FACTORS INFLUENCING CHOICE AND USE OF CONTRACEPTIVE METHODS AMONG WOMEN IN KIBERA SLUM, NAIROBI, KENYA

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JULY, 2013
DECLARATION

This is my original work and has not been presented for a degree or any other award in any other university.

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To my husband Dr Joseph Kiragu and our children Fiona, Diana, Emma and Lena for their love, patience and support in making this struggle worthwhile. My mother, Cecilia Wanjiru Mutitu and all women of reproductive age.
I am grateful to several people who greatly contributed to the successful completion of this work. My deepest appreciation goes to my university supervisors Dr Jemimah Simbauni and Prof Ephantus Kabiru of Kenyatta University for their invaluable comments, scholarly guidance, patience, encouragement and availability throughout the study. Mr Antony Bojana deserves gratitude for editing the final work.

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<td>African Traditional Religion</td>
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<tr>
<td>BTL</td>
<td>Bilateral Tubal Ligation</td>
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<td>CBS</td>
<td>Central Bureau of Statistics</td>
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<td>CM</td>
<td>Contraceptive Methods</td>
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<td>Depo Medroxy Progesterone Acetate</td>
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<td>MoH</td>
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<td>MCH /FP</td>
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<td>MEC</td>
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<td>OC</td>
<td>Oral Contraceptives</td>
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<td>POP</td>
<td>Progesterone Only Pill</td>
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<td>RH</td>
<td>Reproductive Health</td>
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<td>Service Delivery Point</td>
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<td>WHO</td>
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<td>UNFPA</td>
<td>United Nations Fund for Population Activities</td>
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<td>UNHCR</td>
<td>United Nations High Commissioner for Refugees</td>
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DEFINITION OF OPERATIONAL TERMS

Abortificient: A substance that causes premature delivery.

Birth Spacing: The length of time between the birth of one child and another.

Client: A person seeking family planning services.

Contraceptives: Birth control methods that are synthetically manufactured and are used in family planning to prevent pregnancy.

Family Planning: Family planning is the right of an individual to receive adequate information about the method of birth control of their choice and to determine responsibly and freely the number and spacing of children.

Implants: Plastic capsules containing a progestin similar to the natural hormone which are placed there by a surgical procedure under the skin of the upper arm.

Infant Mortality Rate: The number of infants under one year who die due to complications related to poor spacing of births per 1000 live births.

Injectable Contraceptives: These are contraceptives methods made progesterone compounds and they are given as an intra-muscular injection.

Morbidity Rate: The proportion of patients with a particular disease during a given year per given unit of population.

Mortality Rate: The proportion of the population who die due to a disease circumstances or any other specified cause per 1000 people per year.

Maternal Mortality Rate: The number of mothers who die due to complications related to pregnancy and child birth per 100,000 live births in the same period.

Natural Family Planning: This is a method of preventing pregnancy based on observing natural signs and symptoms of fertility and infertility e.g. observing fertile days of the menstrual cycle by basal body temperature. A woman’s body temperature goes up after ovulation, when she could become pregnant.

Service provider: A person trained to offer family planning services.

Slum: A heavily populated urban area characterized by sub-standard housing.

Sterilization: Permanent or irreversible method of family planning.

Vasectomy: A surgical method of family planning providing permanent contraception for men. It involves ligation and separation of vas deferens, the
tubes which transport sperms from the testes to the vaginal canal during sexual activity.

**Tubal Ligation:** A surgical operation procedure for women which involves cutting the fallopian tubes. The aim is to prevent the ovum released from the ovaries from moving through the tubes, so as to meet the sperms introduced after a sexual intercourse. As a result, fertilization is inhibited hence pregnancy does not occur.
ABSTRACT

The choice and use of contraceptive methods has remained a challenge in sub-Saharan Africa. Women from Kibera slum in Nairobi, Kenya have been faced with the problem of unplanned pregnancies due to low use of contraceptive methods. Contraceptives would reduce maternal and infant mortality resulting from unplanned pregnancies. Therefore, the main objective of this study was to establish factors that influence choice of contraceptives among women in Kibera slum. A cross-sectional study was carried out and a total of 384 women attending MCH/FP clinics at different health facilities in Kibera participated in the study. Data was collected using pre-tested, structured, open-ended questionnaires for respondents; unstructured questionnaire was used for service providers as well as for focused group discussions. Data was analyzed using the Scientific Package for Social Sciences (SPSS) software version seventeen. Chi-Square test for goodness-of-fit was used to test relationship between variables. Results indicated that the minimum age was 17 years; the maximum was 45 years while the mean age was 24.2 years. Most of the respondents (84.1%) were married and were aged between 20 - 24 years. Socio-demographic and economic variables had a statistical relationship with choice and use of contraceptive methods' side effects and community perception did not have a statistical relation with choice and use of contraceptives. Health system factors influencing choice and use investigated were health provider's variables which included the provision of contraceptive methods, offering contraceptive methods' health education and counselling. All the variables apart from providing contraceptive methods counselling had a statistical relationship with choice and use (p < .05). Choice and use of contraceptive methods was measured using four variables which included: whether the respondent has ever used contraceptive; currently using contraceptive and used a contraceptive in last intercourse and whether the respondent had a preferred contraceptive method. The study found that less than half (46%) of the respondents used a contraceptive method. This outcome was influenced by respondents' age, marital status, parity, sex of the children, home area, village residence, education, religion, main source income, income per month, knowledge on type of contraceptive methods, sources and side effects of contraceptive methods, discussing contraceptive methods with spouse, teen age son/ daughter, partner involvement in contraceptive method choice and main decision maker, also provision of contraceptive method, offering contraceptive methods' health education and counselling. This study recommends on-going contraceptive health education and counselling services for young women and men, including partners. The results of this study has generated information that will help explain the emerging decline in the use of contraceptives in different social settings in Kenya and particularly generated data that may help revise approaches used to disseminate information on choice of contraceptives methods to different social settings. These results may be used by policy makers to improve policy frameworks and to determine issues that need to be stressed in the design of future family planning campaigns.
CHAPTER ONE: INTRODUCTION

1.1 Background information

The choice of contraception by a woman of reproductive age has been considered as a human rights issue (UNFPA, 2002). Women of reproductive age therefore have a right to access safe, effective, affordable, and acceptable methods of contraception. The gains made in including reproductive health issues as an essential component of human rights was largely the result of the International Conference on Population and Development (ICPD UN, 2000).

It is universally accepted that contraceptives would reduce maternal and infant mortality (MoH, 2007). Moreover, the fifth millennium development goal (Appendix 7) aims at reducing the maternal mortality rate by two thirds by the year 2015 (UN, 2000). It is estimated that maternal mortality rates range from 300 to 800 per 100,000 live births in developing countries (WHO, 2000). In Kenya, maternal mortality rate stands at 414 per 100 000 live births (KDHS, 2003). Despite reproductive health being an important issue, low use of contraceptives has been observed among women of reproductive age in Kenya, especially poor women, including those living in Kibera slum.

Low contraceptive use accounts for 45% of all reproductive health needs (APHR, 2002). It has been estimated that if contraceptives were more widely available, up to 42% of maternal deaths could be averted. In an effort to improve the level of access to appropriate contraceptives the government of Kenya has invested in
information, education and counselling (IEC) on contraceptives as a major strategy in the intervention (MoH, 2007). The efforts by the Government of Kenya notwithstanding, there still remain great variations in the use of the various contraceptives. The uptake of choices of contraception may greatly vary with such characteristics as age, income, users’ desires to prevent or delay pregnancy and culture. Methods that depend on consistent and correct use have a wide range of effectiveness. However, most women tend to be more effective users as they become more experienced with a contraceptive method (WHO, 2007).

1.2 Statement of the problem
Despite the progress made towards fertility control, contraceptive prevalence rate has remained low (KDHS, 2008). In Nairobi, contraceptive prevalence rate is at 52% (KDHS, 2003). Unplanned pregnancies and abortions, have contributed to general ill-health among women (APHR, 2002). Discontinuation of family planning methods has contributed to unmet needs of contraceptives among women. Studies indicate that 120 million women in developing countries would want to postpone child bearing but are not using any means of contraception (Bradley et al., 2002). Globally, there are approximately 50 million abortions each year with other reports indicating that every minute around the world, 380 million women become pregnant, 190 million face unwanted pregnancies, 110 experience pregnancy related complications, 40 have unsafe abortions and one dies as a result of unsafe abortions (WHO, 2000). In Kenya, according to KDHS (2008), there are 448 maternal deaths per 100,000 live births per year, up from 414/100,000
live births in 2003. Neonatal mortality rate was at 31 in 2003 and only changed slightly to 28 in 2010 (KDHS, 2008). Choice and use of contraceptives would reverse the downward trend of the health indicators towards optimal health among women.

In Kibera slum, women are faced with challenges of increasing ill-health, poor nutrition and unplanned pregnancies. Adolescent and unmarried women have limited access to contraception and are prevented or discouraged from using reproductive health services including family planning (UNFPA, 2001). Most women in Kibera slum are of low socio-economic status and this impedes their decision-making on contraceptive choice. Their ability to make decisions on choice and use of contraceptives methods would nearly reduce risks associated with pregnancies to nil (Yonga, 2000). This study sought to determine the factors influencing choice and use of contraceptives methods among women of child-bearing age in Kibera slum, Nairobi, Kenya.

1.3 Justification

Family planning remains a subject of concern among women particularly those from low resource settings. Reproductive health is essential to maternal and child survival. Being able to determine whether and when to have a child is fundamental to women’s educational prospects and economic opportunity. Increasing women’s autonomy is considered key to fostering development at the family, community and country levels. The role that family planning plays in
saving women’s lives is undisputable. The burden squarely lies with women who are not empowered to make choices for their contraception. The study was chosen because there is “unmet need” for family planning and women of Kibera slum most affected (APHRC, 2002). Studies have also shown that women from the slum form a vulnerable part of the community, and ill-health as posed by unwanted pregnancies is of grave consequence, not only to themselves but to their children and the entire family (FHI, 2003). Kibera slum has the largest multi-ethnic population among other slums. It is also the largest urban informal residential area in Nairobi (Erulkar & Matheka, 2007). Kibera slum also has a high proportion of women who work in the informal sector. They live under harsh conditions where violence and corruption are a common issue. However, the women’s use of contraceptives is still low. The main objective of the study was to establish the factors that influence choice and use of contraceptive methods among women in Kibera slum.

The results of the study are of benefit to policy-makers. Socio-economic and demographic factors identified to influence choice and use of contraceptives will be of use in formulation of strategic approaches to help improve the use of contraceptives among poor women in urban settings. The socio-economic and health benefits of improved use of contraceptives would go a long way to improve maternal and child health and thus help in achieving the millennium development goals.
1.4 Research questions

i. What are the socio-demographic and socio-economic factors that influence choices and use of contraceptive among women?

ii. What are the women’s knowledge, attitude on contraceptives methods that influence choice and use?

iii. What are the health systems factors influencing choice and use of contraceptives methods?

1.5 Null hypotheses

Ho1: Socio-demographic and socio-economic factors do not influence choice and use of contraceptive methods among women.

Ho2: Women knowledge, attitude on contraceptives do not influence choice and use of contraceptive methods.

Ho3: Health System factors do not influencing choice and use of contraceptive Methods among women.

1.6 Objective

To establish the factors that influence choice and use of contraceptives by women in Kibera slum, Nairobi, Kenya

1.6.1 Specific objectives

i. To determine the socio-demographic and socio-economic factors that influence choice and use of contraceptive among women.
ii. To establish the level of knowledge, attitude and practice on contraceptives methods by women of reproductive age.

iii. To determine the health systems roles influencing choice and use of contraceptives methods among women.

1.7 Theoretical framework

The Health Belief Model (HBM) propounded by Rosenstock and Becker (1984) identifies four major types of beliefs that influence the likelihood of taking action in the event of a disease occurrence. According to this model, these beliefs include perceived susceptibility to the disease, perceived severity of the diseases, perceived benefits of the action and perceived barriers to the action (McGinley, 2004). Factors associated with choice of contraceptives were examined using HBM. Individual level socio-demographic and socio-economic factors such as age, religion, education and standard of living were expected to influence choice of contraceptive. An individual is influenced by information from early adopters of contraceptives in their social health networks. Health service providers create awareness of the available contraceptive methods in the facility.

1.8 Conceptual framework

Figure 1.1 shows the conceptual framework diagram for understanding factors that influence contraceptives. Independent variables were expected to directly influence women’s choice and eventual use of contraceptives. Independent
variables included demographic/social factors, common contraceptive methods and role of service providers.

1.9 Conceptual framework

**Independent variables**

<table>
<thead>
<tr>
<th>Demographic /socio-economic variables</th>
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<tbody>
<tr>
<td>1. Age</td>
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<tr>
<td>2. Marital status</td>
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<tr>
<td>3. Parity</td>
</tr>
<tr>
<td>4. Sex of the children</td>
</tr>
<tr>
<td>5. Home area</td>
</tr>
<tr>
<td>6. Kibera residence</td>
</tr>
<tr>
<td>7. Education</td>
</tr>
<tr>
<td>8. Religion</td>
</tr>
<tr>
<td>9. Main source income</td>
</tr>
<tr>
<td>10. Income per month</td>
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</table>

**Knowledge & attitude on CM knowledge**

1. Know type of CM
2. Know source of CM
3. Know side effects of CM

**Attitude**

1. Community perception on CM
2. Discuss CM with partner
3. Discuss CM with teenage daughter & son
4. Partner involvement on CM choice

**Health System factors**

1. Provide CM
2. Provide CM health education
3. Provide CM counselling

**Dependent variables**

<table>
<thead>
<tr>
<th>Contraceptive choice &amp; Use</th>
</tr>
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<tbody>
<tr>
<td>1. Ever used contraceptive</td>
</tr>
<tr>
<td>2. Currently using contraceptive</td>
</tr>
<tr>
<td>3. On contraceptive in last intercourse</td>
</tr>
<tr>
<td>4. Has preferred contraceptive method</td>
</tr>
</tbody>
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Fig. 1.1: Conceptual framework showing the relationship between factors influencing contraceptive choice and use

Source: Adapted and modified from Stephenson and Tsui (2002)
CHAPTER TWO: LITERATURE REVIEW

2.1 Historical background of family planning

An attempt to control human reproduction is not a modern phenomenon. Throughout history, human beings have engaged in both pro- and anti-natalist practices. In ancient Greece, people could tell the difference between abortificients and contraceptives (Jain et al., 2004). Often dried fish powder and sea sponges were used as contraceptive devices in the Middle East. Other ancient forms of birth control included breastfeeding, use of herbs and chemicals. The ancient Egyptian as early as 1000 BC made condoms from linen sheath and snakes skin. Killing of infants was also used as birth control in parts of North Africa; occasionally unwanted children were secretly sold or put to death by exposure to the sun (Jain et al., 2004). In Kenya, methods of birth control included, herbs, polygamy, and female circumcision. Grandmothers ensured that after circumcision, the pre-marriage female adolescents were under supervision of elderly women, while in the company of men or into compromising situations, until marriage (Rogo, 1992).

2.1.1 Global trends in family planning

The average use of contraceptives in the world as a whole is 58% (UN, 2000). The regional estimate of contraceptive use is 55% for less developed areas. Among the less developed countries, China has the highest level of contraceptive
use, which stands at 83%. In the more developed countries, the average level of use is 70% (UN, 2000).

Majority of contraceptive users in the developing world rely on male and female sterilization. It accounts for one third of all contraceptive use, followed by IUD 22% and oral pill with 14% (UN, 1996). Male condom accounts for 12% of uses, while injectable contraceptive accounts for 6% of users.

2.1.2 African situation on family planning
Family planning saves the lives of children by helping women space births. Every year between 13 and 15 million children under the age of five years die due to pregnancy related complications (UNICEF, 2009).

If all children were born at least two years apart, 3 to 4 million of these deaths would be avoided. The situation of contraceptive use is that Africa has the lowest contraceptive prevalence, where, on average, only one out of five women is currently using contraceptives (Magadi, 2003). Average prevalence in Northern and Southern Africa is 42% (UN, 2000). However, choice of contraceptive is associated with many factors.

Traditionally, women are viewed as primary clients for contraceptives. This is because of the fact that they become pregnant. Most contraceptives are designed for women and are offered conveniently as part of MCH/FP services (Muia et al., 2000). This scenario has somehow excluded men in response to family planning
issues but the current trends are towards male involvement in reproductive health issues in order to increase support to the use of the contraceptive methods selected by their partners. One of the consequences of restricted choice of contraceptive methods is the lack of the opportunity for individual couples to obtain a method that suits their needs. This eventually leads to lower levels of prevalence in the use of contraceptives. In Zimbabwe, each new method adds another layer of use to the existing prevalence. Similarly, when injectable DMPA contraceptives were introduced in the SDPs, contraceptive prevalence rose from 7% to 20% and the number of unplanned pregnancies reduced (WHO, 2000).

2.1.3 Family planning programme in Kenya

The Family Planning Association of Kenya (FPAK) was formed in Nairobi in 1956 and in 1957 FPAK Mombasa was formed. Other towns countrywide also started to provide contraceptive methods to clients through various outlets; the Ministry of Health, private clinics and non-governmental organisations (Toroitich, 1998).

In the subsequent years, the Government of Kenya formally accepted family planning as part of the national planning strategies and a public health agenda. This led to the integration of family planning services into the Maternal and Child Health (MCH) services (MoH, 1996). At the International Conference on Population and Development held in Cairo (1994), Information Education and Communication strategy was introduced in FP programme in Kenya with an aim
to improve informed decisions on the choice of contraceptives to popularise family planning methods.

In Kenya, there has been a steady increase in contraceptive prevalence rate (CPR) from 17% in 1984 to 27% in 1989, and from 33% in 1993 to 39% in 1998, but has stagnated at 39% over the last five years (KDHS, 2003). This indicates that unmet need for family planning in Kenya has remained high, at about 24% since 1998. On the other hand, the population projection shows that both married and unmarried individuals in need of family planning information will grow by about 200,000 per annum in the 2005-2015 periods (MoH, 1996; MoPHS, 2009).

2.1.4 Contraceptives available in Kenya

Family planning methods available in Kenya (Appendix 8) are; female sterilisation, male sterilisation, the pill, intra-uterine contraceptive device, injections, implants, male condoms, female condoms, emergency contraception. Knowledge of family planning is nearly universal with 95% of all women aged 15-49 knowing at least one method of family planning (KDHS, 2008).

2.1.5 Male condom

The male condom is a thin sheath made up of latex, polyurethane, tactylon, or natural membranes. The male or his partner places the condom on the tip of a man’s erect penis with condom’s rolled side out before sex. The condom is then unrolled all the way to the base of the penis until it fits the penis tightly. Condoms
require correct use with every act of sex for greatest effectiveness. By creating a physical barrier that prevents semen from entering into the vagina, it is very effective in preventing pregnancy. The male condom also protects against sexually transmitted infections (STIs).

By diminishing STIs, male condom may diminish the likelihood of infertility or cervical cancer (WHO, 2007) in some women. They do not require a prescription and are inexpensive; some men however complain that using condoms often dulls their sexual pleasure and it is not 100% effective in protection against HIV and AIDS (MoH, 2005).

2.1.6 Female condom
The female condom is a polyurethane sheath or linings made up of thin, transparent soft plastic film about 17cm (6.5 inches) in length. It has moist texture that feels more natural than the male condom. It has flexible rings at both ends; one ring at the closed end helps to insert the female condom into the vagina while the ring at the open end stays outside the vulva at the entrance to the vagina. The penis should be guided into the condom in order to ensure that the penis does not slip into the vagina outside the condom. It works by forming a barrier that keeps sperms out of the vagina. Female condom is less likely than male condoms to leak or break during sex (Rao, 1997). Women appreciate it because they can initiate their use. Men on the other hand appreciate female condoms because they can be inserted ahead of time therefore do not dull sensation of sex like male condoms.
However there are limitations to using female condoms. These include allergic reaction to latex by some women (WHO, 2007). It is expensive and limited in availability compared to male condoms. Some women find it hard to insert and remove. If not well lubricated, it makes noise during intercourse which makes some women feel self-conscious (MoH, 2005). Worldwide, female condoms rank near the bottom among contraceptive methods used by married women (Maharaj & Cleland, 2006).

2.1.7 Diaphragm

The diaphragm is a dome-shaped, soft latex rubber cup with a spring inside the rim that should be used with spermicidal jelly or cream, which provides additional protection by damaging the sperm that swims over the rim of the diaphragm. It fits inside the vagina and covers the opening to the uterus thus works by blocking the sperm from entering the uterine cavity.

A woman inserts a diaphragm into her vagina, fitting it over the cervix, shortly before sexual intercourse and leaves it in place for at least six hours after intercourse (FHI, 2003).

2.1.8 Injectable contraceptives

These are compounds made up of synthetic progesterone. Progesterone is one of the female sex hormones secreted mainly by ovaries and also the corpus luteum during the luteal phase of the menstrual cycle.
It comes in a suspension form which is administered by deep intramuscular injection (Cunningham et al., 2005). There are two types in the market, Noristerat [R] (Norethidrone Enanthate) which is given every two months and Depo-Provera [R] (Medroxyprogesterone acetate) given every three months. Injectable contraceptives are given between the first and fifth days of the menstrual cycle. It can also be given during or immediately after the menstrual period. In postpartum, it is given six weeks after delivery while in post abortion, it should be given immediately or within seven days after the abortion (WHO, 2007). Some women would prefer injectable contraceptive (IC) because it can be used without spouse’s knowledge, especially where there is controversy on contraceptive use (IPPF, 2000). The injectable method has high efficacy (99%) and rapid effect because it starts working within 24 hours after administration (WHO, 2007).

Injectable contraceptives have non-contraceptive benefits such as convenience; reduce cramps and menstrual bleeding by decreasing the amount of menstrual tissue formed which in turn reduces the bleeding; protects against benign breast disease and endometrial cancer (WHO, 2004). However, the method is not without limitations; it causes menstrual irregularities ranging from spotting, breakthrough bleeding and absent menses; there could be delay in returning to fertility after discontinuing the method, which could take four to five months. Some possible side effects associated with injectables include; headache, nausea, mood change, acne and amenorrhea (WHO, 2007).
2.1.9 Norplant

Norplant is an implant consisting of small flexible non-biodegradable rods or capsules filled with levonorgestrel, a synthetic hormone of the progestin family. Progestin is like the natural progesterone in a woman’s body. The implants do not contain estrogen. Trained health service provider performs a minor surgical procedure to place the implant under the skin on woman’s the upper arm.

Implants come in three forms: the first is called simply Norplant which consists of six hollow silastic (silicon rubber) capsules.

Each of the capsules is 34mm (13/16 of an inch) long and 2.4mm in diameter and contains 36mg of levonorgestrel, which is released at a low, steady rate. Its contraceptive effect lasts for five years. The other is called Jadelle which consists of two solid silastic rods, each 44mm long, 2.4mm wide and each rod has 70mg of levonorgestrel dispersed in its matrix. Its contraceptive effect lasts five years. The other one is called implanon, which consists of one rod and its duration of protection is three years (WHO, 2007)

The thin flexible capsules are inserted just under the skin of a woman’s left upper arm in a minor surgical procedure. Protection is generally provided within 24 hours after the insertion, and the woman returns rapidly to her normal fertility when the implants are removed. Norplant works by inhibiting ovulation and thickening the cervical mucus, which makes it impermeable to sperm to meet the ovum. It also disrupts the menstrual cycle by preventing the release of ova from
the ovaries (MEC, 2004). For every 100 women who use Norplant or implanon over the five years and three years respectively, less than two women become pregnant. Most common side effects associated with Norplant use is irregular menstrual bleeding; irregularities vary from one woman to another; untimely bleeding or spotting between periods; no bleeding at all (amenorrhea) for several months and in some cases, for a year or longer, or a combination of these patterns (MoH, 2005). Norplant implants start to lose effectiveness sooner for heavier women; for women weighing 80kg or more Norplant becomes less effective after 4 years of use; for women weighing 70-79kg, Norplant becomes less effective after 5 years of use. This is because heavier women have increased metabolism of the hormone resulting to low serum levels (Keneth, 2001).

2.1.10 Oral contraceptive pills

They are compounds commonly known as pills. They are made up of low doses of two synthetic hormones; progesterone and estrogen or a combination of both hormones. Progesterone and estrogen are similar to the female sex hormone secreted from the corpus luteum during the luteal phase of the menstrual cycle.

It comes in a pack of pills which a woman can start swallowing at any time she wants if it is reasonably certain she is not pregnant (WHO, 2007). Also, a woman can be given the packet of pills by the service provider and instructed when to start taking the pills (Cunningham et al., 2005).
Pills work by preventing the release of ova from the ovaries. Therefore, they inhibit ovulation through suppressing the hormones progesterone and estrogen from pituitary gland which are necessary for ovulation. Pills enhance thickening of the cervical mucus and make it less penetratable to sperm. In the uterus, pills act on the endometrium by thinning hence blood supply is reduced. The thin endometrium lining inhibits implantation of the fertilized ovum (MoH, 2005). Women prefer to use oral contraceptives for perceived benefits such as not interfering with intercourse; treat hormonal imbalances; aid in acne improvement and give protection from benign cancer (WHO, 2007).

Reversibility of OCPs is fast whereby ovulation is re-established quickly and side effects quickly diminish when the pill is discontinued. Some women do not prefer pills because of daily use requirement for re-supply; some women may take as long as 48 months to conceive depending on age, after discontinuation which is due to atrophy of the mucus secreting glands thus preventing transportation of sperms (Ganog, 2000). There are possible side effects associated with the use of pills such as headaches, fatigue, scant, or absent menses, breast tenderness, mood swings, and weight gain. Spotting also occurs if OCPs are missed or taken late.

Normally, spotting reduces as one continues with contraceptives additional cycles of OCPs so that by end of the third cycle spotting ceases to occur. Nearly all risks associated with use of pills are as a result of development of blockage of blood
vessels, which can cause decreased blood flow to the vital organs including the brain, lungs or eyes (Gyton, 2000).

2.1.11 Intra-uterine contraceptive devices (IUCD)

Intra-Uterine Contraceptive Devices (IUCD) are medicated plastic devices designed in different shapes and forms. Copper bearing IUCD is wrapped with a CuT 380A around its vertical shaft; some also contain progesterone hormones (Cunningham et al., 2005). All IUCDs have one or two strings, tied to them on one end. The strings hang through the cervix into the vagina. IUCDs are usually inserted by a specifically trained health care provider. It is inserted high up into the uterine cavity of a woman through her vagina and cervix. In many cases a woman can be inserted the IUCD at any time it is reasonably certain she is not pregnant.

This method works by interfering with the reproductive process before the egg reaches the uterine cavity; affects viability and motility of sperms, preventing fertilization (MoH, 2005) The use of IUCDs is preferred for being a highly reliable, long-term and reversible contraception; no constant supply; does not interfere with intercourse; quick return to fertility and does not depend on user motivation for its reliability (Drenmann, 1998). It is effective for breastfeeding women and does not affect development of the infant. However, it requires
appropriate counselling before insertion so as to achieve high continuation rates and user satisfaction.

The method is recommended for those women not at risk of sexually transmitted infections (Suhonen et al., 2004). It is an effective post-abortion contraceptive. Women who seek abortion are highly motivated to prevent a further unplanned pregnancy. Some women do not like the method because a health provider is needed during the initiation period and discontinuation period, may cause minor pain and discomfort during insertion and removal; sometimes it may be expelled; cramping during menses and heavy menstrual bleeding. Spotting also follows after fitting an IUCD (WHO, 2007).

2.1.12 Sterilization

Vasectomy
This is a surgical procedure that is done by ligation and separation of vas deferens, the tubes which transport sperms from the testes to the vaginal -canal during sexual activity (IPPF, 2003). It is best for couples desiring no more children (Cunningham et al., 2005). Vasectomy involves cutting the vas deferens. The ends of the vas deferens are closed by ligation, then replaced in the scrotal sac and incision closed. This procedure achieves a permanent contraception for men.
The method is not effective until fifteen to twenty ejaculations have taken place. This is to aid all the remaining sperms in the sperm duct to be ejaculated or reabsorbed. The vasectomy procedure is said to be successful after semen test is done after six weeks and has zero sperm count (Rosdahl & Kowalski, 2008). In Kenya, the prevalence rate is 1% and most cultures disapprove the method because it is presumed that male sterilization is a taboo (KDHS, 2003).

**Tubal-ligation**

This is a permanent contraception for women who will not desire more children. The surgical procedure involves making a small incision in the abdomen. The fallopian tubes are brought to the incision to be cut or blocked. Tubal ligation works because the fallopian tubes are blocked or cut. The eggs released from the ovaries cannot move down the tubes, and so they do not meet the sperms (WHO, 2007). The prevalence rate is at 3%. There is possible failure of 1 % after sterilization with consequent pregnancy (Cates & Stone, 1992).

2.2 Socio- demographic and socio-economic factors that influence contraceptive choices and use

2.2.1 **Partner involvement on choice of contraceptive methods**

Studies have shown that the male spouse contributes to method choice in that females are fearful of husbands' reaction especially after disapproval of contraceptive use. Spouses feel such discussions would only come up after having had enough children (MoH, 1997). Ferguson (1992) established that women stop using contraceptives when their partner wants another child particularly
preference for a son. A man’s disapproval of contraceptive use encourages secret use among women (Ezek, 1997. A survey of male attitudes towards contraceptive use in Kenya observed that 64% of men felt that family size decision should be the couple’s responsibility (Kamau, 2002). Communication between spouses had been observed to be more extensive in monogamous (32%) than polygamous (20%) unions in Nigeria (MoH, 1985). Higher education and good income amongst spouses have been associated with increased communication (Anate, 1995).

2.2.2 Women’s experience with contraceptives

The impact of contraceptives on a woman’s health, whether real or perceived, is a barrier to contraceptive use (Barnett & Stan, 1998). Women experience alteration of menstrual pattern characterized by light or absent menses during contraceptive use. This seems to occur more frequently when under increased stress, illness or climatic changes. Skin changes usually occur in light-skinned persons, it involves darkening of skin pigment around the eyes and on the forehead. Spotting also follows use of contraceptives. The bleeding may be light or heavy as menstrual periods. Absent menses may occur more frequently when under increased stress or during severe illness (WHO, 2007). These concerns are based on knowledge or false information (Hatcher et al., 1997). Counselling can address incorrect knowledge about contraception (Finger, 1999). In Bangladesh, women feared that physical side effects would hinder their ability to work (Barnett & Stan, 1998). A
study done in Nairobi, established that women’s fear of failure to return to fertility inhibited contraceptive use (Kamau et al., 1996).

2.2.3 Maternal age and child-bearing

In studying the reproductive health behaviour of a community, the age at which women start and stop delivering is a critical factor (Bopp & Seifer, 2008). Teenage mothers are prone to hypertensive disease, anaemia, STIs, obstructed labour and other social problems. It is known that the older a woman becomes after the age of forty five, the riskier it becomes to give birth (Neeru, 2007). Diseases such as toxaemia of pregnancy, maternal diabetes and renal disease become more common with advancing age (William, 2000). This phenomenon applies in both developing and developed countries. Although the age of 35 years looks rather risky, going above it seems to multiply the risk even more. The Kenya Ministry of Health second National Sector Strategic Plan focuses on service delivery and promotion of health lifestyles of individuals and communities. Therefore, delivery of contraceptive services is a core component of the strategy (NHSSP II, 2005).

2.2.4 Parity and maternal health

Maternal deaths increase with birth order because many complications of pregnancy and childbirth rise sharply among third and later births. An estimated 25 million women suffer such complications every year. The more the children a woman bears, the more risky it is to her health. It is important for partners to
decide early on the number of children the woman will bear in order to avoid prolonged spacing. However, the use of contraceptives between births ensures adequate spacing that partners would want. Stopping at the third pregnancy would be the most idea and therefore, at fourth and fifth pregnancies would be considered high risk (Williams, 2000).

2.2.5 Level of education and choice of contraceptives

Education correlates positively with contraceptive use (Stephenson, 2004; WHO, 1994). Educated women desire effective family planning methods, though they are unwilling to assume risks associated with contraceptive use. Due to perceived low risk of side effects, voluntary surgical contraception is the most widely used family planning method in the world.

In more recent studies, it has been demonstrated that more educated women want fewer children than less educated ones because they are no longer bound by cultural and religious beliefs such as the number of children one bears being ‘upto God’ (Programme on Population East-West Centre, 1996). Generally, it appears that the more educated a woman is, the more likely she is to use contraceptives to space pregnancies and also to limit the total number of children that she bears. Level of education also gives women a good understanding of contraceptive choices and the ability to make informed choices on family planning (WHO, 2007).
2.2.6 Religion and choice of contraceptives
Religious beliefs affect use of all forms of contraceptive (Stephenson 2004; APHR, 2002; Rosenfield et al., 1990). Christianity is generally pronatalistic and the Bible advises the faithfuls to be literally so. Protestant Christians have no opposition to contraceptive use. Catholics, however condemn all forms of contraceptives except the natural method. While the Hindu and Buddhist teachings are silent on birth control, Islamic law does not give a clear direction on it. Interpreters of the Quran, however, generally oppose family planning. In a conference of Muslim women organized by International Planned Parenthood Federation (IPPF) Africa Region and held in Niamey, Niger (IPPF, 1995), it was declared that Islam does not prohibit use of contraceptives. For medical reasons, a Muslim woman does not need to seek the consent of the husband to use family planning methods. Stephenson (2004), however, has showed that Islamic faith is a barrier to the use of family planning services.

2.3 Knowledge, attitude and practice on contraceptives influencing choice and use
According to a study done in slum Delhi, more than 70% women reported irregular menstruation from Oral Contraceptive pills and ill-health from tubectomy as side effects. The study also indicated that family planning methods were generally well-known. The prevalence of modern contraceptive use was 53.6%; IUCDs being the most commonly used followed by sterilization and pills. The public sector was the main source for obtaining contraceptives although pills and condoms tended to be obtained from the private sector. There was a
significant correlation between contraceptive use and urban residence. Respondents who had a son as preferences were not using any contraceptive methods. Effective family planning methods’ use should be advocated through adequate counselling about the correct use, expected side effects and proper management of customs and beliefs (Kumar et al, 2005).

2.4 Health systems roles influencing choice and use of contraceptive methods

Health service providers play a crucial role in choice of contraceptives. The role includes; information on a wide range of contraceptives, empathetic counselling and effective communication that women receive from service providers influence their attitude towards contraceptive methods choice and continuation (MoH, 2005). Service providers ensure proper coordination of service delivery chain. These include provision of wide range of contraceptives where monitoring and evaluation is done to improve functional logistic system (WHO, 2007).
CHAPTER THREE: MATERIALS AND METHODS

3.1 Study design
The study employed a cross-sectional descriptive study design. This approach was deemed appropriate since it enables the researcher to collect information from the target population at the same time and is less expensive and takes a shorter time (Bell, 1993). This being a study for partial fulfilment for an award of a degree, it had a modest budget and was also time bound.

3.2 Study area
The study was carried out in Kibera slum area within the city of Nairobi. Kibera is the largest urban slum in Nairobi (Appendix 5). Nairobi lies between longitude 36\(^0\)4' and 37\(^0\) 10' to the east and latitude 1\(^0\) 9' and 1\(^0\) 28' to the south of the equator. It covers an area of 696km\(^2\) and lies at a height of 1,670m. Most houses in Kibera are temporary structures (Appendix 6); there are few footpaths which are polluted with human and animal waste. Kibera has a population of 800 000 people who are faced with critical problems such as poverty-driven commercial sex and unplanned pregnancies. It has the highest number of unplanned pregnancies among the Nairobi slum division (Bodewes, 2005). The use of family planning is also low (APHR, 2002). There is diverse-ethnic culture where majority of the population earn less than one dollar per day (GoK, 2000). The study area was purposively selected because of its metropolitan population and health facilities.
3.3 Study population
The study population consisted of women of reproductive age (15-49 years) from Kibera slum area who were visiting MCH/FP Clinic at Mbagathi District Hospital, Langata Health Centre and Ngong Road Health Centre all in Nairobi.

3.3.1 Inclusion criteria
Women of reproductive age (15-49 years) from Kibera slum who consented, and at the time of the study had resided in Kibera slum for at least six months participated in the study. Those who met criteria (a) and (b) and were visiting the sampled health facility also participated in the study.

3.3.2 Exclusion criteria
Women of reproductive age (15-49 years) who declined to participate in the study and had resided in Kibera slum for less than six months did not participate in the study. Those who met criteria (a) and (b) and were visiting the sampled health facilities did not participate in the study.

3.3.3 Sampling procedure
The study employed a number of methods for sampling the study respondents. The first step of sampling was purposively done to select Kibera slums. Kibera slum was selected purposively because it is assumed to harbour people from all over the country with varied socio-cultural and religious background (Bodewes, 2000). The second step was the sampling of the health facilities. Kibera slums are served mainly by five public health facilities that have MCH/FP services and each
of these health facilities formed a cluster. Three out of the available five public health facilities in Kibera slum were selected using simple random sampling technique. To determine the number of women to participate from each facility, proportionate sampling method was used. The individual respondent was identified by systematic random sampling technique.

3.4 Sample size determination
The study sample size was determined by using the following formulae as used by Fisher et al., (1998).

\[ N = \frac{z^2pqD}{d^2} \]

Where;
\[ N \] = Desired sample size (when population is > 10 000).
\[ z \] = The standard normal deviate set at 1.96 which corresponds to the 95% Confidence limit.
\[ p \] = Expected Proportion in the target population estimated to have a particular characteristic (0.5 is used where there is no estimate).
\[ q \] = 1-p or (1-0.5) hence 1.0-0.5 =0.5
\[ d \] = The degree of accuracy usual
\[ D \] = Is equal to 1 where there are no comparisons or replications (design effect)

Thus:
\[ N = \frac{(1.96)^2 (0.5)(0.5)}{0.05^2} = 384 \]

The sample size was 384 respondents.
3.4.1 Sampling frame

Sampling frame of Maternal child health and family planning (MCH/FP) clinic visits for the last six (6) months at Mbagathi Hospital, Langata and Ngong road health centres in the year 2010.

<table>
<thead>
<tr>
<th>Months</th>
<th>Mbagathi Hospital</th>
<th>Langata Health centre</th>
<th>Ngong Road Health centre</th>
</tr>
</thead>
<tbody>
<tr>
<td>February</td>
<td>594</td>
<td>430</td>
<td>398</td>
</tr>
<tr>
<td>March</td>
<td>720</td>
<td>532</td>
<td>428</td>
</tr>
<tr>
<td>April</td>
<td>715</td>
<td>496</td>
<td>525</td>
</tr>
<tr>
<td>May</td>
<td>812</td>
<td>564</td>
<td>468</td>
</tr>
<tr>
<td>June</td>
<td>785</td>
<td>708</td>
<td>547</td>
</tr>
<tr>
<td>July</td>
<td>720</td>
<td>696</td>
<td>615</td>
</tr>
<tr>
<td>Total</td>
<td>4346</td>
<td>3326</td>
<td>2981</td>
</tr>
<tr>
<td>Grand total</td>
<td></td>
<td>10653</td>
<td></td>
</tr>
</tbody>
</table>

Mbagathi Hospital $4346 \times 384 = 157 \times 41\%$

10653

Langata Health center $3326 \times 384 = 120 \times 31\%$

10653

Ngong Road Health center $2981 \times 384 = 107 \times 28\%$

10653

3.4.2 Sample from each health facility

<table>
<thead>
<tr>
<th>Health facility</th>
<th>%</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Mbagathi</td>
<td>41</td>
<td>157</td>
</tr>
<tr>
<td>2. Langata</td>
<td>31</td>
<td>120</td>
</tr>
<tr>
<td>3. Ngong Road</td>
<td>28</td>
<td>107</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>384</td>
</tr>
</tbody>
</table>
3.5 Data collection methods and research instruments

3.5.1 The questionnaire
Data collection was done using a methodological triangulation approach. The tools used included a semi-structured interview guide (Appendix 2); the interview schedule guides were administered by use of one to one interviewing technique. The answers provided by the respondents were filled in by the investigator. This approach was prepared because the respondents had diverse education background and to ensure uniform interpretation, this approach was helpful.

3.5.2 Key informants interview
Key informants interview guides (Appendix 3) were administered to service providers who included nurses and clinical officers working in the selected health facilities. From each health facilities one clinical officer and one nurse were selected for the study.

3.5.3 Focus group discussion
Focus group discussion for women of reproductive age was also used (Appendix 4). One focus group discussion session comprising eight women from each study site was conducted. The women selected for focus discussions had not participated in the interview schedule guide tool.
3.6 Data analysis

The Statistical Package for social sciences (SPSS) was used to analyse data. Descriptive statistics described the data collected from the research sample. Inferential statistics was used to make inferences from sample statistics to the population parameters. The inferential statistics used was mainly Chi-Square. Chi-square was used to determine the extent and significance of the relationships between the nominal variables (Shaw & Wheeler, 1985). Qualitative data was analysed manually using the content analysis technique. The responses were put into themes and the emerging shared meanings identified.

3.7 Logistical and ethical considerations

Clearance to carry out the study was sought from the following relevant authorities; Kenyatta University Board of Postgraduate Studies, Ministry of Education, Science and Technology (MOEST) (Appendix 9 and 10), Nairobi City Council (NCC) and Provincial Medical Officer, Nairobi. The final permission was granted by the in-charge of each of the selected health facilities. All the study participants’ rights to privacy and confidentiality were respected (appendix 1). Verbal consent was sought from all the interviewees.
CHAPTER FOUR: RESULTS

4.0 Introduction

This chapter presents the findings in relation to the study objectives. The first section presents the general characteristics of the respondents based on the descriptive analysis of the study variables. The second section is based on inferential analysis present factors that influencing choice and use of the contraceptive choice and use. The study used Chi Square ($\chi^2$) to test the statistical significance relationship between the independent variables (socio demographic & economic, knowledge attitude and health system factors) with the outcome (contraceptive choice and use). Correlation coefficient significant was at the 0.05 level.

4.0 General characteristics of the respondents

4.1 Socio- demographic and socio-economic variables

The socio demographic and economic variables investigated included respondent’s age, marital status, and parity, sex of the children, home area, Kibera residence, education, religion, main source income and income per month.

4.1.1 Age distribution of respondents

Table 4.1 shows that a total of 384 women participated in the study. The minimum age was 17 years and the maximum age was 45 years. The mean age
was 24.2 years. Majority of the respondents (34.9 %; n=384) were in age group 20-24 years.

Table 4.1: Proportion of respondents (%) in various age groups (years) (n=384)

<table>
<thead>
<tr>
<th>Age group in years</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 - 19 yrs</td>
<td>90</td>
<td>23.4</td>
</tr>
<tr>
<td>20 - 24 yrs</td>
<td>134</td>
<td>34.9</td>
</tr>
<tr>
<td>25 - 29 yrs</td>
<td>97</td>
<td>25.3</td>
</tr>
<tr>
<td>30 - 34 yrs</td>
<td>41</td>
<td>10.7</td>
</tr>
<tr>
<td>35 - 39 yrs</td>
<td>18</td>
<td>4.7</td>
</tr>
<tr>
<td>above 40 yrs</td>
<td>4</td>
<td>1.0</td>
</tr>
<tr>
<td>Total</td>
<td>384</td>
<td>100.0</td>
</tr>
</tbody>
</table>

4.1.2 Marital status of the respondents

 Majority of the respondents (86 %; n=384) were married compared to 53 (14%) who were single (Fig.4.1).

![Figure 4.1: Proportion of respondents (%) and their marital status](image)

4.1.3 Parity of respondents

Results of the study indicated that nearly less than half of the respondents (38%, n=384) had two children whereas; few respondents (7%, n=384) had more than four children (Table 4.2).
Table 4.2: Proportion of respondents (%) with various numbers of children (n=384)

<table>
<thead>
<tr>
<th>No of children per woman</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>108</td>
<td>28.1</td>
</tr>
<tr>
<td>Two</td>
<td>146</td>
<td>38.0</td>
</tr>
<tr>
<td>Three</td>
<td>52</td>
<td>13.5</td>
</tr>
<tr>
<td>more than 4</td>
<td>27</td>
<td>7.0</td>
</tr>
<tr>
<td>None</td>
<td>51</td>
<td>13.3</td>
</tr>
<tr>
<td>Total</td>
<td>384</td>
<td>100.0</td>
</tr>
</tbody>
</table>

4.1.4 Gender of respondents’ children

About the gender of children of respondents, it was found that out of 333 women who had children, 215 (64.5%) women had no male children while 118 (35.4%) had male children (Fig. 4.2).

Figure 4.2: Proportion of respondents (%) with different sex of children

4.1.5 Distribution of respondents by their home province

Majority of the respondents (34.6%, n=384) were from Central Province, followed closely by Western Province (26.8%) while Coast Province had the least respondents (2.6%) (Table 4.3).
Table 4.3: Proportion of respondents (%) and their province of origin (n=384)

<table>
<thead>
<tr>
<th>Province of Origin</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern province</td>
<td>40</td>
<td>10.4</td>
</tr>
<tr>
<td>Central province</td>
<td>133</td>
<td>34.6</td>
</tr>
<tr>
<td>Western province</td>
<td>103</td>
<td>26.8</td>
</tr>
<tr>
<td>N.E province</td>
<td>14</td>
<td>3.6</td>
</tr>
<tr>
<td>Nairobi province</td>
<td>22</td>
<td>5.7</td>
</tr>
<tr>
<td>Nyanza province</td>
<td>42</td>
<td>10.9</td>
</tr>
<tr>
<td>Coast province</td>
<td>10</td>
<td>2.6</td>
</tr>
<tr>
<td>RV province</td>
<td>20</td>
<td>5.2</td>
</tr>
<tr>
<td>Total</td>
<td>384</td>
<td>100.0</td>
</tr>
</tbody>
</table>

4.1.6 Respondents' residence villages in Kibera slum

Distribution of respondents by residents' village of in Kibera slum showed that 73 (19 %) were from Raila village and the least (13.5%) were from Siranga village (Table 4.4).

Table 4.4: Proportion of respondents (%) from different residences in Kibera (n=384)

<table>
<thead>
<tr>
<th>Residence village</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soweto</td>
<td>16</td>
<td>4.2</td>
</tr>
<tr>
<td>Gatwekera</td>
<td>32</td>
<td>8.3</td>
</tr>
<tr>
<td>Kisumu Ndogo</td>
<td>64</td>
<td>16.7</td>
</tr>
<tr>
<td>Lindi</td>
<td>37</td>
<td>9.6</td>
</tr>
<tr>
<td>Laini Saba</td>
<td>30</td>
<td>7.8</td>
</tr>
<tr>
<td>Siranga</td>
<td>15</td>
<td>3.9</td>
</tr>
<tr>
<td>Makina</td>
<td>52</td>
<td>13.5</td>
</tr>
<tr>
<td>Mashimoni</td>
<td>65</td>
<td>16.9</td>
</tr>
<tr>
<td>Raila</td>
<td>73</td>
<td>19.0</td>
</tr>
<tr>
<td>Total</td>
<td>384</td>
<td>100.0</td>
</tr>
</tbody>
</table>
4.1.7 Religion affiliation of respondents

Religious affiliation of respondents showed that slightly less than half (46.6%, \( n=384 \)) of the respondents were Protestants, followed by Catholics (38.8%) while Muslims were the least (2.1%) (Table 4.5).

Table 4.5: Proportion of respondents (%) from various religious affiliations (\( n=384 \))

<table>
<thead>
<tr>
<th>Religion</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catholic</td>
<td>149</td>
<td>38.8</td>
</tr>
<tr>
<td>Protestant</td>
<td>179</td>
<td>46.6</td>
</tr>
<tr>
<td>Muslim</td>
<td>8</td>
<td>2.1</td>
</tr>
<tr>
<td>None</td>
<td>20</td>
<td>5.2</td>
</tr>
<tr>
<td>Others</td>
<td>28</td>
<td>7.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>384</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

4.1.8 Respondents level of education

Distribution of respondents by level of education showed that slightly less than half (43.2%) of the women had primary level of education while few (17.4%) had no education (Table 4.6).

Table 4.6: Proportion of respondents (%) with various levels of education (\( n=384 \))

<table>
<thead>
<tr>
<th>Level of education</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>66</td>
<td>17.2</td>
</tr>
<tr>
<td>Primary</td>
<td>166</td>
<td>43.2</td>
</tr>
<tr>
<td>Secondary</td>
<td>139</td>
<td>36.2</td>
</tr>
<tr>
<td>College level</td>
<td>13</td>
<td>3.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>384</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>
4.1.9 Main source of income of respondents

The results indicated that half of the women got remittance from husband/partner/parents (51.6%) followed by women who were doing small scale business (32.8%), while only few (15%) were in informal employment (Figure 4.3).

![Figure 4.3: Percent distribution of respondents (%) by main source of Income (n=384)](image)

4.1.10 Income per month

Income per month of the respondents showed that slightly less than half (45.8%; n=384) of the women earned > 2000 shillings while few (41.9%) respondents earned 2001 - 4000 shillings (Table 4.7).

Table 4.7: Proportion of respondents (%) with various ranges of incomes per Month (n=384)

<table>
<thead>
<tr>
<th>Total income per month</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;2000</td>
<td>176</td>
<td>45.8</td>
</tr>
<tr>
<td>2001 – 4000</td>
<td>161</td>
<td>41.9</td>
</tr>
<tr>
<td>4001 – 6000</td>
<td>40</td>
<td>10.4</td>
</tr>
<tr>
<td>&gt;8000</td>
<td>7</td>
<td>1.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>384</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>
4.2 Women knowledge, attitude and practice on contraceptive methods

Knowledge variables that were investigated included respondents’ knowledge on type of Contraceptive Methods, sources and side effects of Contraceptive Methods. The attitude variables investigated included community perception on Contraceptive Methods, the respondents’ ability to discuss with partner, with teenage daughter / son and the partner involvement on Contraceptive Methods choice and use.

4.2.1 Types of contraceptive methods known by respondents

Results indicated that oral contraceptive method was known by 286 (74.5%), vasectomy was known by 264 (68%) while diaphragm was known by 24 (6.3%) respondents (Table 4.8).

Table 4.8: Proportion of respondents (%) who know different types of contraceptive methods (n=384)

<table>
<thead>
<tr>
<th>Types of contraceptive methods</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female condom</td>
<td>80</td>
<td>20</td>
</tr>
<tr>
<td>Male condom</td>
<td>181</td>
<td>47</td>
</tr>
<tr>
<td>Intra uterine contraceptive device</td>
<td>123</td>
<td>32</td>
</tr>
<tr>
<td>Norplant/Jadelle</td>
<td>258</td>
<td>67</td>
</tr>
<tr>
<td>Oral Contraceptive Pills</td>
<td>286</td>
<td>74.5</td>
</tr>
<tr>
<td>Tubal-Ligation</td>
<td>223</td>
<td>58</td>
</tr>
<tr>
<td>Vasectomy</td>
<td>264</td>
<td>68</td>
</tr>
<tr>
<td>Depo-Provera</td>
<td>260</td>
<td>67.7</td>
</tr>
<tr>
<td>Diaphragm</td>
<td>24</td>
<td>6.3</td>
</tr>
<tr>
<td>Breastfeeding</td>
<td>188</td>
<td>49</td>
</tr>
</tbody>
</table>
4.2.2 Respondents knowledge on where to obtain contraceptive methods

More than half of the women (68.8%) reported that they knew Government of Kenya health facilities as source of contraceptive methods while 41 (10.7%) of the respondents knew of non-governmental health facilities to provide contraceptive methods. Private clinics were recognized by 79 (20%) respondents as source of contraceptive methods (Table 4.9).

Table 4.9: Proportion of respondents (%) who know different types of health facilities in provision of contraceptive methods (n=384)

<table>
<thead>
<tr>
<th>Health Facility</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government of Kenya Health Facility</td>
<td>264</td>
<td>68.8</td>
</tr>
<tr>
<td>Non-governmental Health Facility</td>
<td>41</td>
<td>10.7</td>
</tr>
<tr>
<td>Private clinics</td>
<td>79</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>384</td>
<td>100</td>
</tr>
</tbody>
</table>

4.2.3 Effects of contraceptive methods among women

Majority of the respondents (66.9 %) mentioned that contraceptive methods inhibited women from ever conceiving while 27 (7%) of the respondents indicated that contraceptive methods caused mild intensity on their menstrual flow (Table 4.10).
Table 4.10: Proportion of respondents (%) who know different types effects of contraceptive methods (n=384)

<table>
<thead>
<tr>
<th>Type of side effects</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy menstruation</td>
<td>55</td>
<td>14.3</td>
</tr>
<tr>
<td>Mild menstruation</td>
<td>27</td>
<td>7.0</td>
</tr>
<tr>
<td>No menstrual flow at all</td>
<td>45</td>
<td>11.7</td>
</tr>
<tr>
<td>Block women form ever conceiving</td>
<td>257</td>
<td>66.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>384</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

4.2.4 Community perception on choice and use of contraceptive methods

Majority of the women (63.5%) perceived contraceptive methods to promote immorality while 140 (36.5%) respondents did not have this perception (Table 4.11).

Table 4.11: Proportion of respondents’ (%) perception on community contraceptive method choice and use

<table>
<thead>
<tr>
<th>Community perception</th>
<th>Contraceptive choice and use</th>
<th>Present n (%)</th>
<th>Absent n (%)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contraceptive doesn’t promote immorality</td>
<td></td>
<td>72(18.8)</td>
<td>68(17.7)</td>
<td>140(36.5)</td>
</tr>
<tr>
<td>Contraceptive promote immorality</td>
<td></td>
<td>105(27.3)</td>
<td>139(36.2)</td>
<td>244(63.5)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>177(46.1)</strong></td>
<td><strong>207(53.9)</strong></td>
<td><strong>384(100.)</strong></td>
</tr>
</tbody>
</table>
4.2.5 Ability of respondents to discuss choice and use of Contraceptive methods with partner

Results indicated that majority of the respondents (83.1 %) were able to discuss choice and use of contraceptive methods with their partners while 65 (16.9 %) did not (Table 4.12).

Table 4.12: Proportion of respondents (%) who discussed contraceptive method choice and use with partner

<table>
<thead>
<tr>
<th>Ever discuss with your partner</th>
<th>Contraceptive choice and use</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Present n (%)</td>
<td>Absent n (%)</td>
</tr>
<tr>
<td>Discuss with partner on CM</td>
<td>153(39.8)</td>
<td>166(43.2)</td>
</tr>
<tr>
<td>Doesn't discuss</td>
<td>24(6.3)</td>
<td>41(10.7)</td>
</tr>
<tr>
<td>Total</td>
<td>177(46.1)</td>
<td>207(53.9)</td>
</tr>
</tbody>
</table>

4.2.6 Ability of respondents to discuss choice and use of contraceptive methods with teenage daughter or son

Most women (83.3 %, n=384) stated that they would be comfortable discussing choice and use of contraceptive methods with teen daughter or son while 64 (16.7 %) would not discuss (Table 4.13).
Table 4.13: Proportion of respondents (%) who would be comfortable to discuss contraceptive method choice and use with a teenage

<table>
<thead>
<tr>
<th>View on discussing CM</th>
<th>Contraceptive choice and use</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Present n (%)</td>
<td>Absent n (%)</td>
</tr>
<tr>
<td>Would not be comfortable</td>
<td>32(8.3)</td>
<td>32(8.3)</td>
</tr>
<tr>
<td>Would be comfortable</td>
<td>145(37.8)</td>
<td>175(45.6)</td>
</tr>
<tr>
<td>Total</td>
<td>177(46.1)</td>
<td>207(53.9)</td>
</tr>
</tbody>
</table>

4.2.7 Partner involvement on choice and use of contraceptive methods

As regards decision making on choice and use of contraceptive methods, results of the study indicated that in 79.4% of the respondents, both partners are involved in a joint decision on choice and use of contraceptive methods (Table 4.14).

Table 4.14: Proportion respondents (%) who have various options as major decision maker on choice and use of contraceptive methods

<table>
<thead>
<tr>
<th>Major decision maker</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondent Partner</td>
<td>16</td>
<td>4.2</td>
</tr>
<tr>
<td>Respondent</td>
<td>63</td>
<td>16.4</td>
</tr>
<tr>
<td>Both Respondent and Respondent Partner</td>
<td>305</td>
<td>79.4</td>
</tr>
<tr>
<td>Total</td>
<td>384</td>
<td>100.0</td>
</tr>
</tbody>
</table>

During the Focus Group Discussions, the majority of respondents felt that both partners should make a joint decision, a few felt that it is the partner’s responsibility while others felt it is a woman’s responsibility so that the male partner only supports. However, some mentioned that in case where the male
partner is uncooperative, the woman should take upon herself to make the
decision. Some women mentioned that their mother in-law discouraged use of
contraceptive methods before the desired number of children was achieved. They
argued that contraceptives would cause infertility among women. As a result of
this, women used contraceptives without their husband’s knowledge.

4.3 Health systems factors
Health systems’ variables investigated included the availability of contraceptive
methods, health education and counselling.

4.3.1 Availability of contraceptive methods
Less than half of the women (49%, n=384) reported that Government of Kenya
Health facilities were the source of contraceptive methods (Fig. 4.4).

![Figure 4.4: Proportion of respondents (%) who indicated availability of
contraceptive methods from different health facility type (n=384).]
4.3.2 Affordability of contraceptive method

About 30.2% of the respondents indicated that the most affordable contraceptive method to use is male condom while the least proportion (2.9%) indicated that the most affordable is IUCD (Fig. 4.5).

![Chart showing proportions of respondents (%) who indicated that various contraceptive methods were affordable than others]

Figure 4.5: Proportions of respondents (%) who indicated that various contraceptive methods were affordable than others

4.3.3 Health workers friendliness when offering contraceptive method health education and counselling

Slightly more than half (61%) of respondents reported that the health workers were friendly during counselling services as compared to 11% of the respondents who reported that health workers at the health facility were not friendly (Fig. 4.6).
The Key informant confirmed that update training on contraceptives for the staff and their clients influenced contraceptive choice and use. They observed that clients came to health facility to enquire, get services or accompany a friend or a relative. Providers noted that clients forgot easily the information given to them on contraceptives; as such they got very little benefit from counselling sessions given to them at the facility. They suggested that with increased number of staff, they could conduct outreach contraceptive education and other reproductive health education in the community. They also observed that clients do not keep clinic appointments so that the follow-up is quite low and in cases of side effects of contraceptives, the clients discontinue without proper guidance from service providers and as a result, such clients do not continue with use of contraceptives.

The FGD discussions concurred with the quantitative findings that service providers were found to play a significant role in the decision-making process among the respondents. They counselled women on the methods, they observed...
the women’s blood pressure, advise on spacing, educate on advantages and disadvantages of the methods. Majority of the women felt that counselling at the health facility was not enough due to limited time and the long cues accompanied by few service providers. Women felt that the education of contraceptive methods can be carried out as outreach programme in the community, where women can be organized in groups of varying age differences and from different religious affiliations.

Respondents felt that youth out of school are at risk of unwanted pregnancy. They suggested that they should be organized into youth clubs either in the community or in their respective churches and taught on growth and development of their body and also issues about contraceptives methods. This would improve their knowledge to face challenges of premarital sex. Women also felt that fees payments on contraceptives should be subsidized for all women to afford in order to increase access to contraceptive. On access to contraceptive methods, majority of the women mentioned that they were easily accessible especially from the government facility.

Majority of the women mentioned partners’ approval as one of the major hindrances to use of contraceptives. Women indicated that male partners discouraged their female partners from using contraceptives because of fear of side effects such as infertility, bleeding, obesity and high blood pressure. They observed that clients came to health facility to enquire, get services or accompany
a friend or a relative. Providers noted that clients forgot easily the information given to them on contraceptives; as such, they got very little benefit from counselling sessions given to them at the facility. They suggested that with increased number of staff, they could conduct outreach contraceptive education and other reproductive health education in the community.

They also observed that clients do not keep clinic appointments so that the follow-up is quite low and in cases of side effects of contraceptives, the clients discontinue without proper guidance from service providers and as a result, such clients end up with unwanted pregnancies. Women relied on information from their friends, such information as *no need to be followed up if you are not experiencing any problem with the contraceptive method*. Providers noted that some clients only came to the clinic for insertion or removal, change of method or when they experience side effects such as bleeding.

### 4.4 Contraceptive choice and use
Choice and use were measured using four variables which included: if the respondent has ever used contraceptive; currently using contraceptive and used contraceptive in last intercourse and if the respondent had a preferred contraceptive method. Slightly more than half (66.9%) of the women reported to have ever used a contraceptive compared to 127 (33.1%) who had never used. Majority of the women (81%) had a preferred contraceptive choice compared to 73 (19%) who had no preferred choice (Fig. 4.7).
4.4.1 Preferred contraceptive method choice and use

Majority of the respondents (45%) indicated that they preferred oral contraceptive pills while the least preferred male condom (13%) (Table 4.15).

Table 4.15: Distribution (%) of preferred contraceptive method

<table>
<thead>
<tr>
<th>Contraceptive Method</th>
<th>Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1st</td>
</tr>
<tr>
<td>1. Female condom</td>
<td>-</td>
</tr>
<tr>
<td>2. Male condom</td>
<td>50(13%)</td>
</tr>
<tr>
<td>3. Intra uterine contraceptive device</td>
<td>-</td>
</tr>
<tr>
<td>4. Norplant/Jadelle</td>
<td>54(14.1%)</td>
</tr>
<tr>
<td>5. Oral Contraceptive Pills</td>
<td>173(45.1%)</td>
</tr>
<tr>
<td>6. Tubal-Ligation</td>
<td>-</td>
</tr>
<tr>
<td>7. Vasectomy</td>
<td>-</td>
</tr>
<tr>
<td>8. Depo-provera</td>
<td>35(9.1%)</td>
</tr>
<tr>
<td>9. Diaphragm</td>
<td>-</td>
</tr>
<tr>
<td>10. Breastfeeding</td>
<td>-</td>
</tr>
</tbody>
</table>
4.4.2 Distribution of preferred contraceptive method used by respondents

About half of the respondents (50.8%) were currently using contraceptive method compared to 189 (49.2%) who were not using it. Of the respondents who were currently using a contraceptive method, majority (72.8%, n=195) were using oral contraceptive pills while the least (8%) were using intra-uterine contraceptive device (Table 4.16).

Table 4.16: Percentage distribution of current contraceptive methods being used by respondents (n=195)

<table>
<thead>
<tr>
<th>Contraceptive Method</th>
<th>Frequency</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Female condom</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>2. Male condom</td>
<td>22</td>
<td>(5.7%)</td>
</tr>
<tr>
<td>3. Intra uterine contraceptive device</td>
<td>3</td>
<td>(8%)</td>
</tr>
<tr>
<td>4. Norplant/Jadelle</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>5. Oral Contraceptive Pills</td>
<td>142</td>
<td>(37%)</td>
</tr>
<tr>
<td>6. Tubal-Ligation</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>7. Vasectomy</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>8. Depo-provera</td>
<td>31</td>
<td>(8.3%)</td>
</tr>
<tr>
<td>9. Diaphragm</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>10. Breastfeeding</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>11. Not currently using CM</td>
<td>189</td>
<td>(49.2%)</td>
</tr>
</tbody>
</table>

Less than half (46%) of the respondents chose and used contraceptive methods (Fig. 4.11).
4.5 Factors influencing choice and use of contraceptive methods

4.5.1 Socio-demographic and economic variables influencing contraceptive methods choices and use

The results of the study indicated that age group 25-29 years had the highest proportion of respondents (21.4%) that chose and used contraceptive methods while age group 15-19 years had the least (2.3%) (Table 4.17).

Table 4.17: Relationship between age group and contraceptive method choice and use

<table>
<thead>
<tr>
<th>Age group</th>
<th>Contraceptive choice and use</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Present (%)</td>
<td>Absent (%)</td>
</tr>
<tr>
<td>15 - 19 years</td>
<td>9 (2.3)</td>
<td>81 (21.1)</td>
</tr>
<tr>
<td>20 - 24 yrs</td>
<td>29 (7.6)</td>
<td>105 (27.3)</td>
</tr>
<tr>
<td>25 - 29 years</td>
<td>82 (21.4)</td>
<td>15 (3.9)</td>
</tr>
<tr>
<td>30 - 34 yrs</td>
<td>37 (9.6)</td>
<td>4 (1.0)</td>
</tr>
<tr>
<td>&gt;35</td>
<td>20 (5.2)</td>
<td>2 (0.5)</td>
</tr>
<tr>
<td>Total</td>
<td>177 (46.1)</td>
<td>207 (53.9)</td>
</tr>
</tbody>
</table>

$$\chi^2 = 187, \ df 5, p = .0001$$
4.5.2 Marital status in relation to choice and use of contraceptive methods

Respondents who chose and used contraceptives were more (175, 45.6 %) compared to those who were single. There was a significant association between marital status and choice and use of contraceptive methods \( (\chi^2 = 187, \text{ df} \ 5, \ p=.0001) \) (Table 4.18).

Table 4.18: Relationship between marital status and contraceptive method choice and use

<table>
<thead>
<tr>
<th>Marital status</th>
<th>Contraceptive choice and use</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Present (%)</td>
<td>Absent (%)</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>Single/widowed</td>
<td>2(5)</td>
<td>51(13.3)</td>
<td>51(13.5)</td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>175(45.6)</td>
<td>156(40.6)</td>
<td>331(86.2)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>177(46.1)</td>
<td>207(53.9)</td>
<td>384(100.0)</td>
<td></td>
</tr>
</tbody>
</table>

\( \chi^2 = 187, \text{ df} \ 5, \ p=.0001. \)

4.5.3 Parity of respondents

Choice and use of contraceptive was higher among women who had two children (23.4 %) and lowest among those who had no children (3.9 %) \( (\chi^2 = 167, \text{ df} \ 4, \ p = .0001) \) (Table 4.19).

Table 4.19: Relationship between Parity of respondents and contraceptive methods choice and use

<table>
<thead>
<tr>
<th>No of children</th>
<th>Contraceptive choice and use</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Present n (%)</td>
<td>Absent n (%)</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>One</td>
<td>15(3.9)</td>
<td>93(24.2)</td>
<td>108(28.1)</td>
<td></td>
</tr>
<tr>
<td>Two</td>
<td>90(23.4)</td>
<td>56(14.6)</td>
<td>146(38.0)</td>
<td></td>
</tr>
<tr>
<td>Three</td>
<td>47(12.2)</td>
<td>5(1.3)</td>
<td>52(13.5)</td>
<td></td>
</tr>
<tr>
<td>more than 4</td>
<td>25(6.5)</td>
<td>2(0.5)</td>
<td>27(7.0)</td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>-</td>
<td>51(13.3)</td>
<td>51(13.3)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>177(46.1)</td>
<td>207(53.9)</td>
<td>384(100)</td>
<td></td>
</tr>
</tbody>
</table>

\( \chi^2 = 167, \text{ df} \ 4, \ p = .0001 \)
4.5.4 Gender of respondents’ children

The respondents who had a male child had higher choice and use of contraceptive methods (19 %) compared to those who did not have ($\chi^2 = 791$, df=2, $p=.0001$) (Table 4.20).

Table 4.20: Relationship between respondents’ children gender and contraceptive method choice and use

<table>
<thead>
<tr>
<th>Number male children</th>
<th>Contraceptive choice and use</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Present (%)</td>
<td>Absent (%)</td>
</tr>
<tr>
<td>One</td>
<td>73(19)</td>
<td>45 (11.7)</td>
</tr>
<tr>
<td>Two</td>
<td>54(14.1)</td>
<td>13 (3.4)</td>
</tr>
<tr>
<td>None</td>
<td>50(13)</td>
<td>149(38.8)</td>
</tr>
<tr>
<td>Total</td>
<td>177(46.1)</td>
<td>207(53.9)</td>
</tr>
</tbody>
</table>

$\chi^2 = 791$, df=2, $p=.0001$

4.5.5 Relationship between province of origin and respondents choice and use of contraceptive methods

Results indicated that highest proportion of contraceptive choice and use was among women from Central province (13.7 %) as compared to the other provinces, ($\chi^2 = 113$, df=2, $p=.0001$) (Figure 4.9).
4.5.6 Relationship between respondents’ residence and contraceptive methods choice and use

Choice and use of contraceptives was high in Makina Village (12.2%) and lowest at Soweto (2.1%) and Gatwekera (2.1%) ($\chi^2 = 130$, df 9, $p = .0001$) (Table 4.21).

Table 4.21: Relationship between respondents’ residence and contraceptive method choice and use

<table>
<thead>
<tr>
<th>Kibera residence</th>
<th>Contraceptive choice and use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Present (%)</td>
</tr>
<tr>
<td>Soweto</td>
<td>8(2.1)</td>
</tr>
<tr>
<td>Gatwekera</td>
<td>8(2.1)</td>
</tr>
<tr>
<td>Kisumu Ndogo</td>
<td>21(5.5)</td>
</tr>
<tr>
<td>Lindi</td>
<td>34(8.9)</td>
</tr>
<tr>
<td>Laini Saba</td>
<td>7(1.8)</td>
</tr>
<tr>
<td>Siranga</td>
<td>15(3.1)</td>
</tr>
<tr>
<td>Makina</td>
<td>47(12.2)</td>
</tr>
<tr>
<td>Mashimoni</td>
<td>22(5.7)</td>
</tr>
<tr>
<td>Raila</td>
<td>23(6.0)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>207(53.9)</strong></td>
</tr>
</tbody>
</table>

$\chi^2 = 130$, df 9, $p = .0001$
4.5.7 Relationship between Education level and choice and use of contraceptive methods

Choice and use of contraceptive was high among the respondents with secondary school education (25%) and lowest among those who had no education (7.6%) ($\chi^2 = 78$, df 3, p = .0001) (Table 4.22).

Table 4.22: Relationship between Education level and contraceptive choice and use

<table>
<thead>
<tr>
<th>Education level</th>
<th>Contraceptive choice and use</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Present (%)</td>
<td>Absent (%)</td>
</tr>
<tr>
<td>None</td>
<td>29(7.6)</td>
<td>37 (9.6)</td>
</tr>
<tr>
<td>Primary</td>
<td>39(10.2)</td>
<td>127(33.1)</td>
</tr>
<tr>
<td>Secondary</td>
<td>96(25.0)</td>
<td>43(11.2)</td>
</tr>
<tr>
<td>College level</td>
<td>10(2.6)</td>
<td>3(8)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>177(46.1)</strong></td>
<td><strong>207(53.9)</strong></td>
</tr>
</tbody>
</table>

4.5.8 Religious affiliation and choice and use of contraceptive methods

Contraceptive choice and use was highest among Protestants (22.4%). Religion had no statistical association with choice and use of contraceptives ($\chi^2 = 1.516$, df 4, p = .842) (Table 4.23).

Table 4.23: Percentage distribution of respondents by religious affiliation and contraceptive choice and use (n=384)

<table>
<thead>
<tr>
<th>Religion</th>
<th>Contraceptive choice and use</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Present n (%)</td>
<td>Absent n (%)</td>
</tr>
<tr>
<td>Catholic</td>
<td>68(17.7)</td>
<td>81(21.1)</td>
</tr>
<tr>
<td>Protestant</td>
<td>86(22.4)</td>
<td>93(24.2)</td>
</tr>
<tr>
<td>Muslim</td>
<td>3(8)</td>
<td>5(1.3)</td>
</tr>
<tr>
<td>None</td>
<td>7(1.8)</td>
<td>13(3.4)</td>
</tr>
<tr>
<td>Indigenous</td>
<td>13(3.4)</td>
<td>15(3.9)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>177(46.1)</strong></td>
<td><strong>207(53.9)</strong></td>
</tr>
</tbody>
</table>

$\chi^2 = 1.516$, df 4, p = .842
4.5.9 Source of income and choice and use of contraceptive methods

Choice and use of contraceptives was highest among respondents who got their remittance from their partners (22.7%) as compared to those who were in business or informal employment ($\chi^2 = 7, df 2, p = .029$) (Table 4.24).

Table 4.24: Main source of income by contraceptive choice and use (n=384)

<table>
<thead>
<tr>
<th>Main source of income</th>
<th>Contraceptive choice and use</th>
<th>Present n (%)</th>
<th>Absent n (%)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business</td>
<td></td>
<td>53(13.8)</td>
<td>73(19.0)</td>
<td>126(32.8)</td>
</tr>
<tr>
<td>Remittance from husband/partner/parents</td>
<td></td>
<td>87(22.7)</td>
<td>111(28.9)</td>
<td>198(51.6)</td>
</tr>
<tr>
<td>Informal employment</td>
<td></td>
<td>37(9.6)</td>
<td>23(6.0)</td>
<td>60(15.6)</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>177(46.1)</td>
<td>207(53.9)</td>
<td>384(100)</td>
</tr>
</tbody>
</table>

$\chi^2 = 7, df 2, p = .029$

4.5.10 Income per month and choice and use of contraceptive methods

Choice and use of contraceptives was high among those who had monthly income between 2001 - 4000 shillings (23.4%), while those with >8000 were the least (1.3%) ($\chi^2 = 14, df 3, p = .0003$) (Table 4.25).

Table 4.25: Percentage distribution of income per month by contraceptive choice and use

<table>
<thead>
<tr>
<th>Income per month</th>
<th>Contraceptive choice and use</th>
<th>Present n (%)</th>
<th>Absent n (%)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;2000</td>
<td></td>
<td>65(16.9)</td>
<td>111(28.9)</td>
<td>176(45.8)</td>
</tr>
<tr>
<td>2001 – 4000</td>
<td></td>
<td>90(23.4)</td>
<td>71(18.5)</td>
<td>161(41.9)</td>
</tr>
<tr>
<td>4001 – 6000</td>
<td></td>
<td>17(4.4)</td>
<td>23(6.0)</td>
<td>40(10.4)</td>
</tr>
<tr>
<td>&gt;8000</td>
<td></td>
<td>5(1.3)</td>
<td>2(0.5)</td>
<td>7(1.8)</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>177(46.1)</td>
<td>207(53.9)</td>
<td>384(100)</td>
</tr>
</tbody>
</table>

$\chi^2 = 14, df 3, p = .0003$
Knowledge and attitude variables influencing contraceptive methods choices and use.

Knowledge variables that were investigated include respondents' knowledge on type of contraceptive methods, sources of contraceptive methods and side effects of contraceptive methods. The Attitude variables investigated included community perception on contraceptive methods, the responded ability to discuss contraceptive methods with partner, with teenage daughter & son and the partner involvement on contraceptive methods choice and the person with authority on contraceptive methods choice.

4.5.11 Knowledge on source of contraceptive methods and choice and use

Choice and use of contraceptive methods was higher in the public health facility (83.1 %) and lowest among the private health facility (7.6%) \( (\chi^2 = 3, \text{ df } 2, p = 0.160) \) (Table 4.26).

Table 4.26: Knowledge on sources of contraceptive methods by choice and use

<table>
<thead>
<tr>
<th>Place FP services is available</th>
<th>Contraceptive choice and use</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Present n (%)</td>
<td>Absent n (%)</td>
</tr>
<tr>
<td>Public health facility</td>
<td>127(33.1)</td>
<td>137(35.7)</td>
</tr>
<tr>
<td>NGO health facility</td>
<td>21(5.5)</td>
<td>20(5.2)</td>
</tr>
<tr>
<td>Private health facility</td>
<td>29(7.6)</td>
<td>50(13.0)</td>
</tr>
<tr>
<td>Total</td>
<td>177(46.1)</td>
<td>207(53.9)</td>
</tr>
</tbody>
</table>

\( \chi^2 = 3, \text{ df } 2, p = 0.160 \)
4.5.12 Side effects of contraceptive methods and choice and use of contraceptive methods

Choice and use of contraceptive methods was high among respondents who knew that contraceptive methods may block women from ever conceiving (32%), while it was least among women who experienced no menstrual flow at all (2.6%) ($\chi^2 = 15$, df 3, $p = .0002$) (Table 4.27).

Table 4.27: Knowledge on effects of contraceptive methods and choice and use

<table>
<thead>
<tr>
<th>Type of side effects</th>
<th>Contraceptive choice and use</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Present n (%)</td>
<td>Absent n (%)</td>
</tr>
<tr>
<td>Heavy menstruation</td>
<td>33(8.6)</td>
<td>22(5.7)</td>
</tr>
<tr>
<td>Mild menstruation</td>
<td>11(2.9)</td>
<td>16(4.2)</td>
</tr>
<tr>
<td>No menstrual flow at all</td>
<td>10(2.6)</td>
<td>35(9.1)</td>
</tr>
<tr>
<td>Block women from ever conceiving</td>
<td>123(32.0)</td>
<td>134(34.9)</td>
</tr>
<tr>
<td>Total</td>
<td>177(46.1)</td>
<td>207(53.9)</td>
</tr>
</tbody>
</table>

$\chi^2 = 15$, df 3, $p = .0002$

4.5.13 Community perception on contraceptive methods, choice and use of contraceptive methods

Choice and use of contraceptives was high (27.3%) among respondents who perceived that contraceptive methods promoted immorality ($\chi^2 = 4$, df 2, $p = .106$) (Table 4.28).

Table 4.28: Proportion (%) of respondents’ perception on community by contraceptive methods choice and use

<table>
<thead>
<tr>
<th>Community perception</th>
<th>Contraceptive choice and use</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Present n (%)</td>
<td>Absent n (%)</td>
</tr>
<tr>
<td>Contraceptive doesn’t promote immorality</td>
<td>72(18.8)</td>
<td>68(17.7)</td>
</tr>
<tr>
<td>Contraceptive promote immorality</td>
<td>105(27.3)</td>
<td>139(36.2)</td>
</tr>
<tr>
<td>Total</td>
<td>177(46.1)</td>
<td>207(53.9)</td>
</tr>
</tbody>
</table>

$\chi^2 = 4$, df 2, $p = .106$
4.5.14 Partner discussion on contraceptive methods and choice and use

Contraceptive choice and use was higher (39.8%; n=153) among respondents who discussed with partners. This group were the majority ($\chi^2= 4$, df 2, $p =.106$) (Table 4.29).

Table 4.29: Proportion of respondents (%) who ever discussed contraceptive methods choice and use with partner

<table>
<thead>
<tr>
<th>Ever discuss with your partner</th>
<th>Contraceptive choice and use</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Present n (%)</td>
<td>Absent n (%)</td>
</tr>
<tr>
<td>Discuss with partner on CM</td>
<td>153(39.8)</td>
<td>166(43.2)</td>
</tr>
<tr>
<td>Doesn’t discuss</td>
<td>24(6.3)</td>
<td>41(10.7)</td>
</tr>
<tr>
<td>Total</td>
<td>177(46.1)</td>
<td>207(53.9)</td>
</tr>
</tbody>
</table>

$\chi^2= 4$, df 2, $p = .106$

4.5.15 Discussion of contraceptive methods with teenage daughter and son

Choice and use of contraceptives was higher (37.8%) among women who discussed contraceptive methods with their teenage daughter or son compared to those who were not comfortable with such a discussion (16.7%, n=384). ($\chi^2= .472$, df 1, $p =.492$) (Table 4.30).

Table 4.30: Relationship between respondents who discussed contraceptive methods with a teenage daughter or son in relation to choice and use

<table>
<thead>
<tr>
<th>View on discussing CM</th>
<th>Contraceptive choice and use</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Present n (%)</td>
<td>Absent n (%)</td>
</tr>
<tr>
<td>Would not be comfortable</td>
<td>32(8.3)</td>
<td>32(8.3)</td>
</tr>
<tr>
<td>Would be comfortable</td>
<td>145(37.8)</td>
<td>175(45.6)</td>
</tr>
<tr>
<td>Total</td>
<td>177(46.1)</td>
<td>207(53.9)</td>
</tr>
</tbody>
</table>

$\chi^2= .472$, df 1, $p = .492$
4.5.16 Partner involvement and contraceptive methods choice and use

Choice and use of contraceptive was higher (34.1%) where the man and woman were decision makers than were the man or the woman alone was the decision maker \( (\chi^2 = 1.107, \text{df } 1, p = .293) \) (Table 4.31).

Table 4.31: Relationship between main decision maker in contraceptive in relation to and contraceptive methods choice and use

<table>
<thead>
<tr>
<th>Major decision maker on RH and CM</th>
<th>Contraceptive choice and use</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Present n (%)</td>
<td>Absent n (%)</td>
</tr>
<tr>
<td>Man</td>
<td>6(1.6)</td>
<td>10(2.6)</td>
</tr>
<tr>
<td>Woman</td>
<td>40(10.4)</td>
<td>23(6.0)</td>
</tr>
<tr>
<td>Both man and woman</td>
<td>131(34.1)</td>
<td>174(45.3)</td>
</tr>
<tr>
<td>Total</td>
<td>177(46.1)</td>
<td>207(53.9)</td>
</tr>
</tbody>
</table>

\( \chi^2 = 1.107, \text{df } 1, p = .293 \)

Health provider’s variables investigated included the provision of contraceptive methods, offering contraceptive methods, health education and counselling. All the variables apart from providing contraceptive methods counselling had a statistical relationship with choice and use of contraceptive methods, p value was < .05 as indicated in table 4.31 above.

4.5.17 Provision of contraceptive methods and choice and their choice and use

Choice and use of contraceptive methods was higher among the respondents who went to the Private health facility for provision of contraceptive methods (17.6 %) compared to public and NGO health facility \( (\chi^2 = 14, \text{df } 3, p = .0003) \) (Table 4.32).
Table 4.32: Relationship between types of health facility providing contraceptives and choice and use of contraceptive methods

<table>
<thead>
<tr>
<th>Provide CM services</th>
<th>Contraceptive choice and use</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Present n (%)</td>
<td>Absent n (%)</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>Public health facility</td>
<td>50(13.1)</td>
<td>137(35.7)</td>
<td>187(48.8)</td>
<td></td>
</tr>
<tr>
<td>NGO health facility</td>
<td>59(15.5)</td>
<td>20(5.2)</td>
<td>70(20.7)</td>
<td></td>
</tr>
<tr>
<td>Private health facility</td>
<td>67(17.6)</td>
<td>50(13.0)</td>
<td>117(30.6)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>177(46.1)</td>
<td>207(53.9)</td>
<td>384(100)</td>
<td></td>
</tr>
</tbody>
</table>

$\chi^2 = 14, \text{ df } 3, p = .0003$

4.5.18 Relationship between provision of contraceptive methods health education and choice and use

The results showed that choice and use of contraceptive methods was low among women who did not receive health education (27.7%) ($\chi^2 = 3.66, \text{ df } 2, p = .160$) (Table 4.33).

Table 4.33: Relationship between provision of health education on contraceptive methods to respondents and choice and use

<table>
<thead>
<tr>
<th>Health Education provision</th>
<th>Contraceptive choice and use</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Present n (%)</td>
<td>Absent n (%)</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>Health Education provided</td>
<td>63(16.4%)</td>
<td>44(11.5%)</td>
<td>107(27.9%)</td>
<td></td>
</tr>
<tr>
<td>Health education not provided</td>
<td>114(27.7%)</td>
<td>163(42.4%)</td>
<td>277(70.1%)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>177(46.1)</td>
<td>207(53.9)</td>
<td>384(100.0)</td>
<td></td>
</tr>
</tbody>
</table>

$\chi^2 = 3.66, \text{ df } 2, p = .160$

4.5.19 Contraceptive methods counselling and choice and use of contraceptive methods

Choice and use of contraceptive method was higher (20%) among the respondent who had received counselling compared to those who had not (11.1%) ($\chi^2 = 40, \text{ df } 2, p = .0001$) (Table 4.34).
Table 4.34: Proportion of respondents (%) who were counselled on contraceptive methods and choice and use of contraceptive methods

<table>
<thead>
<tr>
<th>Counselling outcome</th>
<th>Contraceptive choice and use</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Present n (%)</td>
<td>Absent n (%)</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>Counselling was very helpful</td>
<td>77 (20)</td>
<td>156 (41)</td>
<td>230 (60.5)</td>
<td></td>
</tr>
<tr>
<td>Counselling Helpful</td>
<td>57 (15)</td>
<td>35 (9.2)</td>
<td>92 (24.2)</td>
<td></td>
</tr>
<tr>
<td>No counselling given</td>
<td>43 (11.1)</td>
<td>15 (3.9)</td>
<td>58 (15.3)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>177 (46.1)</td>
<td>207 (53.9)</td>
<td>384 (100)</td>
<td></td>
</tr>
</tbody>
</table>

$\chi^2 = 40$, df 2, $p = .0001$
CHAPTER FIVE: DISCUSSION

5.1 Socio-demographic and economic variables influencing contraceptive methods’ choice and use

The variables influencing contraceptive methods choice and use included respondent age, marital status, parity, sex of the children, rural home province, current village of residence in Kibera, education, main source income and income per month. Religion had no influence on contraceptive methods’ choice and use.

This study revealed that most of the respondents were in their youth according the age stipulated in the Kenya Essential Package for Health (KEPH, 2005). This may have influenced choice and use because this age group of 15 -24 is sexually active. It is at this stage that most women begin their families and tend to begin to plan their families. They are likely to receive reproductive health services by MoH (2007). The findings showed a trend where women advancing in age declined in attending clinic visits to seek contraceptive use. This could be associated with the fact that the women could have acquired the intended number of children and therefore, adopted long-term methods such as tubal- ligation, which does not require frequent visits to family planning clinics.

A large proportion of women sampled in the study were married. This being predominantly an African community, the value attached to marriage and raising children within a marriage attracts greatest approval of the society. Any children born out of marriage institutions are often referred to as illegitimate children in traditional African societies. Education is considered a major factor in
reproductive health issues including the use of contraceptives. A large proportion of women aged 15-49 years in the study had primary level of education. This shows high level of literacy. These results do not in any way indicate the general literacy levels of women of reproductive age residing in Kibera since the sample was drawn from those seeking family planning services. It is likely that those with lower level of education may be averse to the use of contraceptives and thus may not visit the clinics.

Women without male children had low uptake of contraceptives compared to women with male children. This could have been explained by the fact that many cultures value male children and many women will tend not to use contraceptives to so as to chance giving birth to male children. Women of high parity of girls are less likely to use contraception. The rural home province of the respondent and the residential village in Kibera had influenced contraceptive methods. This trend could have been influenced by the fact that Kibera villages tend to be an extension of the rural provincial home. This means that women from Nyanza will mostly settle in a village in Kibera where their fellow rural women live. It’s likely that she will be influenced by the culture and beliefs of her rural counterparts who reside in Kibera.

Results agree with those of Kamau et al. (1996) who found that the use of contraceptives may be related positively or negatively to such factors as women’s level of education, religion, socio-economic, knowledge of contraceptives,
attitudes and cultural beliefs. The findings concur with population reports (2003) which indicated that, in developing countries fertility peaks at 20-24 years and extends up to 39 years. The study findings also agree with KDHS (2008) which indicated that the peak of child-bearing age is 20-39 years. The findings concur with Koech et al., 2011 who found that among all age groups in city slums in Kenya majority of women may have used a condom. However, condoms require correct use with every act of sex for effectiveness. These findings agree well with KDHS (2008), which indicated that majority of women in Kenya are married.

5.2 Knowledge and attitudes towards contraception among women

Being married warrants contraceptive use in order to space births. Single women had high preferences for condoms. These findings are in tandem with findings of Andetunji (2006) in Zambia which revealed that condom was the most preferred contraceptive followed by OCPs among sexually active single women. The high preference for condoms and pills could be associated to the short period of time they take allowing the young women to get pregnant when they want. These findings concur with reports by UNHCR (2009), which indicates that majority of Kenyan population are Christians 80%, followed by Muslims 10%, African Traditional Religion (ATR) 9% and Hindus 1%. The use of pills was most preferred method among the Protestants (48.9%), Muslims (53.5%) and ATR (47.2%).

Knowledge, attitude and perception of contraceptives among women influence choice of contraceptives. The findings indicate that eventual knowledge may
translate to use of all contraceptives. A study done in Namibia by Indongo (2008) showed that contraceptive use was higher among women with higher level of education. Women with higher level of education are likely to use contraceptives and hence space their births compared to women with low level of education. These findings agree with those of Schoemaker (2005) which indicated that the wealthier women use contraceptive methods more compared to women of low income.

5.2 Knowledge and attitude variables influencing contraceptive methods choices and use

Knowledge variables that were influenced contraceptive methods choice and use include respondents' knowledge on type of contraceptive methods, sources of contraceptive methods. The attitudinal variables that influenced contraceptive methods choice and use included the respondent ability to discuss contraceptive methods with partner, with teenage daughter and son and the partner involvement on contraceptive methods choice and the person with authority on contraceptive methods choice. Knowledge on contraceptive methods' side effects, community perception on contraceptive methods did not influence their choice and use. Knowledge of various contraceptives methods among the respondents was slightly more than average percent. But this did not translate to contraceptive methods choice and use because it was below average percent. These patterns are lower than the national findings (KDHS, 2008). This study revealed a low percentage on condom knowledge. The low percentage of awareness of condom as a method of birth control can be attributed to the over-emphasized role of
condoms as a method of preventing sexually transmitted diseases and infections and HIV and AIDS. The findings indicate that knowledge and eventual use of all contraceptives is low more than the national level which stands at 39% and 49% for Nairobi, KDHS (2008).

Knowledge, attitude and perception of contraceptives among women influenced choice of contraceptives (KDHS, 2008). The findings concur with reports by Division of reproductive Health (2009) on best practices in reproductive health which observed that there is under-utilization of IUCD and Norplant and suggested that this could be attributed to provider bias or preference to other methods due to concerns about time and skill required to offer the methods. These results agree well with recent worldwide surveys by United Nations (2006) which have indicated that condoms are largely used outside marriage. Worldwide, condoms rank near the bottom among contraceptive methods used by married women. Similarly, the use of pills increased with the increase in income levels for the household while the reverse was true of the use of injectables. This could be associated with confidentiality levels of the method.

These findings are in agreement with a study done by Magadi and Curtis (2003) in Kenya who found that injection contraceptive was a popular method among Kenyan women. Popularity of injectable contraceptive probably could be due to its confidentiality, high levels of adherence and convenience to users compared to all other methods. These findings agree with WHO (2007) reports which indicated
that, women prefer to use oral contraceptive for perceived benefits such as not interfering with the intercourse; treat hormonal imbalances; aid in acne improvement and give protection from benign cancer. Studies by MoH (2005) reported that men complain that using condoms often dulls their sexual pleasure. Interesting findings were though noted with regard to preferences of contraceptives before the first pregnancy.

5.3 Health system factors influencing choice and use of contraceptive methods

Health provider’s variables influencing contraceptive methods choice and use included, health provider offering contraceptive methods, health education and counselling. Availability of contraceptives in health facility influences choice of contraceptives. There was a general consensus among women that contraceptives were readily available. Eighty-eight per cent of women felt that contraceptives were readily available. The main sources of in this study was government health facilities which catered for half the number of sampled women followed by Non-Governmental organization- run health facilities private health facilities. Women in this study heavily relied on the services provided by the government health facilities.

These findings agree with those of KDHS (2008) which indicated that public health facility provided contraceptives to majority of women. Women receiving their contraceptive services from government and NGO run health facilities prefer use of pills as compared to other methods. Women who mentioned having
received their contraceptive services from private facilities overwhelmingly prefer injections.

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CHAPTER SIX: CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusion
This study investigated three major independent variables and their effects on contraceptive choice and use. These included socio-demographic, economic, respondent’s knowledge and attitude variables on contraceptive methods and service provider’s factors.

Socio-demographic and economic variables influencing contraceptive methods choices included respondents’ age, marital status, parity, sex of the children, rural home province, and current village of residence in Kibera, education, main source income and income per month. Religion had no influence on contraceptive methods choice and use.

Knowledge and attitude variables influencing contraceptive methods choices and use include respondent’s knowledge on type of contraceptive methods, sources of contraceptive methods. The attitude variables that influenced contraceptive methods choice and use included the respondent ability to discuss contraceptive methods with partner, with teenage daughter or son and the partner involvement on contraceptive methods choice and the person with authority on contraceptive methods choice. Knowledge on contraceptive methods side effects, community perception on contraceptive methods did not influence contraceptive methods choice and use. Service providers factors that influence choice and use included, health provider offering contraceptive methods, health education and counselling.
6.2 Recommendations

The changing dynamics with openly sexual content from the media, young women and on how to behave in relation to contraceptive choice and use and what their role is in decision-making with their partners. This study recommends ongoing contraceptive health education and counselling services for young women and men.

The study also recommends that clinicians help involving the male partners especially with the married women when offering contraceptive choice and use counselling and education. This is critical because research indicates that when male partners become involved with contraceptive decision-making, women are more likely to use the most effective methods and to continue with those methods.

Appropriate contraceptive counselling on both the benefits and side effects are encountered needs to be given when initiating a method and this will lead to higher rates of contraceptive continuation. Women are most successful with a contraceptive method choice and use when they receive continuing education.
Further Research

This study focused more on the consumer of contraceptive methods but not on the provider. There is need to conduct further study on:

1. Knowledge, Attitude and Practice study on health provider's barriers influencing on contraceptive method choice and use.

2. Role of faith-based organizations on contraceptive choice and use.
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APPENDICES

APPENDIX 1: INFORMED CONSENT FOR PARTICIPANTS

I, .................................................. agree to participate in the research study conducted by Florence W. Maina from Kenyatta University.

I understand that the researcher will interview me at the maternal child/ FP clinic. I understand that my withdrawal from this study at any time I wish is possible if I do not want to continue with the study.

I understand that this study is not aimed at harming me.

I also understand that the information I give to the researcher will be kept confidential.

I acknowledge that the investigator has explained to me the need for the research and has offered to answer any question I may have relating to the study. I freely and voluntarily consent to participate in this study.

Signature of participant..........................Date........................................

Signature of interviewer.......................Date .......................................
APPENDIX 2: STRUCTURED QUESTIONNAIRE FOR RESPONDENTS

Respondent serial no.

SECTION I (Socio-demographic data)
Q1 (a) How old are you?
Q1 (b) How many children do you have?
   (a) One
   (b) Two
   (c) Three
   (d) Over four
Q2 Marital status:
   (1) Single
   (2) Married
   (3) Divorced/separated
   (4) Widowed
Q3 What is your Religion?
   1. Catholic
   2. Protestant
   3. Muslim
   4. None
Q4 What is your basic education level?
   1. None
   2. Primary level
   3. Secondary level
   4. Secondary with some training
   5. University

SECTION II -SOCIAL ECONOMIC STATUS
Q5 What are your sources of income?
   1. Formal employment
   2. Businesses
   3. From husband/partner
Q6 How much is your income per month in Ksh (for the whole household)?
   1. 0-2000
   2. 2001-4000
   3. 4001 - 6000
   4. 6001 - 8000
   5. >8000
   6. No idea
SECTION III (BASIC CONTRACEPTIVE KNOWLEDGE)
Q8. Which methods of family planning do you know? (Write 1 for yes against the method and 0 for no)?

1. Male condom
2. Female condom
3. Intra-uterine contraceptive device
4. Norplant/Jadelle
5. Oral Contraceptive Pills
6. Tubal-Ligation
7. Vasectomy
8. Injectable hormonal Contraceptive (e.g. Depo-provera)
9. Diaphragm
10. Breastfeeding
11. Coitus interruptus

SECTION IV (PRACTICE)
Q9. (a). Have you ever used any Contraceptive method?
1. No
2. Yes

(b). If yes, which one(s)? (More than one answer accepted)

Q11. Were you on any contraceptive prior to delivery of the present baby?
1. No
2. Yes

Q12 (a) If no, to question 11 why?
(b) If yes, to question 11, state the type of method you had used

Q13 (a) Are you planning to have more children?
1. No
2. Yes

(b). If yes, how many more? (State number)

Q14 (a). Are family planning services available to you?
1. No
2. Yes

(b). If yes, where?
1. Government health facility
2. NGO health facility
3. Private clinic

Q15. (a) if you have ever used a contraceptive, did it have any health concern on you?
1. No
2. Yes

(b). If yes what was the effect?
1. Rejection by spouse
2. Illness
3. Family size
4. Friends/relatives
5. Religion
(c). Did the provider discuss the health concerns of the method on the first day of use?
   1. No
   2. Yes

(d) If yes to question 15 c, how helpful was the discussion?
   1. Very helpful
   2. Helpful
   3. Moderately helpful
   4. Less helpful
   5. Not helpful at all

Q17 (a) Do you plan to use any form of contraceptive in the future?
   1. No
   2. Yes

   (b) If you intend to use a contraceptive in future which method would you prefer?
      1. Most preferred
      2. Second preference
      3. Least preferred
      4. Can't use at all method

   (c) Currently are you on any contraceptives?
      1. No
      2. Yes

Which are the major factors that influence your choice of contraceptive method(s) to use? (Probe for more reasons and more than answer allowed)
   1. Husband decision
   2. Health workers advice
   3. Availability of the method
   4. Number of children
   5. Sex of the children
   6. My age
   7. The possible side effects
   8. Others (specify)

SECTION V: ATTITUDE
(a) ON CONTRACEPTIVE CHOICE
SECTION III (Attitudes)

Q18. Whom would you recommend to get contraceptive services?
   1. Married couples
   2. Single men/women
   3. Teenaged boys/girls
   4. HIV positive patients

Q19. What is your opinion on contraceptive methods?
   1. Very good
   2. good
   3. Average
   4. fairly good
   5. Not good

Q20. (a) Would you seek for your partner's consent before going to get contraceptive services?
Q20. (b) Explain your answer in question 20 (a)
Q20. (c) If you have a teenage daughter/son will you be comfortable discussing the issue of contraceptives with him/her?
1. No
2. Yes

Explain your answer

Q21. (a) In your opinion, does contraceptives promote immorality?
1. No
2. Yes
(b) Who should make the decision related to reproductive health and contraceptive use?
1. Man alone
2. Woman
3. Both man and woman

Explain you answer

(b) MENSTRUAL CHANGES INFLUENCE ON METHOD USE
Q22 (a) Have you ever had any side effects on your menstrual bleeding attributable to the use of any contraceptive?
1. No
2. Yes
(b). If yes how?
1. Heavy
2. Mild
3. Irregular
4. No menstrual flow at all
(c) If yes to 22 (b) which method were you using then?

Q23. Did the provider discuss the side effects of the method on the first day of use?.
1. Yes
2. No

Q27. If you’re menstrual flow was to change what would you prefer?
1. Heavy
2. Low
3. None
(b) Which of the following contraceptive method do you think is cheaper to maintain?
1. Pills
2. Condoms
3. IUD
4. Injection

PART VI: SPOUSAL COMMUNICATION
Q30. Have you ever discussed with your partner when to have a baby?
1. No
2. Yes.
(b) If yes, who usually initiate the discussion?
   1. Myself
   2. My partner
   3. Either

(c) If no, why don't you and your husband discuss such matters?
   1. Only one person makes the decision
   2. Culturally, unacceptable to discuss such matters
   3. Fear of spouse reaction

Q31 (a) Has your partner ever disapproved a method of family planning?
   1. No
   2. Yes

(b) If yes which one?

Q32. Under what circumstances would you discuss contraceptives?
   1. When the number of children are enough
   2. Economic/cost reasons
   3. Health reasons

Q33. Who would you discuss with in case of change of method?
   1. Friend
   2. Health worker
   3. Kin ship

Q34. In your own opinion, who has the authority to decide on family planning?
   1. Partner only.
   2. Wife only
   3. Both
   4. I don't know
APPENDIX 3: UNSTRUCTURED QUESTIONNAIRE FOR SERVICE PROVIDERS

1. What method mix is available at the facility?

2. What factors affect family planning service delivery in this facility?

   II. Staff training on contraceptive updates

   III. Administrative support: supervisory, IEC materials, staffing,
       Contraceptive availability, equipment, expendables, lighting/water, work
       environment, policy

3. How would you rate women of reproductive age knowledge on family
   planning?

4. In your opinion, what influence women of reproductive age attitude and
   practice on family planning?

5. Which are the preferred methods of family planning by women of
   reproductive age in this facility (probe reasons for preferences)?

6. What is the rate of drop out on each method?

7. In your opinion, what are the main obstacles in family planning in this area?

8. Does the current cost of contraceptives affect use of contraceptives?

9. Do you handle cases of women of reproductive age who are willing to adopt
   the family planning methods but the spouses are not?

10. How do you handle cases of women of child bearing age who are willing to
    adopt the family planning but the spouse are not of the idea?
APPENDIX 4: FOCUS GROUP DISCUSSION GUIDE FOR CLIENTS

1. Who do you think should make family planning decisions
   i. Individuals
   ii. Couples
   iii. Extended family members
   iv. Service providers

2. What is the role of service provider in your decision making process – explain?

3. To what extent does fees or payments of contraceptives affects your choice of the method.

4. What is your opinion on
   i. Range of methods available
   ii. Counselling by service providers
   iii. Access to services
   iv. Clinic opening hours.

APPENDIX 5: MAP SHOWING POSITION OF THE STUDY SITE
(INSET MAP OF KENYA SHOWING POSITION OF NAIROBI)
APPENDIX 7: SUMMARY OF MILLENIUM DEVELOPMENT GOALS

Millennium Development Goals (MDGs) are eight International development goals that all one hundred and ninety two (192) United member states, and twenty three (23) International Organizations have agreed to achieve by 2015. They are;

**Goal 1:** Eradicate extreme poverty and hunger: - The target is to halve the proportion of people living on less than 1$ dollar a day and halve proportion of people who hunger. Also to achieve descent employment for women, men and young people

**Goal 2:** Achieve Universal Primary Education: - The target is that by 2015, all children can complete a full course of primary schooling

**Goal 3:** Promote gender equity and empower women: - The target is to eliminate gender disparity in primary and secondary education preferably by 2005 and at all levels by 2015.

**Goal 4:** Reduce child mortality: - The target is to reduce two-thirds, between 1990 and 2015, the less than five mortality rate.

**Goal 5:** Improve maternal Health: - The target is to reduce by three quarters, between 1990 and 2015, the maternal mortality ratio. The goal also target to achieve access to reproductive health by improving contraceptive prevalence rate and reduce unmet need for family planning.

**Goal 6:** Combat HIV/AIDS, Malaria and other diseases: - The target is to have reduced incidence of malaria and other major diseases by 2015 and reverse the spread of HIV/AIDS by reducing HIV prevalence among population aged 15-24 years by promoting condom use.

**Goal 7:** Ensure environmental sustainability: - The target is to integrate the principles of sustainable development into country policies and programs; reverse loss of environmental resources, reduce biodiversity loss, halve by 2015 the proportion of people without sustainable access to safe drinking water and basic sanitation.

**Goal 8:** Develop a global partnership for development: - The target include developing non-discriminatory trading and financial system. Also address the special needs of the least developed countries (LDC). Deal comprehensively with debt problems of developing countries through national and international measures in order to make debt sustainable in the long-term.
APPENDIX 8: A PLATE OF COMMON METHODS OF CONTRACEPTIVES

LOS MÉTODOS DE PLANIFICACIÓN FAMILIAR

Métodos Temporales

- La Pastilla
- El Condom (preservativo)
- Las Tabletas, Óvulos y Espumas Vaginales
- El Método basado en la Lactancia Materna (MIL)
- El Método de la Ovulación (Rítmico)
- El Método del Rítmico
- El Implante Norplant®
- El DIU (Aparato)

Métodos Definitivos

- La Esterilización Femenina
- La Esterilización Masculina
APPENDIX 9: RESEARCH AUTHORIZATION

REPUBLIC OF KENYA

NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

To: Florence Wangechi Maina
Kenyatta University
P.O BOX 43844-00100
NAIROBI

From: NCST

Date: 2nd December 2010

Subject: RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "Factors influencing choice of contraceptive methods among women in Kibera slum, Nairobi, Kenya" I am pleased to inform you that you have been authorized to undertake research in Langata District for a period ending 31st December 2010.

You are advised to report to the Provincial Commissioner & the Provincial Director of Medical Services, Nairobi Province before embarking on the research project.

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

Copy to:

The Provincial Commissioner
Nairobi Province