within respondent's reach, FWS-public health facilities are well equipped with medicines/contraceptives, HFFP- heard about the government offering free family planning, CLP-contraceptive use leads to promiscuity, CSE- use of contraceptives has side effects, CCI- contraceptive use leads to infertility, CBD- use of contraceptives can lead to bearing children with defects, RSP-contraceptive use leads to decreased sexual pleasure, WG- Childhood place of residence, REL-Religion, CD-Desire for more children, RCG- sex of your children, CGP- children's gender preference, MT-type of marriage, DCP- discussion about family planning with the partner.

Table 4.1: Correlation Matrix

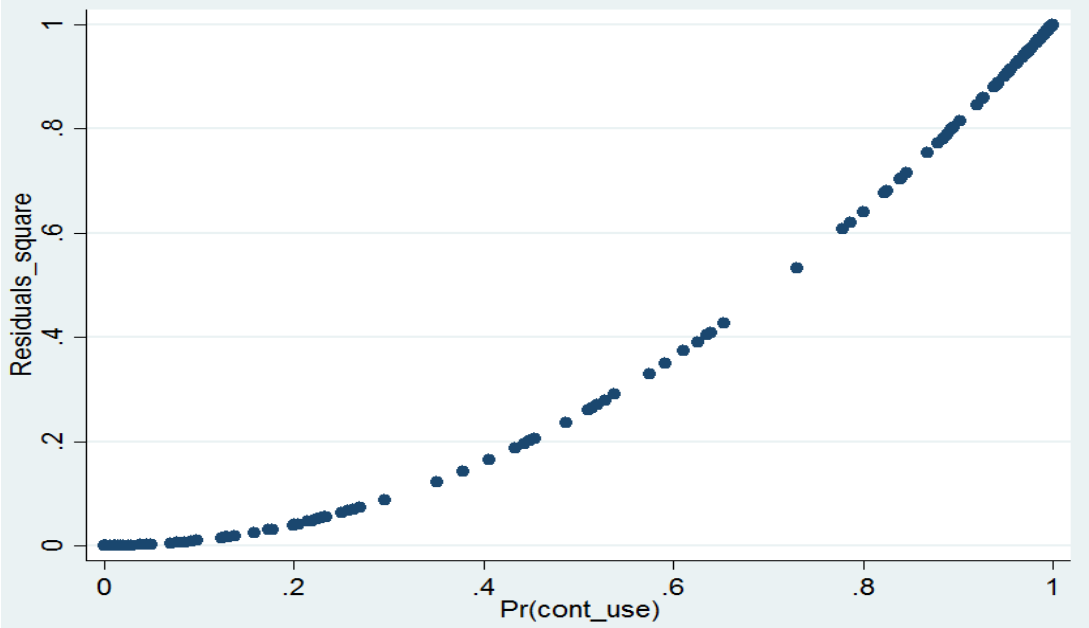
Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Contraceptive	1.0000																				
Age	-0.2553	1.0000																			
NLC	-0.3387	0.7291	1.0000																		
Employed	0.0864	-0.1117	-0.0922	1.0000																	
Education	0.2142	-0.1744	-0.3090	0.4091	1.0000																
PA	0.1385	0.0354	-0.0751	0.2025	0.5400	1.0000															
AFFP	0.1735	-0.2198	-0.2146	0.2651	0.2942	0.3016	1.0000														
FWR	0.0542	0.0265	0.0073	0.0251	0.0750	0.1266	0.1868	1.0000													
FWS	0.2043	-0.2478	-0.2281	0.1125	0.1025	-0.1052	0.2804	0.1719	1.0000												
FPC	0.1520	-0.2160	-0.1936	0.2273	0.2124	0.1960	0.5996	0.0595	0.3180	1.0000											
CLP	-0.2041	0.1015	0.1486	-0.0988	-0.1700	-0.0973	-0.2130	-0.0269	-0.0360	-0.2781	1.0000										
CSE	-0.0282	0.1041	0.0961	0.0408	0.0382	0.0819	-0.0369	0.0550	-0.0500	-0.1093	0.2295	1.0000									
CCI	-0.2553	0.1767	0.1546	-0.0792	-0.1047	0.0993	-0.2127	-0.0779	-0.3465	-0.2567	0.2747	0.3042	1.0000								
CBD	-0.3546	0.0942	0.1497	0.0414	-0.1370	-0.0219	-0.1158	-0.2152	-0.2373	-0.1062	0.1778	0.1583	0.4571	1.0000							
RSP	-0.1791	0.0174	0.1047	0.0754	-0.1449	-0.2526	-0.0831	0.0600	0.1894	-0.0738	0.2778	0.3556	0.1247	0.1573	1.0000						
WG	0.1578	-0.3948	-0.3351	-0.0002	0.0432	-0.0565	0.1672	-0.0220	0.1859	0.1716	-0.0212	-0.0000	-0.1212	-0.0380	0.0138	1.0000					
REL	-0.2335	0.1721	0.1044	-0.0175	0.0817	0.0799	-0.0117	-0.1425	-0.1503	-0.0010	0.0124	0.0566	0.0683	0.0763	-0.0737	-0.1011	1.0000				
CD	-0.2433	0.3463	0.5097	-0.0499	-0.2354	-0.1771	-0.1316	0.0285	-0.1063	-0.1487	0.0589	0.0442	0.0517	0.0926	0.1715	-0.1259	0.0247	1.0000			
RCG	0.1195	-0.2894	-0.3469	0.0669	0.0815	0.0262	0.0092	0.0118	-0.0180	0.0046	-0.0052	0.0254	0.0104	0.0025	0.0318	0.1785	-0.0780	-0.2281	1.0000		
CGP	-0.0341	-0.1254	-0.1163	0.0729	0.0961	0.0768	0.0321	-0.0357	0.1689	0.1050	-0.0194	0.0031	0.0392	0.1941	-0.0023	-0.0253	0.0216	-0.0975	0.1092	1.0000	
MT	0.0154	0.2684	0.2836	0.0449	0.0675	0.1261	-0.0546	-0.0935	0.0281	0.0412	-0.0300	0.0272	0.1112	0.1787	-0.0502	-0.1656	0.1039	0.0711	-0.1149	0.1504	1.0000
DCP	0.6688	-0.2218	-0.2841	0.0572	0.2614	0.2063	0.1619	0.1597	0.1978	0.1184	-0.1464	-0.0239	-0.1436	-0.3806	-0.1006	0.1188	-0.1579	-0.1368	0.0432	-0.0627	-0.0095

Source: Primary data

4.4.3 Heteroscedasticity Test

This refers to lack of a variance that is constant, of the error terms across all the observations. The scatter plot method (see figure 4.2) shows the results.

Figure 4.2: Plot of Residual Squared against the Fitted Values



Source: Primary Data

The residual plot method was used to test for heteroscedasticity as suggested by Muthoni (2016). As shown above, the plots exhibit a systematic pattern. This implies that heteroscedasticity is present and the study used robust standard errors in the final model.

4.5 Determinants of Male Involvement in Female Contraceptive Uptake

The main objective is to understand the various determinants of male involvement in female contraceptive uptake. The proposed probit model with the corresponding indices was evaluated and the findings are as indicated in Table 4.7. From model estimation, the overall p-value was less than 5 percent level of significance (Prob > chi2 was 0.0000) implying that the determinants identified explained significantly the dependent variable (male involvement in use of contraceptives. This means the data fitted the probit model well. The results for marginal effects are as shown in table 4.7.

Table 4.3: Marginal Effects (Male Involvement in Female Contraceptive Use)

Probit regression
Number of obs = 283
Wald chi2(25) = 133.69
Prob > chi2 = 0.0000
Log pseudo likelihood = -44.230346
Pseudo R2 = 0.6793

Male Involvement in female contraceptive Uptake	Marginal Effects	Robust Std. Err.	z	P>z [95%	Confidence Interval	
Age	.0020486	.0020066	1.02	0.307	-.0018841	.0059814
No of Children	-.026874**	.0101614	-2.64	0.008	-.0467901	-.006958
Employment	.0677406**	.0312549	2.17	0.030	.0064821	.128999
Education (*no education-reference*)						
Primary	-.032153	.028375	-1.13	0.257	-.087767	.023461
Secondary	-.0419968	.0349741	-1.20	0.230	-.1105447	.0265511
Tertiary	-.0645643	.0633167	-1.02	0.308	-.1886627	.0595341
Government Policy on RH funding	-.0647815**	.0305347	-2.12	0.034	-.1246284	-.0049345
Awareness on family planning services	.0880231	.0514887	1.71	0.087	-.0128929	.188939
Distance to health facilities	-.0090476	.0298201	-0.30	0.762	-.067494	.0493988
Health facilities equipped with medicines	-.0454862	.0393874	-1.15	0.248	-.1226841	.0317117
Heard of Free FP services	-.0458027	.0541433	-0.85	0.398	-.1519215	.0603162
Family Planning leads to promiscuity	-.0286159	.0257087	-1.11	0.266	-.0790039	.0217722
Family Planning has side effects	.0615057	.0405277	1.52	0.129	-.0179271	.1409384
Family Planning leads to infertility	-.062281	.0390501	-1.59	0.111	-.1388178	.0142557
Family Planning leads to bearing children with defects	-.049604	.0356434	-1.39	0.164	-.1194638	.0202558
Family Planning leads to decreased sexual pleasure	-.0322573	.0295039	-1.09	0.274	-.090084	.0255694
Childhood place of Residence	.0087309	.0264923	0.33	0.742	-.0431932	.0606549
Religion (*No religion -reference*)						
Catholic	.0184695	.035366	0.52	0.602	-.0508465	.0877855
Protestant	-.0013478	.0437645	-0.03	0.975	-.0871248	.0844291

Muslim	-.1847228**	.0599731	-3.08	0.002	-.302268	-.0671776
Other religion	.0237314	.0561118	0.42	0.672	-.0862456	.1337085
Desire for more children	*0*	*(omitted)*				
Sex of your Children	.0355971	.0296387	1.20	0.230	-.0224936	.0936878
Gender Preference	-.0912077**	.0357867	-2.55	0.011	-.1613483	-.0210671
Type of Marriage	.1168256**	.0387022	3.02	0.003	.0409705	.1926806
Discuss Family Planning with partner	.2431884**	.0272333	8.93	0.000	.189812	.2965648

(**) Significant at 5% level.

The results in Table 4.7 indicates the marginal effects. The coefficient on age (β= .0020486, p =0.307) was found to be positive and statistically non- significant at 5% level. This means that an increase in the age of the respondent, increases the probability of male involvement in female use of contraceptives in Korogocho Nairobi by 0.2% holding other factors constant. This implied that as the women advance in age, the effect in male involvement in her use of contraceptives increases. The coefficient on a number of children had a negative and significant effect on male involvement in female use of contraceptives in Korogocho Nairobi, Kenya (β= -.026874, p value=0.008). This means that an additional child led to reduced probability of male involvement in female use of contraceptives significantly by 2.7 percent holding other factors constant. This implies that married men may assume that their women understand more on other methods including safe days.

The coefficient on employment (β= .0677406, p =0.030) was positive and statistically significant at 5 percent. The results show that being employed increased significantly the likelihood of male involvement in female use of contraceptives by 6.8 percent holding other factors constant. This finding implies that married men who are on any employment are likely to cater for the cost of obtaining contraceptives for their women as well as other associated costs compared to those men who are not under any employment.

On educational levels, individuals who attained primary, secondary and tertiary education were compared to individuals who had no education. The coefficient on primary education was (β=-.032153, p value=0.257), indicating that married men who had attained primary level of education had lower probability of being involved in female use of contraceptives by 3.2 percent compared to those who had no education. The coefficient on secondary education was (β= -.0419968, p value=0.230) showing that married men who attained secondary level of education had low likelihood of being involved in female use of contraceptives by 4.2 percent compared to their counterparts who had no education. Further, the findings indicated that the coefficient on higher education (β=-.0645643, p value=0.308) was negative and statistically insignificant. This means that married men who had higher level of education had reduced likelihood of being involved in female use of contraceptives by 6.5 percent compared to those who had

no education. The findings imply that married men who are schooled are more likely to prefer other methods of FP to stop bearing more children compared to those who are not schooled.

On policy, the coefficient on awareness of government policy on RH funding had a negative and significant effect on male involvement in female use of contraceptives in Korogocho Nairobi (β= -.0647815, p value=0.034). This means that married men who were aware of government policy on RH funding were less likely to be involved male in use of contraceptives significantly by 6.5 percent holding other factors constant.

The coefficient on awareness to free family planning services had a positive and non-significant effect on male involvement in female use of contraceptives in Korogocho Nairobi (β= . 0880231, p value=0.087). This means that married men who were aware of free family planning services were more likely to be involved in female use of contraceptives by 8.8 percent holding other factors constant in Korogocho, Nairobi.

The coefficient on distance to nearest health facilities had a negative and non- significant effect on male involvement in female use of contraceptives in Korogocho Nairobi (β= -.0090476, p value=0.762). This means that married men who were far from the nearest health facilities had lower probability of being involved in female use of contraceptives in Korogocho, Nairobi by 0.9 percent holding other factors constant.

The coefficient on equipping well public health facilities with medicines/contraceptives was found to be negative and statistically non-significant at 5 percent (β= -.0454862, p value=0.248). The results show that equipping well the public health facilities with medicines/contraceptives was less likely to encourage married men to be involved in female contraceptive use by 4.5 percent holding other factors constant.

The coefficient on married men who had heard about the government offering free family planning had a positive and non- significant effect on male involvement in female use of contraceptives in Korogocho Nairobi (β= -.0458027, p value=0.398). This means that married men who had heard of free family planning services were less likely to be involved in female use of contraceptives by 4.6 percent holding other factors constant in Korogocho, Nairobi.

On perceptions, the coefficient on the variable that FP leads to promiscuity had a negative and non- significant effect on male involvement in female use of contraceptives in Korogocho Nairobi (β= -.0286159, p value=0.266). This means that married men who perceived that FP leads to promiscuity were less likely to be involved in female use of contraceptives by 2.9 percent holding other factors constant in Korogocho, Nairobi.

The coefficient on the fact that FP has side effects had a positive and non- significant effect on male involvement in female use of contraceptives (β= .0615057, p value=0.129). This means that married men who perceived that FP has side effects were more likely to be involved in female use of contraceptives by 6.2 percent holding other factors constant in Korogocho, Nairobi.

The coefficient on the perception that FP leads to infertility had a negative and non-significant effect on male involvement in female use of contraceptives (β= -.062281, p value=0.111). This means that married men who perceived that FP leads to infertility were less likely to be involved in female use of contraceptives by 6.2 percent holding other factors constant in Korogocho, Nairobi.

The coefficient on the perception that FP leads to bearing children with defects had a negative and non- significant effect on male involvement in female use of contraceptives (β= -.049604, p value=0.164). This means that married men who perceived that FP leads to bearing children with defects were less likely to be involved in female use of contraceptives by 5 percent holding other factors constant in Korogocho, Nairobi.

The coefficient on the perception variables such that FP leads to decreased sexual pleasure had a negative and non- significant effect on male involvement in female use of contraceptives (β= -.0322573, p value=0.274). This means that married men who perceived that FP leads to decreased sexual pleasure were less likely to be involved in female use of contraceptives by 3.2 percent holding other factors constant in Korogocho, Nairobi.

Considering the socio-cultural factors, the coefficient on childhood place of residence had a positive and non- significant effect on male involvement in female use of contraceptives (β= .0087309, p value=0.742). This means that married men who grew up

in the country side were less likely to be involved in female use of contraceptives by 0.9 percent holding other factors constant in Korogocho, Nairobi.

The coefficient on childhood place of residence had a positive and non- significant effect on male involvement in female use of contraceptives (β= .0087309, p value=0.742). This means that married men who grew up in the country side were less likely to be involved in female use of contraceptives by 0.9 percent holding other factors constant in Korogocho, Nairobi.

The study also assessed the influence of religious believes. Married men who were Catholics, Protestants, Muslims and those in other religions were compared to individuals who had no religion. The coefficient on Catholic married men (β= .0184695, p value=0.602), indicated that married men who were Catholics had higher probability of being involved in female use of contraceptives by 1.8 percent compared to those who had no religion. The coefficient on Protestants (β= -.0013478, p value=0.975) showed that married men who on those who were Protestants had low likelihood of being involved involvement in female use of contraceptives by 0.1 percent compared to their counterparts who had no religion ceteris paribus. In addition, the findings indicated that the coefficient on Muslims (β= -.1847228, p value=0.002) was negative and statistically significant. This means that married men who were Muslims had reduced likelihood of being involved in female use of contraceptives by 18.5 percent compared to those who had no religion ceteris paribus. The findings further revealed that the coefficient on married men in other religions (β= .0237314, p value=0.674) had higher probability of being involved in female use of contraceptives by 2.4 percent compared to those who had no religion ceteris paribus.

The coefficient on sex of the children had a positive and non-significant effect on male involvement in female use of contraceptives (β= .0355971, p value=0.230). This means that married men who had children who were girls only were more likely to be involved in female use of contraceptives significantly by 9.1 percent compared to those who had boys and girls holding other factors constant in Korogocho, Nairobi.

The coefficient on gender preference had a negative and significant effect on male involvement in female use of contraceptives (β= -.0912077, p value=0.011). This means that married men who had were less likely to be involved in female use of contraceptives significantly by 9.1 percent holding other factors constant in Korogocho, Nairobi.

The coefficient on the type of marriage that characterized married men had a positive and significant effect on male involvement in female use of contraceptives (β= .1168256, p value=0.003). This means that married men who were in a polygamous marriage were less likely to be involved in female use of contraceptives by 11.7 percent compared to married men who were in a monogamous marriage holding other factors constant in Korogocho, Nairobi

Lastly, the study established that the coefficient on whether the respondents do discuss about family planning with their partners had a positive and significant effect on male involvement in female use of contraceptives (β= .2431884, p value=0.000). This implies that married men who discuss about family planning with their partners were more likely to be involved in female use of contraceptives significantly by 24.3 percent compared to married men who did not create time to discuss holding other factors constant in Korogocho, Nairobi.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter gives a summary of the findings of the study and afterwards, conclusions are made based on various determinants of male involvement in female contraceptive uptake in Korogocho Nairobi County, Kenya. Additionally, recommendations on policy and areas of further research are suggested thereafter.

FP is fundamental to health of the population especially women, their families, and community. Most of the contraceptive methods are highly effective in preventing unintended pregnancies and reducing maternal and child mortality. The study was conducted with the sole aim of establishing determinants of male involvement in female contraceptive uptake in Korogocho, Nairobi County, Kenya. The specific objectives were; to determine various aspects of reproductive health policy implementation that influence male involvement in female contraceptive uptake in Korogocho, establish the male perceptions on contraceptives that influence male involvement in female contraceptive uptake in Korogocho, what are the socio-cultural factors that influence male involvement in female contraceptive uptake in Korogocho.

The study used collected primary data set where probit regression analysis was used to model the relationship. To establish the effects of different factors influencing male involvement in female use of contraceptives, the study tested significance at five percent level. Dependent variable was male involvement in female contraceptive uptake. Determinants used in this study as main factors include demographic and socioeconomic factors, reproductive health policy factors, perception factors and social cultural factors.

5.2 Summary of findings

The discussion of the results of the study follows the study objectives and was conducted focusing on both significant and non-significant determinants. Our findings were compared to other empirical studies explored in the literature.

5.2.1 Reproductive Health Policy Implementation and male involvement in female contraceptive uptake in Korogocho

From the estimated model, the coefficient on awareness of government policy on RH funding had a negative and significant effect on male involvement in female use of contraceptives in Korogocho Nairobi. The coefficient on awareness to free FP services had a positive and non- significant effect on male involvement in female use of contraceptives in Korogocho Nairobi. This means that married men who were aware of free FP services were more likely to be involved in female use of contraceptives holding other factors constant.

The coefficient on distance to nearest health facilities had a negative and non- significant effect on male involvement in female use of contraceptives in Korogocho Nairobi. This means that married men who were far from the nearest health facilities had lower probability of being involved in female use of contraceptives in Korogocho, Nairobi.

The coefficient on equipping well public health facilities with medicines/contraceptives was found to be negative and statistically non-significant. The results mean that equipping well the public health facilities with medicines/contraceptives was less likely to encourage married men to be involved in female contraceptive use holding other factors constant. The coefficient on married men who had heard about the government offering free FP had a positive and non- significant effect on male involvement in female use of contraceptives in Korogocho Nairobi. This means that married men who had heard of free FP services were less likely to be involved in female use of contraceptives by 4.6 percent holding other factors constant in Korogocho, Nairobi.

5.2.2 Male Perceptions on Contraceptives that influences their Involvement in Female Contraceptive Uptake in Korogocho

On perceptions, the coefficient on the variable that FP leads to promiscuity had a negative and non- significant effect on male involvement in female use of contraceptives. This means that married men who perceived that FP leads to promiscuity were less likely to be involved in female use of contraceptives in Korogocho, Nairobi. Also, the coefficient on the fact that FP has side effects had a positive and non- significant effect on male involvement in female use of contraceptives. This means that married men who

perceived that FP has side effects were more likely to be involved in female use of contraceptives in Korogocho, Nairobi. The study results were close to those of Kriel et al. (2019) was attributed to some side effects, whether real of perceived, which included side effects such as increased wetness during intercourse and minimal sexual pleasure, (Kriel, et al., 2019).

The coefficient on the perception that FP leads to infertility had a negative and non-significant effect on male involvement in female use of contraceptives. This means that married men who perceived that FP leads to infertility were less likely to be involved in female use of contraceptives in Korogocho, Nairobi. In addition, the coefficient on the perception that FP leads to bearing children with defects had a negative and non-significant effect on male involvement in female use of contraceptives. This means that married men who perceived that FP leads to bearing children with defects were less likely to be involved in female use of contraceptives in Korogocho, Nairobi.

The coefficient on the perception variables such that FP leads to decreased sexual pleasure had a negative and non- significant effect on male involvement in female use of contraceptives. This means that married men who perceived that FP leads to decreased sexual pleasure were less likely to be involved in female use of contraceptives in Korogocho, Nairobi.

5.2.2 Socio-cultural factors and Male involvement in Female Contraceptive Uptake in Korogocho.

Considering the socio-cultural factors, the coefficient on childhood place of residence had a positive and non- significant effect on male involvement in female use of contraceptives. This means that married men who grew up in the country side were less likely to be involved in female use of contraceptives in Korogocho, Nairobi. The coefficient on childhood place of residence had a positive and non- significant effect on male involvement in female use of contraceptives. This means that married men who grew up in the country side were less likely to be involved in female use of contraceptives in Korogocho, Nairobi.

According to a study by Adanikin, McGrath, & Padmadas, (2017), despite programmatic interventions, there is slow progress in family planning uptake. The reports elucidates that, while social, economic and religious impediments exist, social psychological factors, for example, negative perception about contraceptives by the male partner may affect spousal FP demand and use.

The study also assessed the influence of religious believes. Married men who were Catholics, Protestants, Muslims and those in other religions were compared to individuals who had no religion. The coefficient on Catholic married men indicated that married men who were Catholics had higher probability of being involved in female use of contraceptives compared to those who had no religion. On the other hand, it was revealed that married men who were Protestants had low likelihood of being involved in female use of contraceptives compared to their counterparts who had no religion ceteris paribus. In addition, the findings indicated that married men who were Muslims had reduced likelihood of being involved in female use of contraceptives compared to those who had no religion ceteris paribus. The findings further revealed that the coefficient on married men in other religions had higher as well as insignificant probability of being involved in female use of contraceptives compared to those who had no religion ceteris paribus. Socio-cultural factors such as race, religion and education level, play an integral role in influencing contraceptive uptake behaviors of an individual, (CDC, 2014). According to a study carried out by Black and others (2009), 89 per cent of white women used the contraception pills compared to all other racial and ethnic groups.

The coefficient on sex of the children had a positive and non-significant effect on male involvement in female use of contraceptives. This means that married men who had children who were girls only were more likely to be involved in female use of contraceptives significantly compared to those who had boys and girls in Korogocho, Nairobi. In addition, the coefficient on gender preference had a negative and significant effect on male involvement in female use of contraceptives. This means that married men were less likely to be involved in female use of contraceptives significantly in Korogocho, Nairobi. The findings were supported by the study results of Kriel, et al., (2019) who posited that, men have a complex and evolving responsibility in FP and

contraceptive uptake. Their study elucidates that, gender dynamics that are culturally influenced and adequate understanding of FP and contraceptions, are key in influencing male behavior and beliefs about contraceptive use, either positively or negatively.

The coefficient on the type of marriage that characterized married men had a positive and significant effect on male involvement in female use of contraceptives. This means that married men who were in a polygamous marriage were less likely to be involved in female use of contraceptives compared to married men who were in a monogamous marriage in Korogocho, Nairobi. Lastly, the study established that the coefficient on whether the respondents do discuss about family planning with their partners had a positive and significant effect on male involvement in female use of contraceptives. This implies that married men who discuss about family planning with their partners were more likely to be involved in female use of contraceptives significantly compared to married men who did not create time to discuss holding other factors constant in Korogocho, Nairobi. This finding concurred with the results of Abdi et al. (2020) whereby they concluded that socio-cultural characteristics such as spousal communication, gender-relations and decision making, polygamy, preference for sons, child mortality, desired family size, religion, and fertility preference as the major socio-cultural factors that influence family planning decision making.

5.3 Conclusions

From the literature, contraceptive use by female, which is part of a woman's life experience, creates remarkable opportunities and achievements. From the findings, it is evident that although contraceptives are effective, there remains other factors hindering while other promote their use in informal settlements in Kenya.

The study concludes as follows: That the fewer the number of children in a family, the lower the likelihood of male involvement in female contraceptives uptake in Korogocho Nairobi. This observation disputes the assumption that, sociocultural factors do not influence male involvement in female contraceptive uptake in Korogocho, Nairobi. On the other hand, employment status significantly increases the probability of male involvement in female contraceptives uptake in Korogocho Nairobi. This observation is supported by the assumption of the SCT theory that, health personal behavior is subject

to among other factors, self-efficacy. Government Policy on RH funding had a significant but a negative influence on the probability of male involvement in female contraceptives uptake in Korogocho Nairobi. This therefore implies that, government policy on RH funding has a determinate effect on male involvement in female contraceptive uptake in Korogocho, Nairobi.

It was established that being a Muslim significantly reduces the likelihood of being involved in female contraceptives uptake in Korogocho Nairobi. Therefore, in dispute of the assumption that, sociocultural factors do not influence male involvement in female contraceptive uptake in Korogocho, Nairobi. Gender (sex of the child) preference was negative and significantly associated with reduced probability of male involvement in female contraceptives uptake in Korogocho Nairobi. Hence, refuting the hypothesis that, sociocultural factors do not influence male participation in female contraceptive uptake.

Type of Marriage was positively and significantly linked to male involvement in female contraceptives uptake in Korogocho Nairobi. This is inline with the alternative theory that, sociocultural values influences male involvement in female contraceptive uptake in Korogocho, Nairobi. Lastly, discussing FP with partner was highly significant and positively associated with male involvement in female contraceptives uptake in Korogocho Nairobi. Hence, in agreement with the alternative hypothesis that, sociocultural factors do not influence female contraceptive uptake in Korogocho, Nairobi.

5.4 Policy Recommendations

To promote increased male involvement in female uptake of contraceptives across the country and especially within the informal settlements like Korogocho, the study recommends the following; There is need to customize family planning services so as to offer a wide range of methods and appropriate counseling, so that women in informal settlements can make an informed choice and ease of access to quality follow-up services. This is because, the study concluded that the lower the number of children in a family, the lower the likelihood of male involvement in female contraceptives uptake whereas employment

status significantly increased the probability of male involvement in female contraceptives uptake in Korogocho Nairobi.

There is need for a renewed commitment from government bodies (both national and county) as well as independent organizations to implement and monitor family planning strategies including redirecting funding in order to ensure the adherence to and provision of the most appropriate contraceptive method for both men and women in informal settlements. This is because, government funding was found to have a negative and significant effect on male involvement in female contraceptive uptake.

It is important to understand that educational leaning interventions can aid in increasing knowledge on contraceptive methods that are available and their benefits, enabling making of informed decisions by individuals and an effective use of contraception. Specific messages need to be tailor made for Muslim married men to embrace and encourage their women to use contraceptives. This is because being a Muslim was strongly linked to reduced likelihood of male involvement in female contraceptive use. This was also the same with those who had preference for gender or sex of their children.

Type of Marriage and men who discuss FP with their partners had higher chances of being involved in female contraceptive uptake. Based on these two findings, the study suggests for specialized clinics or family planning outreach workers who may be required to reduce barriers to male involvement in female uptake of contraceptives. Thus, there is a need for public sector partnership in health to empower men in polygamous marriage to encourage their women to access reproductive and health services.

5.5 Areas for Further Studies

The main focus of this study has been to look at the determining factors behind male involvement in female contraceptive use in Korogocho Nairobi. Specifically, the study analyzed as well as investigated the effect of reproductive health policies, perception factors, as well as socio-cultural factors. The study collected primary data only focusing on men in Korogocho and the findings could be different if women were also included. The estimation technique used was multiple linear regression model which has a lot of assumptions. The study thus suggests for similar studies exploring male involvement in

female contraceptive use in health facilities (primary healthcare facilities) in Kenya for comparison purposes.

Further studies are required to expound how measures of women's empowerment interact with cultural values and health system factors to influence women's uptake of modern contraceptives. It is also suggested that, there is need for studying using advanced models in estimation such as multinomial logit or IVprobit regression models (apart from probit, logit, or linear probability model). More empirical studies need to be conducted using other sociocultural factors, political as well as other confounding factors. Lastly, there is need for other similar studies across other informal settlements for comparison purposes.

REFERENCES

Abdi, B., Okal, J., Serour, G., & Temmerman, M. (2020). "Children are a blessing from God"- a qualitative study exploring the socio-cultural factors influencing contraceptive use in two Muslim communities in Kenya . *Abdi et al. Reproductive Health*.

Adanikin, A. I., McGrath, N., & Padmadas, S. S. (2017). Impact of men's perception on family planning demand and uptake in Nigeria. *Nationa Library of Medicine*.

Agbo, A. H., Ogbonna, C., & Okeahialam, B. N. (2013). Factors related to the uptake of contraceptive in a rural community in Plateau State Nigeria:A Cross-sectional community study. *Journal of Medicine in the Tropics*.

Agyei, W. K., & Migadde, M. (1995, 27). Demographic and Socio-cultural factors influencing contraceptive use in Uganda. *J. biosoc. Sci* , 47-60.

Ahmed, W. M., Shokai, S. B., Abduelkhair, I. H., & Boshra, A. Y. (2015). Factors affecting utilization of family planning services in a post-conflict setting, South Sudan: A Qualitative study. *AIMS Public Health*.

Albert, B. (1998). *"Health Promotion from the Perspective of Social Cognitive Theory."* . Psychology and Health.

Aluisio, A. M., Richardson, B., Bosire, R., John-Stewart, G., Mbori-Ngacha, D., & Farquhar, C. (2011, Vol 56). Male Antenatal Attendance and HIV Testing are associated nwith decreased infant HIV infection and increased HIV-free survival. *JAIDS Journal of Acquired Immune Deficiency*.

Appleford, G., & Ramarao, S. (2019). *Health Financing and family planniong in the context of Universal Health Care;Connecting the discourse in Kenya.* Newyork: Population Council.

Bandura, A. (1986). *ASocial Foundations of Thought and Action: ASocial Cognitive Theory.* Englewood Cliffs, N.J.: Prentice Hall.

Bandura, A. (1997). *Gude for constructing self-efficacy scales.* Information Age Publishing.

Bandura, A. (1997). *Self-Efficacy.* New York: W.H.Freeman.

Bandura, A. (1998,13). "Health Promotion from the Perspective of Social Cognitive Theory". *Psychology and Health*, 623-649.

Bankole, A., & Singh, S. (1998). Couples' fertility and contraceptive decision-making in developing countries: Hearing the man's voice. *International Family Planning Perspectives*.

Bankole, A., & Singh, S. (1998). Couples' fertility and contraceptive decision-making in developing countries: Hearing the Man's voice. *International Family Perspectives*, 15-24.

Bankole, A., & Singh, S. (1998, 24 (1)). Couples' fertility and contraceptive decision-making in developing countries: Hearing the Man's voice. *JSTOR*, 15-24.

Black, A., Yang, Q., Wen, S. W., Lalonde, A. B., Giubert, E., & Fisher, W. (2009). *Contraceptive use among Canadian women of reproductive age: Results of a National Survey.* Canada: Obstetric Gynaecology Department, University of Ottawa.

Blacker, J., Opiyo, C., Jasseh, M., & Sloggett, A. S.-S. (2005). Fertility in Kenya and Uganda: AComparative Study of Trends and Determinants. *US National Library of Medicine*, 355-373.

Breusch, T., & Pagan, A. (1979 47 (5)). A Simple Test for Heteroscedasticity and Random Coefficient Variation. *Econometrica*, .

Carr, M. (1997). New Pattern adn Change in Human Geography. *Nelson Thornes, London*.

Center for Disease Control. (2014: 63 (4)). *Providing Quality Family Planning Services.* Atlanta Georgia: U.S Office of Population Affairs: CDC.

Center-APHRC, A. P. (2014). *Report of the Nairobi Cross-sectional SlumsSyrvey (NCSS)Population and Health Dynamics in Nairobi's Informal Settlements;*. Nairobi: African Population and Health Research Center.

Council, N. R. (1993). *Factors affecting contraceptive use in Sub-Saharan Africa.* National Academies Press.

Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting Mixed methods research (2nd ed.).* CA: Sage: Thousand Oaks.

Development, N. C. (2010). *Fulfilling Unmet Need for Family Planning Can Help Kenya Achieve Vision 2030, Policy Brief.* Nairobi: Population Reference Bureau.

Dewi, V. (2009). Factors that influence male participation in family planning and reproductive health in Indonesia (Master's Thesis). *The Flinders University of South Australia*.

Donaten, B., Ezeh, A. C., Blessing, U., & Emina, J. B. (2017). Family planning in the slums of Nairobi, Kenya. *N-IUSSP*.

Dougherty, A., Kayongo, A., Deans, S., Mundaka, J., Nassali, F., Sewanyana, J., . . . Kalyesubula, R. (2018). Knowledge and use of family planning among male in rural Uganda. *Dougherty et al. BMC Public Health*.

Duke, M. R., & Ames, G. M. (2008). *Challenges of Contraceptive use and pregnancy prevention among women in the U.S. Navy.* Qualitative health research, 18(2).

Engels, F. (1902). *The Origin of the Family, Private Property and the State.* Chicago: Charles H Kerr & Co.

Ezeh, A., Kodzi, I., & J., E. (2010). *Reaching the Urban Poor with Family Planning Services.* Studies in Family Planning.

FHI 360, T. S. (2012). *Increasing Mens's engagement to improve family planning programs in South Asia.* NC, USA: US Agency fo International Development (USAID).

Field, A. P. (2005). *Discovering Statistics using SPSS (2nd edition).*

FP, F. P. (2019). *Kenya Commitment Maker Since 2012.* PENNYSYLVANIA: United Nations.

Frost, J. J., Darroch, J. E., & Remez, L. (2008). *Improving Contraceptive use in the United States. Issues in Brief.* Alan Guttmacher Institute.

Ghosh, S., & RAO, C. R. (1996). *Design and Analysis of Experiments. Handbook of Statistics.*

Ghosh, U. (1999). *Male Involvement in Family Planning: An Analysis Based on NFHS. PHD Thesis.* New Delhi: Jawarharlal Nehru University.

Government of Kenya. (2015). *Kenya Demographic and Health Survey 2014.* Nairobi: Government Press.

Government of Kenya. (2019). *Kenya National Household Survey.* Nairobi: Government Press.

Government of Kenya. (2020). *Budget Policy Statement.* Nairobi: Government Press, Kenya.

Greene, W. H. (2002). *Econometric Analysis.* New York: MacMillan.

Gujarati, D. (2004). *Basic Econometrics*. Retrieved from http://www.afriheritage.org/TTT/2 Basic Econometrics- Gujarati [1]. pdf

Hair, J., Anderson, R., Tatham, R., & Black, W. (1995). *Multivariate Data Analysis 3rd ed.* New York: MacMillan.

Hartmann, M., Gilles, K., Shattuck, D., Kerner, B., & Guest, G. (2012). Changes in couples' communication as a result of a male-involvement family planning intervention. *Journal of Health Communication- International Perspectives, Vol 17*.

Health Policy Plus. (2018, September). *Better policy for Better Health*. Retrieved from HealthPolicyPlus.com: http://www.healthpolicyplus.com

https://www.nedarc.org

Ijadulona, Y. M., Abiona, T. C., Ijadunola, K. T., Afolabi, O. T., Esimai, A. O., & OlaOlorun, F. M. (2010). Male involvement in Family Planning Decision Making in Ile-Ife, Osun State, Nigeria. *African Journal of Reproductive Health*, 45.

Kenya National Bureau of Statistics. (2014). *Kenya Demographic Health Survey.* Nairobi: Ministry of Heath.

Kenya National Bureau of Statistics. (2019). *Kenya Population and Housing Census: Volume 3.* Nairobi: Government Press, Kenya.

Kenya, G. o. (2012). *Kenya Population Situation Analysis.* Nairobi: National Council for Population and Development.

Kenya, G. o. (2015). *Family Planning in Kenya; Saving Lives, saving money.* Washington, DC: United States Agency for International Development (USAID).

Koffi, B. T., Weidert, K., Bitasse, E. O., Mensah, M. A., Jacques, E., Sheila, M., . . . Ndola, P. (2018;6(2):317-239). *Engaging Men in Family Planning; Perspectives from Married Men in Lome', Togo.* Global Health; Science and Practice.

Kriel, Y., Milford, C., Joanna, C., Suleman, F., Bekisinska, M., Steyn, P., & Smit, J. A. (2019). Male partner influence on family planningand contraceptive use: perspectives from community members and healthcare providers in KwaZulu-Natal, South Africa. *Kriel et al. Reproductive Health*.

Kyobutungi, C., Ziraba, A. K., Ezeh, A., & Ye, Y. (2008). The burden of disease profile of residents of Nairobi's slums: Results from a Demographic Surveillance System. *Population Health Metrics*.

Lee, K. L. (1998). *Family Planning Policies and Programmes in Eight Low-income countries: A Comparative Policy Analysis.*

Machio, M. P. (2008). Demand for maternal Health care services in Kenya. *Unpublished Master of Arts Research Paper). University of Nairobi*.

Machiyama, K., Huda, F. A., Ahmmed, F., Odwe, G., Obare, F., Mumah, J. N., . . . Cleland, J. (2018). Women's attitude and beliefs towards specific contraceptive methods in Bangladesh and Kenya. *BMC Reproductive Health*.

Machiyama, K., Mumah, J. N., Mutua, M., & Cleland, J. (2019). Childbearing desires and behavior: a prospective assessment in Nairobi slums. *BMC Pregnancy and Childbirth*.

Magadi, M. A. (2003). Trends and Determinants of Contraceptive Method Choice in Kenya. *Population Council*.

Magadi, M. A., & Curtis, S. L. (2003). Trends and Determinants of Contraceptive Method Choice in Kenya. *Population Council*.

Matrix Development Consultants. (1993). *Nairobi's informal settlements: An inventory.* A report prepared for USAID/RED/ESA. Nairobi:USAID;1993.

May, J. F. (1990). *Family Planning in Rwanda: Status and Prospectus.* Kigali: University of Rwanda Press.

May, J. F., Mukamanzi, M., & Vekemans, M. (1990). Family Planning in Rwanda:status and prospectus. *Studies in family planning*, 21 (1), 20-32.

Michuki, C. (2015). Demand for Maternal Health Services: An Analysis for Contraceptive Uptake in Kenya. Unpublished Thesis. University of Nairobi.

Mill, J. S. (1869). *The Subjection of Women.* London: Longmans, Green, Reader and Dyer.

Ministry of Health, D. o. (Oct, 2018). *National Family Planning Guidelines for Service Providers, 6th Edition.* Nairobi: RMHSU.

Montano, D. E., & Kasprzyk, D. (2008). Theory of reasoned action, theory of planned behavior and the Intergrated behaviour model. In K. Glanz, K. B. Rimer, & K.

Viswanath, *Health behaviour and health education: Theory research and practice.* Sanfrancisco, CA: Jossey-Bass.

Mosha, I., Ruben, R., & Kakoko, D. (2013). Family planning decisions, perceptions, and gender dynamics among couples in Mwanza, Tanzania: a qualitative study. *BMC Public Health*.

Nargund, G. (2009). Declining Birth rate in Developed Countries: Aradical policy re-think is required. *Facts, views & vision in ObGyn, 1(3)*, 191-193.

National Council for Population and Development. (2013). *Insights on FamilHealth in Kenya: Further Analysis of Two Decades of Demographic and Health Surveys 1998-2009.* Nairobi: National Council Population Development.

National Council for Population and Development. (2013). *Kenya Population Situation Analysis.* Nairobi: Government of Kenya.

National Council for Population and Development. (2015). *Kenya Demographic and health Survey 2014.* Calverton, Maryland: NCPD, CBS, and MI: Central Bureau of Statistics (CBS) (Office of the Vice President and Ministry of Planning and National Development) [Kenya], and Macro International Inc. (MI).

Ncece, J. (2017). *Determinants of Contraceptive Uptake Among Youth in Kenya* (Doctoral dissertation, University of Nairobi).

NEDARC. (2019, August 05). *Descriptive Study*. Retrieved from NEDARC Web Site:

Nzioka, C. (2001). *Programming for Male Involvement in Reproductive Health: Report of the meeting of WHO regional advisers in Reproductive health.* Washington DC: WHO.

Ochako, R., Mbondo, M., Aloo, S., Kaimenyi, S., Thompson, R., Tammerman, M., & Kays, M. (2015). Barriers to modern contraceptive methods uptake among young women in Kenya: a qualitative study. *BMC Public Health*.

Ochako, R., Temmerman, M., Mbondo, M., & Askew, I. (2017). Determinants of modern contraceptive use among sexually active men in Kenya. *BMC Reproductive Health*.

Okech, T. C., Wawire, N. W., & Mburu, T. K. (2011). Contraceptive use among women of reproductive age in Kenya's city slums. *International Journal of Business and Social Science*.

Okwor, E., & Olasehe, I. (2010). Married men's perceptionabout spousaluse of modern contraceptives: A qualitative study in Ibadan Northwest local government area, Southwest Nigeria. In *International Quarterly of Community Health Education, Vol. 30. no.3* (p. 223).

Omondi-Odhiambo. (1997). *Men's participation in family planning decisions in Kenya.* Populations Studies, Vol. 51 (1) 29-40.

Oraya, J. A. (2014). *Determinants of Health insurance demand among the migrants in Kenya* (Doctoral dissertation, University of Nairobi).

Oyediran, K., Ishola, G., & Feyisetan, B. (2002). *Factors affecting ever-married men's contraceptive knowledge and use in Nigeria.* JBiosoc Sci.

Pearson , E., & Becker, S. (2014). Couple's unet need for family planning and application to Three West African countries. *Stud Fam Plann*.

Republic of Kenya (2015). *National Adolescent Sexual and Reproductive Health Policy.* Nairobi: Ministry of Health.

Republic of Kenya. (2010). *Constituon of Kenya.* Nairobi: Government Printer.

Republic of Kenya. (2012). *Sessional Paper No. 3 of 2012 on Population Policy for National Development.* Nairobi: Government Press.

Ringheim, K., & Fieldman-Jacobs, C. (2009). *Engaging men for Gender Equality and Improved Reproductive Health.* Retrieved from www.igwg.org.: https://www.prb.org

Rosser, M. (1993). *Basic Mathematics for Economists*. Retrieved from http://www.railassociation.ir/Download/Article/Books/Basic Mathematics for Economists.pdf

Rumsby, M. (2012, December 14). *The Royal Society: In Verba.* Retrieved from Royal society: https://blogs.royalsociety.org

Schultz, T. (2008). *Population Policies, Fertility, Women's Human Capital and Child Quality; in Scultz T.P. & Straussn, J, (2008) (eds Handbook of DevelopmentEconomics., Vol. 4).* Amsterdam; North-Holland.

Siddiqui, T. R., Ghazal, S., Bibi, S., Ahmed, W., & Sajjad, S. F. (2016). Use of the Health Belief Model for the assessment of public knowledge and household preventive practices in Karachi, Pakistan, a Dengue-Endemic City . *PLOS Neglected Tropical Diseases*.

Tuloro, T., Deresa., Ali, W, & Davey, G, (2006). The role of men in contraceptive use and fertility preference in Hossana town, Southern Ethiopia. *Ethiopian Journal of Health Development*.

Wambui, T.A.C., & Alehajen, S. (2009). Perceptions of family planning among low-income men in Western Kenya. In *International Nursing Review Vol. 56. no 3* (p. 340).

Truong, S., Villar de Onis, J., Lindley, A., Bazua, R., Reyes, A., Montano, M., . . . Molina, R. L. (2020). Gender-Informed Family Plnning Percetions and Decision-making in Rural Chiapas, Mexico: A Mixed-Methods Study. *Hindawi International Journal of Reproductive Health*.

United Nations, D. o. (2017). *Reproductive Health Policies.* United Nations.

United States Agency for International Development. (2007). *Achieving Equity for the Poor in Kenya: Understanding Level of Inequities and Barriers to Family Planning Services.* Washington D.C: USAID.

United States Agency for International Development. (2009). *Engaging Men for Gender Equity and Improved Reproductive Health.* Population Reference Bureau.

Wambui, T., A., C., & Alehagen, S. (2009). Perceptions of family planning among low income men in Western Kenya. *International nursing Review, 56 (3).*

William, M. K., & Trochim. (2010, July July). *Research Methods.* Retrieved from Types of Reliability: http://www.socialresearchmethods.net

World Bank. (2020). *Kenya- Population Living in Slums.* Trading Economics.

World Health Organization (WHO), J. H. (2018). *Knowledge for Health Project. Family Planning: A Global Hand book for Providers.* Baltimore and Geneva: World Health Organization and Johns Hopkins Bloomberg.

World, O. H. (2008). *Evaluation of The WHO Training Initiative,"Transforming Health Systems, Gender and Rights in Reproductive Health".* Geneva: WHO.

Zulu, E. M., Dodoo, F., & Ezeh, A. (2008). *Sexual risk taking in the slums of Nairobi, Kenya.* Nairobi: Population Studies.

APPENDICES

QUESTIONNAIRE

Section 1: Demographic data

1. Age**……** (Please indicate)
2. Number of children?**.....**(please indicate)
3. What is your current employment status?
    1. Working ( ) 2. Not working ()
4. What is your level of education?
    1. No education ( )2. Primary education ( ) 3. Secondary education 4. College ( ) 5. University ()

Section 2: Policy Variable (S2PDQ)

1. Are you aware that the government has a policy on reproductive health funding?
    1. Yes ( ) 2. No ( )
2. Are you aware that family planning services are offered freely in public health facilities?
    1. Yes ( ) 2. No ( )
3. Public health facilities in the area are within respondent's reach
    1. Yes ( ) 2. No ( )
4. Public health facilities are well equipped with medicines/contraceptives
    1. Yes ( ) 2. No ( )
5. Has heard about the government offering free family planning
    1. Yes ( ) 2. No ( )

Section 3: Perception Variable (S3PCQ)

1. Contraceptive use leads to promiscuity
    1. Yes ( ) 2. No ( )
2. Use of contraceptives has side effects
    1. Yes ( ) 2. No ( )
3. Contraceptive use leads to infertility
    1. Yes ( ) 2. No ( )

4. Use of contraceptives can lead to bearing children with defects
    1. Yes ( ) 2. No ( )
5. Contraceptive use leads to decreased sexual pleasure
    1. Yes ( ) 2. No ( )

Section 4: Socio-cultural Variable (S4SCQ)

1. Where did you grow up? (childhood place of residence)
    1. In the country side ( ) 2. In town ( )
2. Religion
    1. Catholic ( ) 2. Protestant ( ) 3. Muslim ( ) 4. No religion () 5. Other
3. How many children do you have/intend to have?
    1. Three or less ( ) 2. More than three ( )
4. What is the sex of your children?
    1. Boy (s) and girl (s) ( ) 2. Girls only ( )
5. Do you have any children gender preference?
    1. Yes ( ) 2. No ( )
6. What kind of marriage are you in?
    1. Monogamous ( )
    2. Polygamous ( )
7. Do you discuss about family planning with your partner?
    1. Yes ( ) 2. No ( )

Section 5: Use of contraceptive services

1. Does your partner use any contraceptive?
    1. Yes ( ) 2. No ( )

End

INFORMED CONSENT FORM

Policy, Perception and Socio-cultural Determinants of male involvement in female Contraceptive uptake

Section A

Hello,

My name is Esther Faith Maina, a student at the University of Nairobi, researching on **'Policy, Perception and Sociocultural Determinants of Male Involvement in Female Contraceptive Uptake'** in Korogocho, Nairobi County. I am going to give you information and invite you to be part of this research. However, you could take time to evaluate yourself and make a decision on whether you would like to participate in the research or not.

If you agree to participate in the research, you will fill a questionnaire that I will issue to you. Kindly note that your bio data: age, occupation, level of education, number of children, among others will be required, however, your name is not required. Since this research is for academic purposes, disclosure of any descriptions that could reveal your identity shall not be revealed during data presentation.

You have been chosen to participate in this research because we feel that your habitation in Korogocho contribute much to your understanding of the various dynamics that influence or the participation of men in their spouses' contraceptive uptake, which is my research area of concentration. However, your participation in this research is voluntary.

This project has been approved by the University of Nairobi as well as the government of Kenya. If you would like to know more about this research and research findings, feel free to contact my supervisor Dr. Martine Oleche on 0722 285 602. In case of any question about the University of Nairobi procedures for research, please contact Prof. Horace Ochanda, Deputy Vice Chancellor of Research, Innovation and Enterprise on +254 20 491 0000.

Yours Sincerely,

Esther Faith Maina

SECTION B

I have read the foregoing information and I have had the opportunity to ask questions about it and any questions I have been asked have been answered to my satisfaction. I consent voluntarily to be a participant in this study

Name of Participant_____

Signature of Participant _____

Date _____

I appreciate your willingness to participate in this study. I look forward to working with you. In case of any question or clarification, you can reach me on 0721 634 961

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