

**KNOWLEDGE, UTILIZATION AND BARRIERS TO FAMILY PLANNING
SERVICES AMONG WOMEN OF REPRODUCTIVE
AGE IN OBUNGA INFORMAL SETTLEMENT,
KISUMU COUNTY, KENYA**

BY

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EPIDEMIOLOGY AND POPULATION HEALTH**

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DECLARATION

1. THE STUDENT

I, Alice A. Abuyah do declare that this thesis is my original work and has not been submitted for any award of a degree or diploma in any other University or college.

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DEDICATION

This thesis is dedicated to all families who live in communities where utilization of family planning methods and services remains a reproductive health problem.

ABSTRACT

In Kenya knowledge of Family Planning (FP) is universal at 95% but this is not translating to utilization in Obunga slums. The rapid increase of population has got adverse effects on the economy as poverty levels are high at poverty incidence of 74% compared to 63% in Nyalenda A and B and 53% in Manyatta. Despite various strategies put by the government, in Obunga, unmet need is at 32% and Total Fertility Rate at 7%, the unplanned and unwanted pregnancies at 50% and 75% respectively. Every year about 156 girls in Obunga drop out of school due to accidental pregnancies, maternal deaths per 100,000 live births is 45. Knowledge, barriers and utilization of FP services is uncertain among women of reproductive age in Obunga. The objectives of this study were to find out the knowledge women of reproductive age have about FP methods, identify the barriers to use of FP methods and services, determine the utilization of FP and the association between socio-demographic characteristic and FP knowledge and utilization by women of reproductive age in Obunga slums. A cross-sectional study design and proportionate stratified random sampling was used to reach 352 study participants. Data was collected using questionnaires through direct interviews. Chi-square test was used to test the association between independent variables (socio-demographic variables) and the dependent variables (Knowledge and utilization of contraceptives). Findings showed that knowledge of FPS was (87.1%) among women of reproductive age with injections (80.6%) and Norplant (71.4%) mentioned FP method. Side effects (23.1%) and husband's approval (15.4%) of family planning was a major barrier to FP use. Norplant (16.9%), injectable (18.6%) and oral pills (11.1%) were the most method used and approximately 63.1% of the respondents agreed to have discontinued FP. There was statistical significance between education level and knowledge on FP among women of reproductive age in Obunga as respondents who completed tertiary education were more likely OR= 1.91, 95% CI [0.27-2.95], $p \leq 0.0461$) to have knowledge on FP than those who did not complete primary and secondary education OR=2.27, 95% CI [0.94-5.48], $p=0.86$. There was statistical significance between age at first birth and utilization of contraceptives among women of reproductive age in Obunga as respondents who reported their first birth at ages 26-33 years were more likely OR=1.81, 95% CI [1.07-3.07], $p=0.0270$ to use contraceptives. The significance of this study is that if women have knowledge on FP and the barriers are adequately addressed, there will be consistency in use of FP and when there is utilization of FP in Obunga, women will be able to plan their families, provide proper education to the children, reduce the high incidence of abortion, unwanted and unplanned pregnancies which will in turn help reduce maternal mortality in Obunga.

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LIST OF ABBREVIATIONS

AIDS -	Acquired Immunodeficiency Syndrome.
CBD-	Community Based Distribution
CHW-	Community Health Worker
CPR -	Contraceptive Prevalence Rate
DRH -	Division of Reproductive Health.
DHIS-	District Health Information System
FP -	Family Planning
FPS	Family Planning Services
GoK	Government of Kenya
HIV -	Human Immune Deficiency Virus
KDHS-	Kenya Demographic and Health Survey
KNBS-	Kenya National Bureau of Statistic
ICPD-	International Conference on Population and Development
IUD -	Intra-uterine Device
MDG -	Millennium Development Goal
MOPHS-	Ministry of Public Health and Sanitation
NCAPD -	National Coordinating Agency for Population and Development
NCPD -	National Council for Population and
NGO	Non Governmental Organizations
NRH-	National Reproductive Health
RH -	Reproductive Health
SES-	Socio Economic Status
TFR -	Total Fertility Rate
UNDP-	United Nations Development Program
USAID -	United States Agency for International Development
WHO -	World Health Organization

DEFINITION OF TERMS

Family Planning: implies the use of contraceptives to plan the size of a family with respect to number of children to have and when to have them.

Utilization: refers to accessing and making use of the contraceptives and family planning services consistently and effectively.

Reproductive Health: is the health of women given to promote good sexual health and activity during pregnancy, childbirth and postpartum.

Effective: refers to making contraceptive and family planning services. Produces successful results that is intended or wanted.

Barriers: refers to things, issues, that stops women from using contraceptive and accessing family planning services.

Knowledge: refers to familiarity, awareness, information and Understanding of family planning

Reproductive Age: refers to the child bearing age of a woman and the age bracket When a woman is fertile and stands a chance of conceiving Without making several attempt

Informal settlement: refers to an area where residents have constructed on Land that they have no legal claim to and have built Temporary shelters

Family planning services: refers to services that are confidential and low cost And offered to males and females to help with the sexual And reproductive health needs

Unmet family planning need: refer to sexually active married or unmarried women that do not want to have a child in the next two years or ever and are not using Contraceptive yet they need to use

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CHAPTER ONE

1.1. Background Information

Reproductive health of women is a matter of public health concern and has not received its desired attention in many nations. Unintended pregnancy and sexually transmitted diseases including HIV and AIDS infection continues to be a major reproductive health problem as a result of increasing levels of sexual activity and unsafe sex (MacPhail *et al.*, 2007). Family planning is one of the 10 great public health achievements of the 20th century that can help achieve desired birth spacing, family size and reduce the number of deaths among women, which account for about 30% of deaths in Sub-Saharan Africa (WHO, 2010).

The last two decades has seen literature reporting an increase in knowledge and use of contraceptives among women in Kenya, as in the rest of sub-Saharan Africa, In Kenya, knowledge of FP is almost universal at 95% for women of reproductive age, with male condoms, injectable and pills being the most commonly known methods (Health Policy Initiative, 2007) Kisumu is the third largest city in Kenya, after Nairobi and Mombasa and it is the country's poorest city (Nangendo, 2012). A unique feature of Kisumu is a belt of slums surrounding the formally planned city center in a semi-circle. It is estimated 60 percent of the population lives in informal settlements, with the majority living in abject poverty (USAID, 2007). Obunga is a densely populated informal settlement, the population of Obunga in 1999 was 12,000 inhabitants and in 2009 the number had grown to 39,000, an increase of nearly 60% (Nangendo, 2012). Presently, there are more than 60,000 people living in Obunga, the majority being children and single or widowed mothers who have come from the rural areas (Tupange Project, 2010).The rapid increase of population of 60% has got adverse effects on the deteriorating economy of

Obunga as poverty levels are high at poverty incidence of 74% compared to Nyalenda A and B at 53% and Manyatta at 63% (Karanja, 2010) and it is an indication that FP is not being utilized to plan families. This could be due to the fact that women in Obunga do not have knowledge on FP and although knowledge is shown in other studies, this has not been done in Obunga.

Despite the various strategies and policies in Kenya on family planning and reproductive health, total fertility rate still remains high at 4.6%, utilization rate at 46% and unmet needs at 24%. Women in slums have the highest level of unmet needs (Cleland *et al.*, 2006) and given the low levels of education among women in slums, in Obunga 50 % of births are unplanned and 75 % of pregnancies are unwanted resulting in continued high (TFR) of 7%, high unmet need for family planning at 32% and stagnating utilization at 30% (DHIS, 2012) which are cause for concern. Every year, about 156 Obunga girls drop out of school due to accidental pregnancy and 53 out of every 1000 births in Obunga are delivered to girls aged 15–19 (Tupange Project, 2010). Accidental pregnancy is a leading cause of abortion, 73% of currently sexually active single women aged 15–19 in Obunga report not using any contraception method (Tupange Project, 2010). Maternal deaths per 100,000 live births is 45 and infant mortality rate per 1000 live births is 59 (KNBS ICF Macro, 2014). The expected national FP utilization rate of 50 % to be attained by the NRH policy makers has not been attained by women living in the informal settlements including Obunga slums in Kisumu hence the need to investigate utilization of family planning methods and services.

The government of Kenya has launched various FP programmes to accelerate the economic and social development to reduce the population growth (NRHP, 2012), however, these programs have been met with marginal success. Across all age groups, perceived and actual side effects of

contraceptive methods emerged as a primary barrier to use. Kenya's demographic health survey (married women only) found that non-users who did not intend to use contraception in the future most commonly cited fear of side effects and health concerns (KNBS, 2009). Even when awareness is high, poor knowledge of contraceptive methods and their side effects has been associated with poor uptake. Myths are heard about from peers and partners and have influence on contraceptive demand and uptake (USAID Kenya, 2009).

Another key barrier is lack of physical and financial access to family planning commodities. Studies have shown that health facilities offering family planning are not equitably distributed throughout the county (Ramare and Catherine, 2012). Shame is also a significant factor preventing use of family planning (specifically condoms), particularly for unmarried youth. Young people perceive women who carry condoms as promiscuous and that asking a partner to use condoms would reveal them as sexually wayward or untrustworthy (NCPA and UNFPA, 2013). Obunga settlement has no public health facility, it is surrounded with private clinics and women complain of frequent stock-outs and the associated costs of lost wages, transport and other financial challenges making access and utilization a challenge (Karanja, 2010). Despite the various measures that have been put by the government, use of family planning method is at utilization rate of 30% in Obunga, unmet needs at 32% (DHIS, 2012) indicating that there are women of reproductive age who want to prevent pregnancy but are not able to use FP methods. The study therefore sought to identify what barriers are hindering women of reproductive age in Obunga from using FP.

A study in three major towns in Kenya, Nairobi, Mombasa and Kisumu show that socio-demographic and programmatic factors have influence on the use of contraceptives among

women of reproductive age (Tupange Project, 2012). Previous studies have shown number of living children and desire for other children also as one of the important variables that determine contraceptive use among women of reproductive age (Cleland J *et al*, 2006). Studies have also shown that a woman's education plays an important role to use contraceptive. Contraceptive use increases with increase in level of education. Women's and their husband's educational level and type of occupation influence on contraceptive use (Agwanda *et al*, 2008). Although KNBS (2009) demonstrated that education, marital status, a woman's income and other demographic factors affect utilization of family planning services, the significance of these factors have not been determined for the urban poor women living in Obunga slums. In Obunga the early child bearing age of 15-19 and a bigger population of 73% (KNBS, 2009) having attained primary level of education impacted on the utilization of FP and that's why the study sought to investigate the association of FP and socio-demographic characteristics.

1.2. Problem Statement

Poor knowledge on FP methods and services has contributed to low uptake of FP which has contributed to a high population with overstretched resources. Obunga is densely populated with an increasing population rate of 60%. High population is contributing to depletion of productive resources in the society, rising cost of living, ill health, poor nutrition and limited educational opportunities. Obunga has a high poverty incidence of 74% because most household earn their livelihood through self-employment and casual jobs such as bar waiter, motorcyclists and vending groceries and kiosks with low income. Poor women have higher fertility and highest unmet need for family planning. Family planning programs are also failing to serve hard-to-reach slum dwellers with knowledge on FP.

Despite high reported knowledge on FP, incorrect information on FP is prevalent across all informal settlements in Kisumu Obunga being one of them and the expected national prevalence rate of 50 % has not been attained by women living in the informal settlement. Poor utilization of FP services in Obunga has led to high level of unwanted pregnancy at 75%, unplanned pregnancy at 50%, 156 girls drop out of school coz of accidental pregnancy and all this are indication that family planning methods and services are not being utilized. Maternal mortality at 45 per 100,000 lives birth, average age at first marriage being 16 years, average age at first intercourse for women in Obunga being 15 years and 73% of sexually active women not using any contraception are a cause of concern. There is a problem because FP messages has for a long time been limited to married women only yet women in Obunga become sexually active at an early age of 15 years.

The uptake of FP in Obunga has been affected by side effects, myths and misconception women of Obunga have. The cost of modern methods of FP is relatively high for women in Obunga to access, FP failure and FP availability in local health private clinics was a hindrance to consistent use as the local health clinics face stock outs and lack trained health personnel.

1.3. Research Objectives

1.3.1. Main Objective

To assess knowledge, barriers and utilization to family planning services among women of reproductive age in Obunga slum, Kisumu County, Kenya.

1.3.2. Specific Objectives

1. To find out the knowledgewomen of reproductive age have about family planning methods and services in Obunga slums.
2. To determine the utilization of family planning by women of reproductive age in Obunga slums
3. To identify the barriers to family planning methods and services by women of reproductive age in Obunga slums.
4. To determine the association between socio-demographic characteristic and contraceptive Knowledge, contraceptive utilization by women of reproductive age in Obunga slums

1.4. Research Questions

1. What knowledge do women of reproductive age have about family planning methods and services in Obunga slums?

2. Which and how are the family planning methods and services being utilized by women of Obunga slums?
3. What are the barriers to family planning methods and services?
4. What is the association between socio-demographic characteristic and Knowledge and utilization of contraceptive?

1.5. Significance of Study

Knowledge on FP methods and services will help inform women of reproductive age on when to use FP, which FP method to use, what side effects to expect on using each FP and how to deal with side effects. Furthermore establishing influence of socio-demographic characteristic and FP use is important in informing FP programme formulation as it will enable focused intervention and addressing needs on information about FP. This study will be widely used to inform, future researchers, as they work together to make family planning a social norm and reach the national health reproductive goals. Ultimately information from this study may help contribute to attainment of NRH goal to decrease reproductive health problem like unsafe abortion, unintended pregnancies and complications arising from use of FP use in Obunga.

CHAPTER TWO: LITERATURE REVIEW

2.1. Introduction

Chapter two dealt with the search for and review of literature relevant to the research topic knowledge, use of contraceptive and barrier to its effective use. This chapter is a critical summary of published research on the topic of interest above aiming at placing the research problem in context. The process involved systematic identification, synthesis, analysis and summary of published material on the research topic. The review of literature was discussed under four sections which are knowledge on contraceptives, utilization of contraceptives and barriers to use of contraceptives by young Women.

2.2 Knowledge on Family Planning Methods and Services

Knowledge of family planning is nearly universal, with 95% of all women knowing at least one method of family planning. Modern methods are more widely known than traditional methods (KNBS, 2009). For example, 94 % of women have heard of at least one modern method, while only 70% know of a traditional method. Among all women, the male condom, pills, and injectable are the most widely known methods of family planning, with about 90 % of all women saying they had heard of these methods. The least widely known methods are emergency contraception, the female condom, and male sterilization.

In Ethiopia, although the level of knowledge of family planning appears to be high in the population under consideration (86%), knowledge of long-term and permanent methods is very low (Shoveller *et al.*, 2007). Less than one in three women mentioned knowledge of female sterilization, and only one in five women mentioned about male sterilization. The major sources

of information on family planning in these regions are health institutions, social gatherings and radio. With regards to knowledge levels, the 2002 and 2007 Zambia Demographic and Health Surveys reported high knowledge levels (90%) of modern contraceptive method among the Zambian population but despite this, there is still low utilization of family planning services among women in Zambia (Central Statistical Office, 2002). Some pregnant adolescents have attributed their pregnancy to lack of knowledge of contraceptives and how to access them (Garenne *et al.*, 2000) .

In Nigeria, the main sources of information for young women about contraceptives are friends, radio and nurses (Oye-Adeniran *et al.*, 2006) where clients of family planning services have prior counseling about side effect of methods of chosen help to counter side effects. Therefore there is need for women to receive information about contraception and promote women's right to control their reproductive health, generate awareness and dispel myths about contraceptives (Shoveller *et al.*, 2007).

The study findings are similar as they are reporting women in Kenya, Ethiopia, Nigeria and Zambia are having high knowledge on FP methods and services at average over 80%.Hospital and health workers was the main source of information about FP,modern methods of family planning method was commonly known among the study participants in the three region. It is indicated that despite the high knowledge of 95%, 86%, 90%, in Kenya, Ethiopia and Zambia respectively the utilization was still low among women of reproductive age in this four countries, It was recognized that women are not poorly educated about contraception or fertility but their education is not sufficient to ensure consistent effective contraceptive use. Women have

knowledge about traditional methods of family planning but less knowledge on modern methods of FP like the emergency pills, male vasectomy and tubal ligation and from the literature knowledge of FP among women of reproductive age in Obunga is not known.

2.3 Utilization of Family Planning Methods and Services

FP use has in the last two decades also increased from 18% (1987) to 39% (2008/09) (KNBS ICF Macro, 2009), however this increase has not been matched with a reduction in the unmet need for FP or reduction in fertility rates. The unmet need for FP in Kenya has stalled at around 25% and is highest among the less economically well-off women and those in rural areas. Total fertility rate in rural areas has remained unchanged at 5.2. In addition, at the national level, only a slight decrease in fertility has been reported from 4.7 in 1998 to 4.6 in 2008/09 (Ojaak, 2008). There are regional variations in fertility trends in Kenya. Fertility is highest in Nyanza and Western provinces at 5.6 and 5.4 respectively (KNBS ICF Macro, 2009).

The Kenyan government has put in place strategies and policies to reduce fertility, increase contraceptive prevalence rate and reduce the unmet family planning needs (republic of Kenya, 2007b). Despite these policies, total fertility rates remains high at 4.6%, while CPR for all methods is at 46% while the unmet need for family planning services averages at 24% (KNBS ICF Macro, 2010). The unmet need for contraception remains at approximately 26% in Kenya, suggesting that the right of Kenyan couples to access sufficient information concerning their preferred birth control method and the actual use of such methods have not been fully realized (Health Policy Initiative, 2007).

Unmet need for contraception can be understood as a rights-based measure of family planning, that is, the degree to which individuals are able to translate their fertility preferences into action by ensuring that births occur by voluntary and informed choice. Reducing unmet need has been a priority in Kenya since the 1994 International Conference on Population and Development (ICPD) in Cairo and the country has made major gains over time in the use of contraceptives, leading to a large and rapid decline in fertility in the early 1990s (UNFPA, 2007). Only four per cent of married women use modern methods of family planning that is going to have a minimal impact on overall population growth rates in the county. Injectable are the most popular type of family planning method used. 2% of married women use Injectable while 1% uses implants, which is the second most popular method (UNFPA, 2007).

Although contraceptive use has increased among women in recent years, consistent reliance on effective form of contraception remains low. Reasons for inconsistent contraceptive use are not easily characterized, as they are as diverse as they are complex (Davies *et al.*, 2006). The use of modern contraceptive methods among adolescents in some communities has been found to be low (Tamire, 2007). Only 30.4% of sexually active adolescents were found in a study in Nigeria to be using any form of modern methods and only 6.2% use condom. Many relied on traditional methods such as periodic abstinence and coitus interruption (Okpani, 2000). Major factors which influenced the choice of contraceptives for users were convenience and effectiveness, so where users are offered a range of commodities that effective and convenient usage will likely increase.

Approximately 88.5% were found to be satisfied with current contraceptive methods (Oye-Adeniran *et al.*, 2006). Most women at family planning clinics have been found to have decided

already which contraceptive methods they want and that failure to obtain that method is probably the biggest deterrent to adoption and sustained use (Cleland *et al.*, 2006). Rising adherence and continuation rate difficulty are not different from other forms of prolonged medication (Okpani, 2000).

The study findings seem to be different as utilization of family planning methods and services seem to vary differently, for Tamire modern family planning methods are the commonly used FP methods as there level of efficacy is high while Agwanda traditional family method are utilized more as they have less side effects (Tamire, 2007). Despite the high knowledge reported by most authors conducting research on FP utilization, the expected national utilization rate of 50% has not been attained by women living in the informal settlements as in Obunga, utilization rate is 30%, unmet need at 32% and TFR at 7% and Since 2000, NGOs and Ministry of Health have increased their coverage on FP methods and services in the informal settlements However, this has not seen utilization of FP increase tremendously.

2.4 Barriers to Using Family Planning Methods and Services

Young women constantly face barriers to effective contraceptive use. Many had used a range of strategies to overcome barriers to effective contraception without success and some pregnant adolescents have attributed their pregnancy to difficulty in obtaining contraceptives (Garenne *et al.*, 2000). In spite of growing efforts and successes in increasing availability and access to these contraceptives, unintended pregnancy remains a considerable social and public health concern. Young women often have difficulty accessing and correctly using contraception (Tamire, 2007). Some identified barriers to effective contraceptives are lack of concern over the possibility of pregnancy, perceived invulnerability to pregnancy, forgetfulness (Kaufman *et al.*, 2003), institutional policy on contraceptives, socio-cultural norms, poor access regarding location (Shoveller *et al.*, 2007), low socioeconomic status, partner resistance, fear of partner's rejection, discomfort buying or carrying contraceptive are barriers that are likely to persist over time despite continuous exposure and experience, unless specific skills are acquired. Fear of losing a sexual partner for insisting on use of condom has been shown to be a barrier to condom negotiation among female adolescents, especially when communication and assertive skills are inadequate (Davies *et al.*, 2006).

Lack of concern over the possibility of pregnancy has been found to be a common barrier to effective contraceptive use (MacPhail *et al.*, 2007). Many young mothers have failed to access contraceptive because they did not care about the possibility of becoming pregnant (Davies *et al.*, 2006). Indifference also influences their use of contraceptive even when it is available, removing their motivation to use it effectively (Breheny and Stephen, 2007). The perceived low risk of pregnancy, lack of awareness of the risk of pregnancy (as they believed that one must

have several sexual intercourse before conception can occur), and several other factors on the part of young women act as barrier to accessing contraceptives and family planning services (Garenne *et al.*, 2000). Fear of side effect, poor knowledge of available methods and individual religion are major barriers to contraceptive use (Garenne *et al.*, 2000). The Catholic Church disapproves the use of modern contraceptives and she has been the major reason for non-contraceptive use among the predominantly catholic South Eastern region of Nigeria (Oye-Adeniran *et al.*, 2006).

Lack of knowledge of where to get condom, not discussing family planning with partner have been found to be a barrier to family planning and risk for sexually transmitted infection among young women (Ohene and Akoto, 2008). Inaccessibility to contraceptives was found to be the major cause of unwanted pregnancy and subsequent unsafe abortion in Ethiopia (Senbeto *et al.*, 2005). In most societies women are found to be prepared to travel long distance for advice and contraceptives, especially for methods which require infrequent or no further visits. Poor quality of service is a major important constraint to effective access to family planning programme. Some aspects of these are continuity of supplies, presence and competence of staff, treating patient with dignity and reasonably privacy (Cleland *et al.*, 2006).

The studies investigated that the barriers affecting contraceptive use are similar in all contexts be it in the urban areas or rural areas: access, religion, partner's disapproval side effects was cutting across as a barrier in all the areas. Population in the informal settlements grow at an alarming rate and this is an indication that families are not planned and no proper spacing is done in children, this could be due to the barriers stated in the previous studies discussed above by

different scholars, this study therefore sought to identify what barriers are affecting FP use in Obunga informal settlement.

2.5 Socio-demographic Characteristics and Family Planning Use

Demographic transition began to manifest in 1989, when population growth rate declined to 3.4 percent and further to 2.5 percent in 1999, but estimated at a higher level of 2.9% in 2009. Owing to the past growth rates, Kenya's population is still youthful with nearly half being aged 18 years or below. This is a clear demonstration of demographic momentum- a phenomenon of continued population increase despite reducing fertility rates, which is brought about by waves of large populations of young person's entering reproductive age in successive years (KNBS, 2009). This may in part explain the addition of one million people annually to Kenya's population referred to above, contributing to the youth bulge. Kenya's total fertility rate has declined from 6.7 births per woman in 1989 to 4.8 in 2003. However, even at this lower rate, the population of the country is doubling. Evidence from research conducted in Kenya and elsewhere has provided empirical evidence to support these suggestions (Cleland, 2006). The specific factors that influence contraceptive use include education, wealth status, residence, religion, knowledge of family planning, desire for more children, number of living children, and death of a child (KNBS, 2009).

2.5.1 Women's Education

A study in Bangladesh showed that adolescent women who had secondary education and higher was found to 2.5 times practice contraception than those who had no education and had shown that 46% of women with no formal education were currently using a method compared with 51%

of women with either incomplete or complete primary school and 56% of those with at least some secondary education (Garenne *et al.*, 2000).

In Kenya, education has been shown to be an important determinant of contraceptive use. There is an association between childbearing and education. Forty percent of women with no education will have had a child by the age of 20 (WHO, 2008). Women with no education have the highest fertility rate at 5.8 births per woman while those with secondary education or higher have the lowest at 3.5 births per woman (CDC, 2007). Increase in the level of education was associated with greater use of contraception methods. Better-educated women were more likely to practice contraception and to use modern methods. Education is also positively related to more favorable attitudes towards birth control and greater knowledge of contraception.

2.5.2 Women's Occupation

A study found a significant positive association between women's employment and contraceptive use (Davies *et al.*, 2006). A study in Nepal had shown the same findings that working women were more likely to use contraception (Oindo, 2002). The study had also shown that the level of contraceptive use was higher among women who were engaged in non-agricultural sector. The study had shown that the women who were currently working in non-agricultural job were more likely to use contraceptives than those who were working in agricultural sector (Ohene and Akoto, 2008).

2.5.3 Women's Age

According to the 2011 Uganda Demographic and Health Survey (UDHS), Uganda has a young population (52% are below age 15, and 17% are age 15-24) and a high total fertility rate (TFR), at 6.2 children per woman. As this large cohort of young people enters the childbearing years, their reproductive behavior will determine the growth and size of Uganda's population for decades to come (Cleland J, 2006). The resultant high fertility is associated with high levels of maternal mortality, especially among the poorest communities. In Senegal as in many other countries, major factors associated with contraceptive use are women's age, education, and socioeconomic status (UNFPA, 2012; Cleland *et al.*, 2006). In Uganda, the median age at first marriage is 17.9 years, and young women are expected to prove their fertility soon after marriage (ICF International, 2012). Early marriage exposes these women to frequent and unprotected sexual intercourse, which can lead to early and risky first birth. In addition, these women have a limited chance to space their births, since contraceptive use within marriage is not expected (UNFPA, 2012).

2.5.4 Religion

Several studies have demonstrated that religion has a significant role in the use of contraceptive methods. A study in Indonesia showed that religion played a major role in method use and choice. Islam was strongly correlated with the probability of choosing injectable type of contraceptive compared to other modern methods (Shoveller and Chabot, 2007). Robey described the success of Indonesia family planning program, with a rapid decline of TFR (WHO, 2010). One important factor was religion and the success was attributed to the fact that Islamic leaders were consulted before program implementation. All Non-Catholic religious groups had slightly

higher rates of contraceptive prevalence compared with Catholics. Women who indicated no religious membership reported a definitely lower likelihood of practicing contraception (Wafula and Obare, 2014). The lower use of contraceptives among Islam women was positively associated with the desire for more children.

The studies on socio demographic association with contraceptive use differ in context with each scholar as one scholar indicates that there is a strong association between education and contraceptive use while others indicate that level of education is less likely to affect contraceptive use, Religion is thought to affect FP use, other scholars argue that Islam does not allow FP as the Quran states that they should have as many children and their religious belief of having many wives and children is a hindrance to FP use. On the other hand the Catholics believe and preach the gospel of the bible stating “go ye and feel the world” and they have spread the message of FP causing infertility to its followers, this has affected FP use among FP. This was why the study sought to identify which socio-demographic characteristics affect contraceptive use in the context of Obunga informal settlement, are they any different from what other authors have researched and how are they likely to hinder FP use and attainment of set NRH target.

2.6 Knowledge gaps

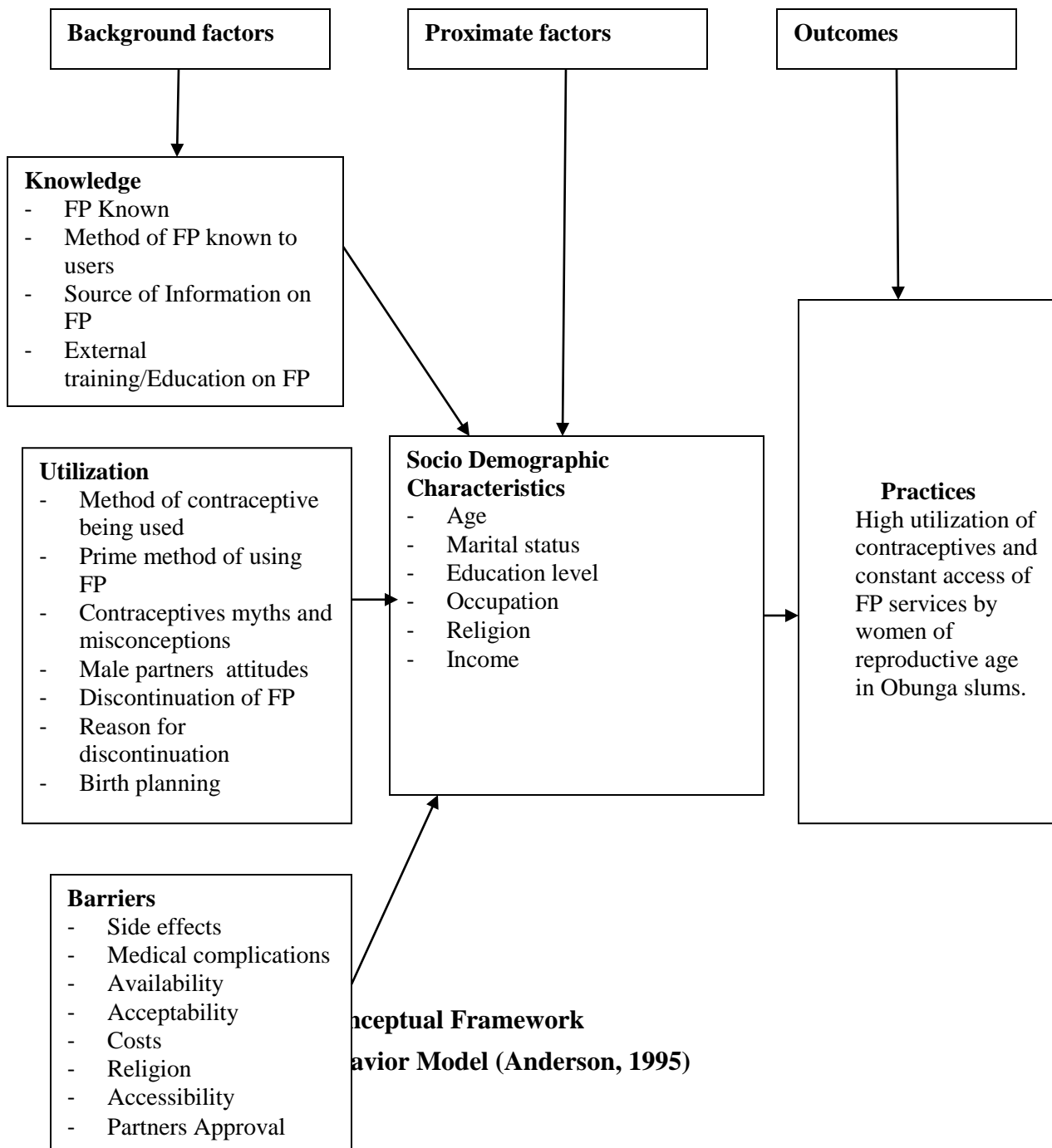
There are knowledge gaps identified through reviewing literature on other studies. It was established that there is scanty information on knowledge and use of FP methods by women in informal settlements; much has been done on knowledge in urban areas, rural areas and Kenya as whole but limited information focusing on studies in informal settlement. In addition barriers to FP use studies have been done by so many scholars but how they influence FP use not

determined for urban slum dwellers. Despite scholars reporting high knowledge on FP scholars have not investigated why this is not reflected on utilization and studies have not been done to investigate why women discontinue FP. Information on association between socio-demographic characteristic and FP use by women in informal settlement is scanty and for the urban poor in slums has not been determined.

2.7 Operational Conceptual Framework

Utilization of contraceptives may be influenced by either one or a combination of provider related and/or user related factors. Service providers who provide information and services may influence uptake of family planning services either positively or negatively. Knowledge and practices will influence their attitude to motivate them to embrace and accept contraceptive use.

Users' factors may either be from the male sexual partners who may reject or accept the use of FP or they having side effects and medical complication, poverty, geographical location of health facilities. Utilization of contraceptives and family planning services will depend on how these factors are managed by the key players.



CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the research methodology that was used to conduct the study; it includes explanation of data collection, quantitative approaches and statistical analysis procedure that was used. Overall the sections has; study site, study design, study population, sample size

determination and sampling techniques, inclusion criteria of study participants, data quality control, data collection, analysis and presentation methods used and ethical consideration.

3.2. Study Site

Obunga slum is one of the eight slums in Nyanza Province. The slum lies between latitude of 0.06°S and longitude 34.45 E as shown in appendix D. It covers a total area of 6.6 km², a population density of 1913 km/sq and 3553 household. It has a total population of approximately 12,554 with 6447 males and 6107 females (KNBS, 2009). The recently released Kenya demographic health survey shows that the national maternal mortality has risen from 414 deaths per 100,000 live births in 2003 to 488/100,000 in 2009. Under-five mortality in Nyanza is 149 deaths/1,000 live births; double that of the national average (74deaths/1,000). Obunga informal settlement lies in Kisumu District which faces reproductive health challenges that is low contraceptive prevalence rate, high maternal mortality and high unmet need of FP. Furthermore Kisumu District has the highest rate of teenage pregnancy (Tupange, 2010).

3.3. Study Design

The study adopted a cross sectional design, this was done to enable collection of information from a larger population over a short period of time. Data was collected once for a period of three months and analyzed.

3.4. Study Population

The study population and respondents consisted of 1696 women of reproductive age who are aged between 18 and 49 years of age (DHIS, 2012), who are both users and non-users of FPS drawn from Obunga slums.

3.4.1 Inclusion Criteria

The women of age 18 – 49 years, women who are both family planning users and non-users, both married women and unmarried women who provided informed consent to participate in the study.

3.4.2 Exclusion Criteria

Married women who the husbands refused they cannot participate in the study were excluded.

3.5. Sample Size Determination

To get a representative sample size population, a confidence level of 95% and a margin of error of $\pm 5\%$ were used to determine the study size from a population of 1696 women which gave a sample size of 320. Sampling error was taken care of by adding 10% to cater for potential non-response hence the corrected sample size used was 352 (Yamane et al.,1967).

$n = N / (1 + N(e)^2)$ Where n is the sample size

N= total population (1696)

e = level of precision or error margin (0.05)

$n = 1696 / (1 + 1696 * (0.05)^2)$

$= 1696 / (1 + 4.24)$

$= 320$. The new corrected sample size will be **352**

3.6 Sampling Procedure

3.6.1. Proportionate Stratified Random Sampling

This was used to reach women of reproductive age from Obunga. The 5 villages were allowed to participate in the study and were categorized into separate strata of Obunga central 1, Obunga central 2, Obunga Sega Sega, Obunga Kasarani and Obunga Kamakowa. Each stratum was then sampled as an independent sub population and every individual in stratum had the same chance of being randomly selected after every 5th household. In order to reach desired sample size of 352 women, 79 women were randomly selected from Obunga Central 1, 60 women from Obunga Central 2, 72 women from Obunga Sega Sega, 47 women from Obunga Kasarani and 94 women from Obunga Kamakowa. Details as shown in table 3.1.

Table 3.1: Proportion to Population Sample Size

Area	Population Sample Size		
	Total Population	Sample Size	+ 10% (Sampling error)
Obunga Central 1	381	$\frac{381 \times 320}{1696} = 72$	79
Obunga Central 2	294	$\frac{294 \times 320}{1696} = 55$	60
Obunga Sega Sega	344	$\frac{344 \times 320}{1696} = 65$	72
Obunga Kasarani	224	$\frac{224 \times 320}{1696} = 42$	47
Obunga Kamakowa	453	$\frac{453 \times 320}{1696} = 86$	94
	1696	320	352

Source of Information: DHIS 2012

3.7. Data Collection Tools

The researcher used research structured questionnaire to collect quantitative data for a period of two months from women of reproductive age in Obunga.

3.7.1 Data Collection Procedure

The data collection tool was administered by research assistant that was reading the questions to the participant and noting down the response. It was to seek information from the women of reproductive age on socio-demographic characteristics, their knowledge on FP, barriers and utilization of FP. All questionnaires were filled and recorded on a daily basis. Data was cleaned crosschecked, coded and entered into SPSS version 20.

3.8. Data Quality Control

To help ensure that data collected was of acceptable quality, data collection instruments were piloted through a field test of 50 women of reproductive age in Manyatta as Manyatta is also an

informal settlement like Obunga and share similar settings. Training of two field interviewers was done before the field test.

3.7.1 Reliability and Validity

Reliability was determined by use of test re-test method. The questionnaire was administered to the first 25 respondents in Manyatta informal settlement and after two weeks 25 other respondents were interviewed. Reliability coefficient was determined to evaluate the consistency and reliability. A reliability coefficient of 0.07 was accepted for the tool.

3.8. Data Analysis

Frequency tables, graphs and charts were constructed using Microsoft Excel to display the results and output for all variables and were based on frequencies and percentages.

Chi-square was used to test the association between independent variables (socio-demographic variables) and the dependent variables (Knowledge and utilization of contraceptives) and for those having cell count less than five a Fisher's exact test was done and p-value <0.05 was accepted as statistically significant at 95% CI.

3.10. Ethical Considerations

The research proposal, the informed consent forms (Appendix A), the Questionnaires (Appendix B) were reviewed by the Jaramogi Oginga Odinga Teaching and referral Hospital Ethical Review Committee (Appendix C). The relevant government agencies in the area of study such as the Member of County assembly, ward administrator and Chiefs were notified for permission. The informed consent was read to the study participant by the research assistant. The participant had the opportunity to ask questions and receive clarification on anything that they did not understand.

The key ethical issues in this study were: The researcher sought informed consent from the respondent and disclosed as much information as possible regarding the intention of the study, the researcher ensured that the respondent's confidentiality was maintained at all level in time and in data collection, analysis and reporting findings and the researcher informed the respondents of her right to non-participation and withdrawal at any time she felt uncomfortable with the interview.

CHAPTER FOUR: RESULTS

4.1. Introduction

The primary objective of the study was to assess the knowledge, barriers and utilization to family planning use among women of reproductive age in Obunga low informal settlement. The results were presented by displaying the socio-demographic profile of study participant's followed by knowledge, utilization and barriers to FP use.

4.2 Socio-demographic Profile of the Study Respondents

The socio-demographic characteristic of this study is presented in Table 4.1. A total of 350 women of reproductive age (18- 49) participated with distribution of ages 18- 25 being 131 (37.4%), 26-33 being 122 (34.9%), 34-41 being 75 (21.4%) and 42- 49 22 (6.3%). About 199 (56.9%) of women are married, at an average early age of below 20 and majority had their first child at an age 15-18 162 (46.3%). Approximately a third of the participants have 5 to 6 children 129 (35.83%) while 31 (8.6%) had 1 to 2 children, with only 154 (44%) of the study population having enough income to feed the family; this implies that most women have large families that they cannot sustain. The proportion of women who are primary school dropout is the highest at 120 (34.3%) and with tertiary at 4 (1.1%), evidence shows worldwide that women's education level is directly related to contraceptive use and this signifies a low current use of contraceptives at 237 (67.3%). Regarding religion the majority of people surveyed were Protestants 157 (44.9%). The rest of the population was largely catholic 115 (32.9%), Islam 21 (7.7%) and Others which includes Legio Maria, Roho account for 51 (14.6%). Very few women are reported to be in employment at 12 (3.4%) or can access employment due to their low level of education of primary incomplete 120 (34.3%). Majority are unemployed totally 146 (41.7%) and depend on

husbands income and 137 (39.1%) small businesses owners like fish, chips, *chapatti*, samosa vending, selling local brew changaa and second hand clothes.

Table 4.1: Socio-demographic Characteristics of Respondents

Variable	Frequency (n)	Percent (%)
Age		
<i>18-25</i>	131	37.4
<i>26-33</i>	122	34.9
<i>34-41</i>	75	21.4
<i>42-49</i>	22	6.3
Level of Education		
<i>Primary Incomplete</i>	120	34.3
<i>Primary complete</i>	111	31.7
<i>Secondary incomplete</i>	75	21.4
<i>Secondary Complete</i>	40	11.4
<i>Tertiary</i>	4	1.1
Marital status		
<i>Currently married</i>	199	56.9
<i>Divorced /separate</i>	68	19.4
<i>Widow</i>	46	13.1
<i>Single</i>	37	10.6
Religion		
<i>Catholic</i>	115	32.9
<i>Protestant</i>	157	44.9
<i>Islam</i>	51	14.6
<i>Others</i>	27	7.7
Occupation		
<i>Unemployed Totally</i>	146	41.7
<i>Employed</i>	12	3.4
<i>Self-employed.</i>	54	15.4
<i>Small business owner.</i>	137	39.1
Age when she had first child		
<i>15-18</i>	162	46.3
<i>19-22</i>	112	33.1
<i>23-26</i>	27	12.6
<i>27-30</i>	6	5.4
Income		
<i>Yes</i>	154	44
<i>No</i>	196	56
Siblings		
<i>One to two</i>	31	8.6
<i>Three to four</i>	126	35.0
<i>Five to six</i>	129	35.83
<i>seven and above</i>	54	15.0
<i>None or unstated</i>	20	5.56

4.3 Knowledge on Family Planning Methods and Services

In this study knowledge of family planning methods among women who participated in this study is high. Approximately 305 (87.1%) of participants knew of at least a method of family planning. The most commonly mentioned method were condom use 280 (80%), injectable 282 (80.6%), Norplant 250 (71.4%) and Oral Pills 256 (73.1%). While the least known method were male vasectomy 43 (12.3%), tubal ligation 49 (14%), emergency pills 62 (17.7%) and coil 70 (20%) as shown in the Table 4.2.

The most common first source of information about family planning was the health worker 139 (39.7%), while the internet is the least first source of information friends and relatives 57 (16.3%) among the participants in the study. Other sources are mass media 95 (27.1%) and community campaigns by non-governmental bodies 59 (16.9%). Only 110 (31.4%) of the respondent had received formal training and teaching on family planning methods on challenge and side effects likely to expect before making informed choices on FP use.

Table 4.2: Knowledge on Family Planning Methods of Respondents

Knowledge Measurement	Frequency (n)	Percentages (%)
Knowledge on contraceptives		
<i>Yes</i>	305	87.1
<i>No</i>	45	12.9
Types of Contraceptives known		
<i>Oral Pills</i>	256	73.1
<i>Injectable</i>	282	80.6
<i>Intrauterine Coil</i>	70	20
<i>Norplant</i>	250	71.4
<i>Condom</i>	280	80
<i>Emergency pills</i>	62	17.7
<i>Male Vasectomy</i>	43	12.3
<i>Tubal ligation</i>	49	14
<i>Natural Family Planning</i>	207	59.1
Knowledge on Sources of information.		
<i>Hospital/Health Worker</i>	139	39.7
<i>Mass media/Internet</i>	95	27.1
<i>Friends/Relatives</i>	57	16.3
<i>Community Campaigns</i>	59	16.9
Formal teaching/Training on FP		
<i>Yes</i>	110	31.4
<i>No</i>	240	68.6
Knowledge on Benefits of FP		
<i>Reduce risk of HIV</i>	32	9.1
<i>Reduce cancers</i>	38	10.9
<i>Good spacing</i>	72	20.6
<i>Reduce maternal mortality</i>	20	5.7
<i>Reduce incidence of abortion /unwanted pregnancies</i>	136	38.9
<i>Child development</i>	30	8.6
<i>Remain youthful</i>	22	6.3

Hospital or a health worker was a major source across the five villages in Obunga with 38% in Obunga central 1, 33% in Obunga Central 2, 27% in Obunga Kamakowa and 15.5% in Obunga Kasarani. Community campaigns as a source of family planning was high in Obunga Central 1 and Obunga Kamakowa as shown in Figure 4.1

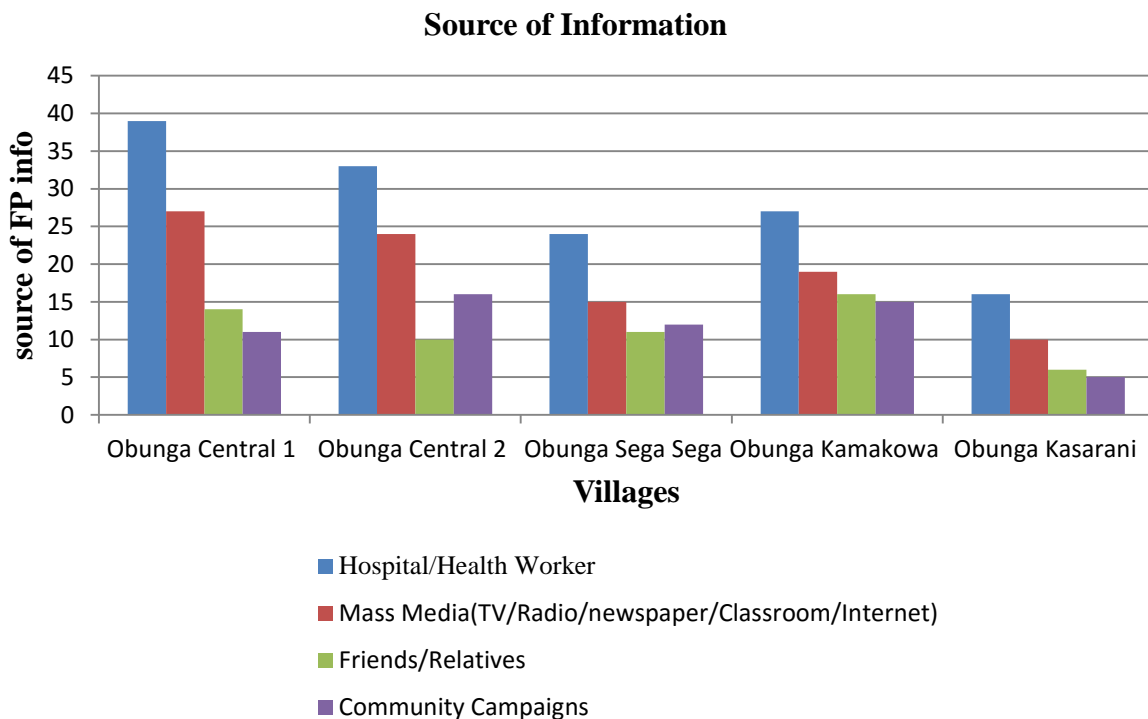


Figure 4.1: Distribution of respondent’s source of knowledge on FP as per the Villages

The study explains in Figure 4.2 that the most perceived benefits known to women of reproductive age in Obunga about family planning is that FP reduces incidences of abortion 136 (38.9%), FP helps in good spacing of children 72 (20.6%) and would help in child development at 30 (8.6%). FP helping in reducing risk of HIV, helps a woman to remain youthful and FP helps in reducing maternal and child mortality were list known to the respondents at 32 (9.1%), 22 (6.3%) and 20 (5.7%) respectively.

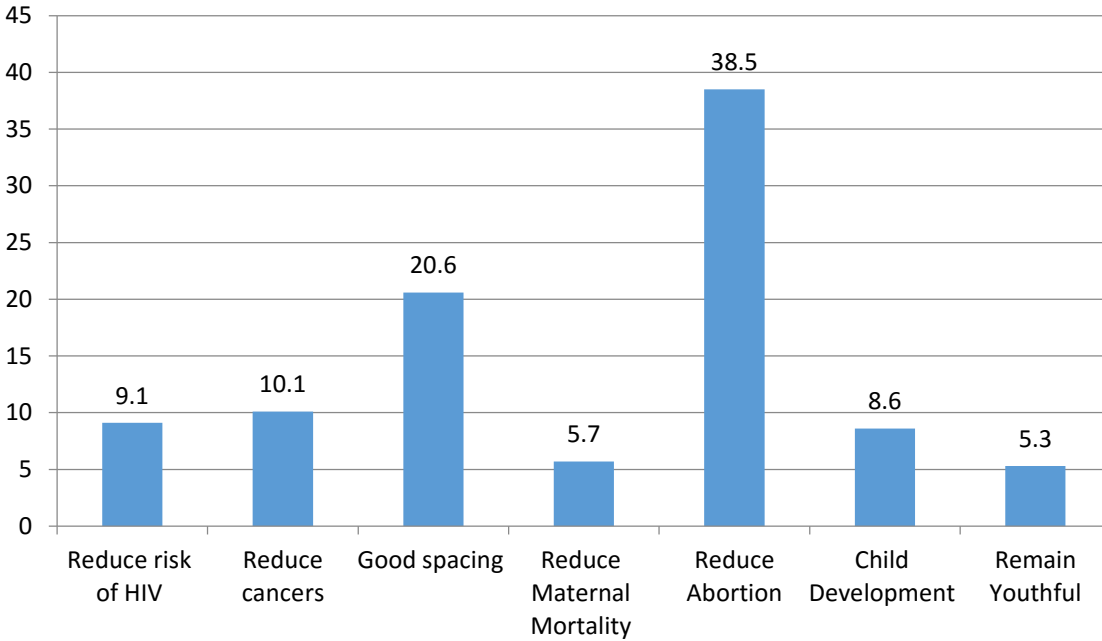


Figure 4.2: Distribution of Respondents Knowledge on Benefits of FP

According to Figure 4.3, incorrect information about contraception is prevalent and is influencing rates of contraceptive use. All respondents with knowledge of at least one contraceptive method were asked a series of questions relating to beliefs around family planning use. The results showed that 112 (23.4 %) believed that family planning causes women to have health problems. Other beliefs are making a woman permanently sterile 51 (11.7%), harming the womb 76 (14.6%), reduce woman's sexual urge (7.8%), causes cancer 54 (12.8%), deformed babies 84 (15.4%) and making women to be promiscuous 63 (14.3%). These suggest that misinformation remains common threat to contraceptive use.

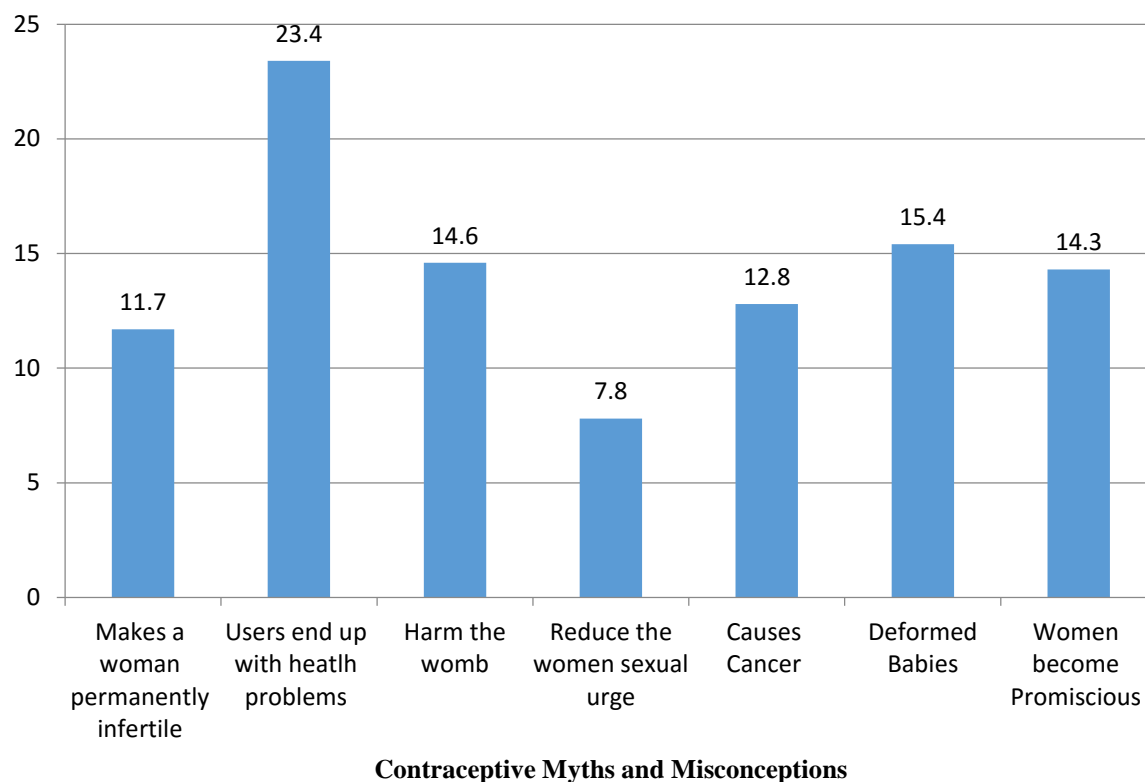


Figure 4.3: Contraceptive Myths and Misconceptions

4.2 Utilization of FP Methods and Services among Women of Reproductive Age

From the current study Table 4.3 shows the utilization of and experience with contraceptive use. Contraceptive use among the survey respondents was 237 (67.7%). The most common contraceptive method among those who reported contraceptives use was injections, 65 (18.6 %) followed closely by nor plant/ implant 59 (16.9%). On the other hand, the least common contraceptive method was female sterilization. A relatively high number of women reported non-use of any family planning methods, there reason for preferring injectable and Norplant was because it saved them the cost and time they would frequent a source of FP method, unlike other family planning method where you need to make a lot of trips to the shop or health facility, another reason for preferring them was because their husbands would not easily detect they are

using the contraceptives. The least used method is tubal ligation 6 (1.7%), male vasectomy and emergency pills at 13 (3.7%). The prime reason for use, among current family planning users are: prevent pregnancy at 98 (28.0%), plan the family 94 (26.9%) and Child development at 66 (18.9%).

Women who had given birth as well as those who were pregnant at the time of the study were asked whether the last birth or current pregnancy was wanted, 111 (31.7%) had their last birth unplanned and 101 (28.9%) wanted by the husband. The unplanned birth was due to FP failure or protection was not used during sex and it happened accidentally. There is also pressure from the husbands to give birth to more children even when the women are not ready to carry a pregnancy.

The prime reason for not using family planning was because of the side effects 82 (23.1%); the side effects include developing cancers as a result of using FP, permanent infertility, deformed babies and the effects such as loss of breath, excessive bleeding, weight gain, perforated uterus, scanty menstruation, back aches, vaginal discharge, dizziness and weight loss. Husband's disapproval 50 (14.3%) was also a major reason for not using FP, most men use of family planning as going against the bible that says 'go ye and fill the world' and they also have feelings that FP methods deform the woman uterus and bring permanent sterility. Other reasons that stop women from using FP is Religious objection 51 (14.6%), FP failure or risk of becoming pregnant while on an FP (12.8%) and medical conditions 32 (11.7%). Only half the women 175 (50%) confirmed not negotiating for condom use and protection while having sex with the high prevalence of HIV and AIDS and with 39.3% confirming being positive. The reason for not

using protection was because most of the women had tested positive, the husband did not approve, the respondent felt she was faithful to the husband and did not see the need of condom use and most of them also felt that they were already on other FP methods and prevented the occurrence of a pregnancy. About 15 (4.3%) of the respondents still say that money is a challenge to accessing family planning method like Tubal ligation, copper coil, and male vasectomy for their partners, Norplant and injectable. Religion was seen as a big challenge to contraceptive use. About 51 (41.1%) respondent that religion is a hindrance to their contraceptive use. Catholic was the most predominant religion that does not promote contraceptive use, other religion that does not approve of contraceptive use are the Legio Maria and Roho.

Table 4.3: Utilization of Contraceptives in Obunga.

Variables	Frequency (n)	Percentage (%)
Currently Using contraceptive	237	67.7
Method currently used		
<i>Oral pills</i>	39	11.1
<i>Injectable</i>	65	18.6
<i>Coil</i>	16	4.6
<i>Norplant</i>	59	16.9
<i>Condom</i>	24	6.9
<i>Emergency pills</i>	13	3.7
<i>Male Vasectomy</i>	6	1.7
<i>Tubal ligation</i>	9	3.7
<i>Natural family planning</i>	6	1.7
Prime reason of using Family Planning		
<i>Prevent unwanted pregnancy</i>	98	28.0
<i>Prevent STI, HIV/AIDS</i>	24	6.9
<i>Plan our family.</i>	94	26.9
<i>Child Development</i>	66	18.9
<i>Good spacing</i>	68	19.4
Discontinued Family planning		
<i>Yes</i>	221	63.1
<i>No</i>	129	36.9
Reason for Discontinuing FP/not using FP		
<i>Not sexually active to get pregnant</i>	9	2.6
<i>Medical condition/complication</i>	32	9.1
<i>Religious objection</i>	51	14.6
<i>Wanted a child</i>	50	14.3
<i>Side effects</i>	82	23.4
<i>Husband's disapproval</i>	54	15.4
<i>Cost</i>	15	4.3
<i>Concerns about unfaithfulness</i>	12	3.4
<i>FP failure.</i>	18	5.1
<i>Already/ currently pregnant.</i>	27	7.7
Use of protection when having sex		
<i>Yes</i>	147	41.4
<i>No</i>	175	50
<i>Sometimes</i>	30	8.6
Current Birth/current pregnancy Planning		
<i>Wanted by both couples</i>	91	26.0
<i>Wanted by respondent</i>	47	13.4
<i>Wanted by husband</i>	101	28.9
<i>Unplanned</i>	111	31.7

About 221 (63.1%) of the respondents have ever discontinued family planning use at the time of the study due to husbands disapproval, 54 (15.4%) wanted a child and fear or experience of a side effect either on a friend or individual effect. The most commonly discontinued contraceptive

is oral pills due to the side effects and FP failure and risk of being pregnant while on oral pills, emergency pills due to complicated instructions.

Discontinued Family Planning

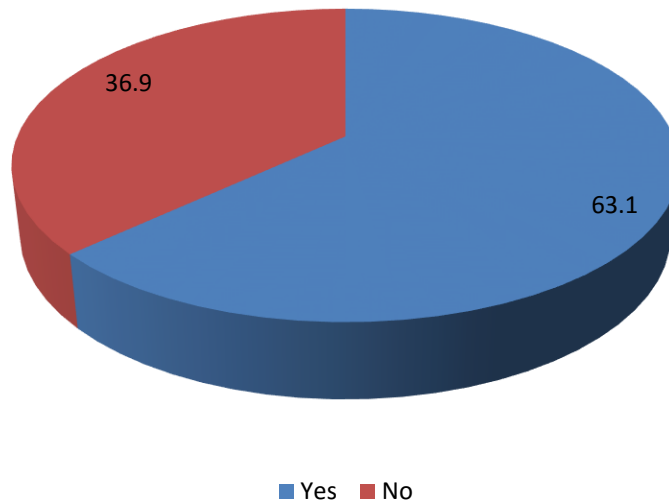


Figure 4.4: Proportion of Respondents who have discontinued Family Planning

Among the villages in Obunga, Obunga Central 2 had the largest share of women 283 (73%) who wanted their pregnancies at the time the pregnancy occurred and consented by both partners. Obunga Central 1 had the largest proportion of unplanned pregnancies as nearly one out of every five births was reported as unplanned at 220 (60%). They wanted the child later not at the time they gave birth or are carrying the pregnancies. This indicates a high need for family planning services for women of Obunga central in Figure 4.5

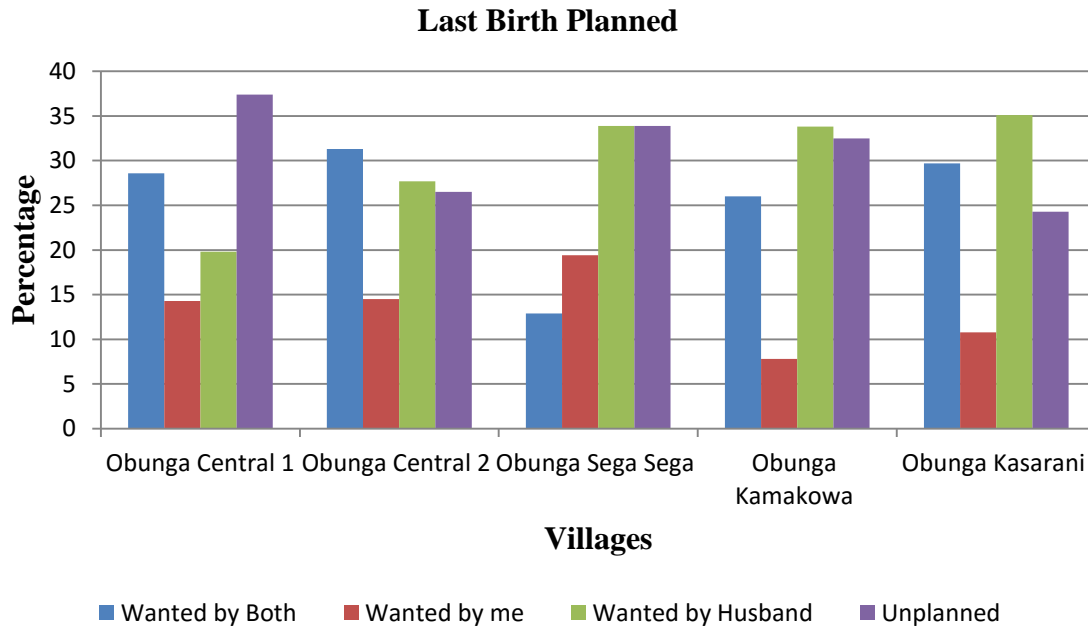


Figure 4.5: Distribution of respondents who planned their pregnancies by village

The study showed in Figure 4.6 that easy accessibility of family planning services among the survey respondents was at 84.7%. Among those who easily accessed the services, 56.8% reported having accessed the services from hospital because most of the services were free, cheap and affordable; some also find the hospital convenient because the health providers are trained. About 14.8% accessed the services by purchasing from a kiosk and 21.9% accessed the services from the pharmacy or chemist.

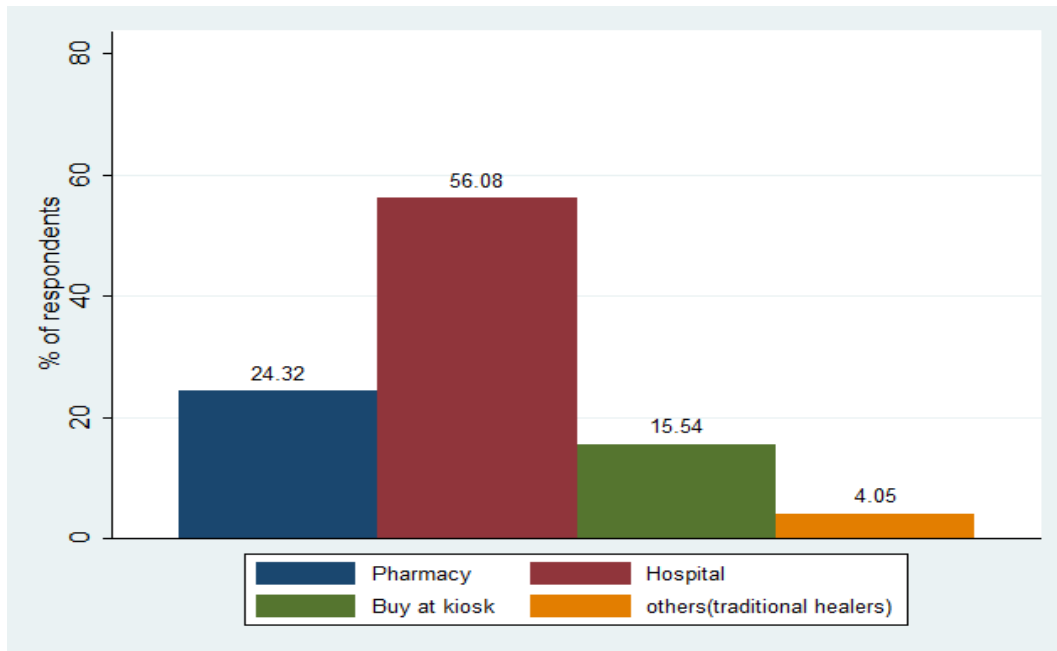


Figure 4.6: Distribution of respondents Place of Accessing FP

The Figure 4.7 shows that the respondents are not using contraceptives majorly because of side effects 82 (23.4%). The side effects include excessive bleeding, backache, dizziness, weight gain and scanty menstruation. About 54 (15.4%) said husband disapproval is a major reason for not using family planning and some were even battered if the husband realized she was an FP, Cost 15 (4.3%) was a reason for not being able to access family planning methods like male vasectomy and tubal ligation which was over Shs. 3000 and is not affordable to them. medical conditions 32 (9.1%) like hypertensiveness, HIV was a hindrance to access some FP methods.

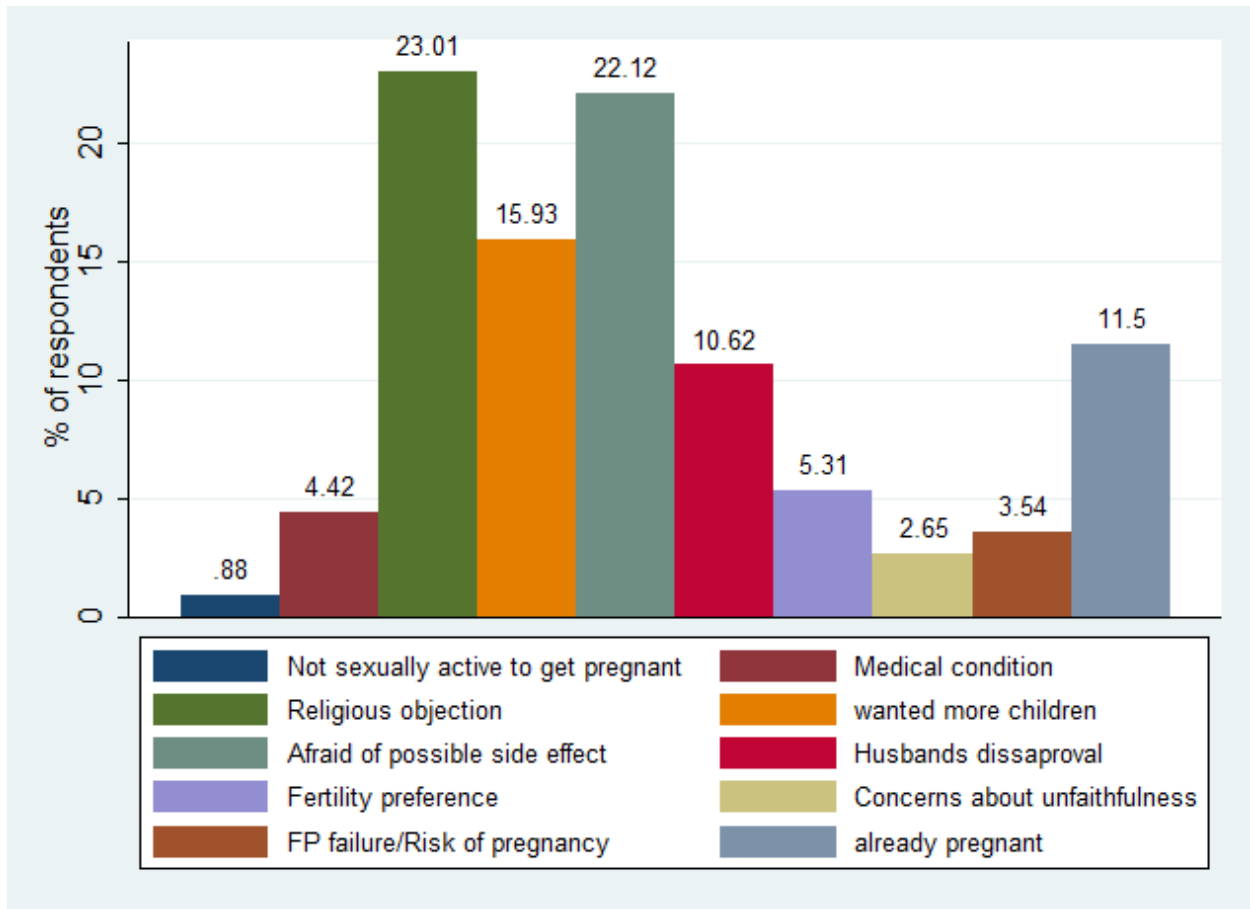


Figure: 4.7: Distribution of Respondents Reason for Discontinuing FP

4.5 Barriers to Contraceptive use in Obunga

As shown in Table 4.4, about three quarter 296 (84.3%) of respondents can easily access family planning services and contraceptives. The services are always available to most of them. The services are close to most of them 109 (31.3%) is a walking distance either from a local health center or government health center. Only 55 (15.7%) of the respondent said the service center was in a place outside their place of residence. The facility most accessed by the respondents is a government health facility 168 (47.9%) which included Jaramogi Oginga Teaching and Referral Hospital and Kisumu County Hospital, it is a challenge though to most of the respondents due to lack of transport to reach the facilities, 79 (22.6%) accessed local health centers such as St Jude’s clinic, St Vincent and AP line health clinic but it recorded low access because most of the local

health centers did not have most of the contraceptives, they charged most of the FP services and most of the health providers were not trained personnel. Reproductive health clinic accessed by 44 (12.5%) of the respondent was very expensive and not affordable to most FP users.

HIV is a major challenge to contraceptive use but more study need to be done in this area. The prevalence of HIV still high, 138 (39.3%) of respondents are positive. Out of the (n=138) who are positive, 89 (25.4%) are on 2nd line medication while 18.2% are on 1st line medication. 93 (67.6%) of those medication attested that their HIV status has influence on their choice of Contraceptive use because they fear the side effects of drug interaction and most of them said their status influenced their choice of becoming pregnant so did not see the need of contraceptive use. About 220 (93.1%) of current users have experienced a side effect and this is a major challenge to continuous use of contraceptive. The side effects experienced by the respondents include vomiting, headache, excessive bleeding, weight gain, dizziness, scanty menstruation, back ache, weight loss, painful periods, vaginal discharge, and perforation of the uterus and loss of breath.

Husband disapproval is another major barrier to contraceptive use in Obunga, out of the 350 respondents 184 (52.4%) respondents has their partners aware that they were using family planning. About 166 (47.3%) of the respondents were using FP behind their husbands wish and knowledge. About 165 (47.1%) of the respondents have discussed with their partner about family planning, some reasons given are fear of losing the husband and male dominance in the family.

Table 4.4: Barriers to FP use among women of Reproductive age in Obunga

Variable	Frequency(n)	Percentage(%)
Easy access of services		
<i>Yes</i>	296	84.3
<i>No</i>	54	15.4
Place of access of FP		
<i>Pharmacy/chemist</i>	77	21.9
<i>Hospital/Health center</i>	189	53.8
<i>Buy at a kiosk</i>	52	14.8
<i>Others(Traditional healers, religious)</i>	32	9.1
Facility of access of FP services		
<i>Government health facility</i>	168	47.9
<i>Private health clinic</i>	59	16.8
<i>Local health center</i>	79	22.6
<i>Reproductive health clinic</i>	44	12.5
Closest FP access point		
<i>Walking distance</i>	109	31.1
<i>Needs transport affordable</i>	87	24.8
<i>Needs transport not affordable</i>	99	28.2
<i>Outside place of residence</i>	55	15.7
Denied /turned back for FP services		
<i>Yes</i>	130	37
<i>No</i>	220	62.7
Money		
<i>Yes</i>	94	26.8
<i>No</i>	255	72.6
Religion		
<i>Yes</i>	144	41.0
<i>No</i>	206	58.7
Partner aware of FP use		
<i>Yes</i>	184	52.4
<i>No</i>	166	47.3
Partner discussion of FP choice /issues		
<i>Yes</i>	165	47.1
<i>No</i>	185	52.7
Partner consents to FP use		
<i>Approves</i>	118	33.7
<i>Disapproves</i>	161	45.1
<i>Unsure</i>	70	19.9
Counseling by health provider on FP choice		
<i>Yes</i>	192	54.9
<i>No</i>	158	45.1
HIV status		
<i>Positive</i>	138	39.3
<i>Negative</i>	118	33.6
<i>Don't Know</i>	94	26.8
HIV positive medication		
<i>Haart</i>	89	25.4
<i>Seprine and multivitamin.</i>	64	18.2
Influence on FP use		
<i>Yes</i>	93	67.6
<i>No</i>	45	32.4
Side effects		
<i>Yes</i>	220	93.1
<i>No</i>	17	6.9

Incorrect information about contraception is prevalent and is influencing rates of contraceptive use. All respondents with knowledge of at least one contraceptive method were asked a series of questions relating to beliefs around family planning use. The results show high levels of misinformation around family planning use in all villages. In Obunga Kasarani 57 % of women surveyed believe that use of a contraceptive injection could make a woman permanently infertile. A majority of female respondents in all five villages believed seven out of the eight myths presented. Regarding the association between contraception and female promiscuity (women who use may become promiscuous), between 18 % in Obunga segasega and 41% in Obunga Kamakowa of women believed the statement to be true. These suggest that misinformation remains common threat to contraceptive use.

Table 4.5: Contraceptive Myths and misconceptions in Obunga.

Variables	Obunga Central1	Obunga Central 2	Obunga Sega Sega	Kamakowa	Kasarani
Make a woman infertile	53.7%	54.1%	93.3%	46.1%	57.2%
Health Problems	75.4%	77.5%	73.6%	82.5%	78.6%
Can harm your womb	62.4%	71.9%	53.1%	63.4%	70.1%
Reduce women's sexual urge	63.1%	55.9%	59.0%	48.4%	57.7%
Can cause cancer	55.6%	68.2%	40.8%	70.6%	60.8%
Can give you deformed babies	63.9%	63.3%	62.6%	61.1%	66.8%
Are dangerous to your health	72.8%	76.9%	64.2%	82.5%	70.9%

4.6: Association between Socio-demographic Characteristic and FP

4.6.1 Association between socio-demographic and economic characteristics and Knowledge on contraceptives

There was a relationship between education and Knowledge on FP ($p \leq 0.0461$). There was also statistical significance between education level and knowledge on contraceptive among women of reproductive age in Obunga respondents as the respondents who completed tertiary education were more likely to use FP OR= 1.91, 95% CI [0.27-2.95], $p=0.00461$ those who did not complete primary education OR=2.27, 95% CI [0.94-5.48], $p=0.86$. The respondents of ages 26-33 years were 0.86 times as likely to have knowledge on contraceptives as those of 18-25 years (OR= 0.86, 95% CI= [0.42 - 1.76], $p=0.6830$), ages 34-41 years were 1.45 times as likely to have knowledge on contraceptives as those of 18-25 years (OR= 1.45, 95% CI= [0.57 - 3.67], $p=0.4350$) and ages 42-49 years were 0.94 times as likely to have knowledge. However, there were no statistical significance at $p \leq 0.05$ between age, religion, marital status, occupation, age at first birth and income with knowledge on contraceptive among the respondents as the $p \geq 0.05$ as shown in Table 4.6.

4.6.2 Association between Socio-Demographic and Economic Characteristics and

Utilization of Contraceptive

There was statistical significance between age at first birth and utilization of contraceptives ($p \leq 0.0001$) among women of reproductive age in Obunga as respondents of ages 26-33 years were 1.57 times likely to use contraceptives as those of 18-25 years (OR= 1.57, 95% CI= [0.92 - 2.70], $p=0.0990$), ages 34-41 years were 0.99 times as likely to use contraceptives as those of 18-25 years (OR= 0.99, 95% CI= [0.55-1.80], $p=0.9860$) and ages 42-49 years were 1.20 times

as likely to have use contraceptives as those of 18-25 years (OR= 1.20, 95% CI= [0.46 - 3.15], p=0.7130). The respondents who first had their child at age 26-33 were more likely to use FP OR=1.81, 95% CI [1.07-3.07], p=0.0270 than those of age 42-49 OR 2.26, 95 % CI [0.72-7.14], p=0.001. However on testing the association between socio-demographic information and utilization of contraceptives among women of reproductive age in Obunga, there was no statistical significance between age, level of education, religion, marital status, occupation and enough income.

Table 4.6: Relationship between Socio-demographic characteristics and Knowledge and utilization of FP among women of reproductive age

Socio-demographic factors	N (%)	<i>Knowledge on contraceptive</i>			<i>Contraceptive Utilization</i>		
		Yes	No	p-value	Yes	No	p-value
Age in categories							
<i>18-25 yrs.</i>	131(37.43)	52(39.69)	79(60.31)	0.7964	84(64.12)	47(35.88)	0.3395
<i>26-33 yrs.</i>	122(34.86)	48(39.34)	74(60.66)		90(73.77)	32(26.23)	
<i>34-41 yrs.</i>	75(21.43)	26(34.67)	49(65.33)		48(64.00)	27(36.00)	
<i>42-49 yrs.</i>	22 (6.29)	10(45.45)	12(54.55)		15(68.18)	7(31.82)	
Level of education							
<i>Primary Incomplete</i>	113(32.29)	40(35.40)	73(64.60)	0.0461	68(60.18)	45(39.82)	0.0932
<i>Primary complete</i>	104(29.71)	35(33.65)	69(66.35)		76(73.08)	28(26.92)	
<i>Secondary Incomplete</i>	74(21.14)	37(50.00)	37(50.00)		47(63.51)	27(36.49)	
<i>Secondary complete</i>	36(10.29)	11(30.56)	25(69.44)		27(75.00)	9(25.00)	
<i>Tertiary</i>	23(6.57)	13(56.52)	10(43.48)		19(82.61)	4(17.39)	
Religion							
<i>Catholic</i>	115(32.86)	47(40.87)	68(59.13)	0.5807	74(64.35)	41(35.65)	0.3795
<i>Protestants</i>	157(44.86)	64(40.76)	93(59.24)		104(66.24)	53(33.76)	
<i>Islam</i>	51(14.57)	17(33.33)	34(66.67)		38(74.51)	13(25.49)	
<i>Others</i>	27(7.71)	8(29.63)	19(70.37)		21(77.78)	6(22.22)	
Marital status							
<i>Currently Married</i>	199(56.86)	73(36.68)	126(63.32)	0.5851	137(68.84)	62(31.16)	0.7193
<i>Divorced/Separated</i>	68(19.43)	27(39.71)	41(60.29)		46(67.65)	22(32.35)	
<i>Widow</i>	46(13.14)	18(39.13)	28(60.87)		32(69.57)	14(30.43)	
<i>Single</i>	37(10.57)	18(48.65)	19(51.35)		22(59.46)	15(40.54)	
Occupation							
<i>Unemployed Totally</i>	146(41.71)	60(41.10)	86(58.90)	0.7783	98(67.12)	48(32.88)	0.3354
<i>Employed</i>	12(3.43)	3(25.00)	9(75.00)		5(41.67)	7(58.33)	
<i>Self Employed</i>	54(15.43)	19(35.19)	35(64.81)		37(68.52)	17(31.48)	
<i>Small Business Owner</i>	137(39.14)	54(39.42)	83(60.58)		96(70.07)	41(29.93)	
<i>Others</i>	1(0.29)	0(0.00)	1(100.00)		1(100.00)	0(0.00)	
Age at first birth							
<i>15-18</i>	162(46.29)	64(39.51)	98(60.49)	0.8573	101(62.35)	61(37.65)	<0.0001
<i>19-22</i>	116(33.14)	44(37.93)	72(62.07)		87(75.00)	29(25.00)	
<i>23-26</i>	44(12.57)	19(43.18)	25(56.82)		33(75.00)	11.(25.00)	
<i>27-30</i>	19(5.43)	7(36.84)	12(63.16)		15(78.95)	4(21.05)	
<i>31+</i>	9(2.5)	2(22.22)	7(77.78)		1(11.11)	8(88.89)	
Enough income							
<i>Yes</i>	154(44.00)	61(39.61)	93(60.39)		105(68.18)	48(31.82)	0.8683
<i>No</i>	196(56.00)	75(38.27)	121(61.73)		132(67.35)	64(32.65)	

Table 4.7: Association between socio demographic characteristic and Knowledge and utilization of FP

<i>Outcome - Knowledge on contraceptive and Utilization of FP</i>			
Predictor	N (%)	Bivariable (Knowledge) OR[95% CI]	Bivariable Utilization of FP OR[95% CI]
Age in categories			
<i>18-25 yrs.</i>	131(37.43)	ref	ref
<i>26-33 yrs.</i>	122(34.86)	0.86[0.42 - 1.76]	1.57[0.92 - 2.70]
<i>34-41 yrs.</i>	75(21.43)	1.45[0.57 - 3.67]	0.99[0.55-1.80]
<i>42-49 yrs.</i>	22 (6.29)	0.94[0.25 - 3.54]	1.20[0.46 - 3.15]
Level of education			
<i>Primary Incomplete</i>	113(32.29)	ref	ref
<i>Primary complete</i>	104(29.71)	2.27[0.94 - 5.48]	1.80[1.01 - 3.19]
<i>Secondary Incomplete</i>	74(21.14)	1.09[0.48 - 2.45]	1.15[0.63 - 2.11]
<i>Secondary complete</i>	36(10.29)	1.52[0.48 - 4.81]	1.99[0.85 - 4.61]
<i>Tertiary</i>	23(6.57)	1.91[0.27 - 2.96]	3.14[1.00 - 9.84]
religion			
<i>Catholic</i>	115(32.86)	ref	ref
<i>Protestants</i>	157(44.86)	0.59[0.27 - 1.25]	1.09[0.6 - 1.80]
<i>Islam</i>	51(14.57)	0.66[0.24 - 1.83]	1.62[0.78 - 3.38]
<i>Others</i>	27(7.71)	0.85[0.22 - 3.27]	1.94[0.72 - 5.19]
Marital status			
<i>Currently Married</i>	199(56.86)	ref	ref
<i>Divorced/Separated</i>	68(19.43)	1.81[0.66 - 4.93]	0.95[0.52 - 1.71]
<i>Widow</i>	46(13.14)	0.46[0.21 - 1.01]	1.03[0.52 - 2.07]
<i>Single</i>	37(10.57)	1.19[0.39 - 3.63]	0.66[0.32 - 1.37]
Occupation			
<i>Unemployed Totally</i>	146(41.71)	ref	ref
<i>Employed</i>	12(3.43)	0.37[0.09 - 1.51]	0.35[0.11 - 1.16]
<i>Self Employed</i>	54(15.43)	0.62[0.25 - 1.49]	1.07[0.55 - 2.08]
<i>Small Business Owner</i>	137(39.14)	0.87[0.42 - 1.80]	1.15[0.69 - 1.90]
<i>Others</i>	1(0.29)	-	-
Age at first birth			
<i>18-25</i>	162(46.29)	ref	
<i>26-33</i>	116(33.14)	0.76[0.39 - 1.49]	1.81[1.07 - 3.07]
<i>34-41</i>	44(12.57)	2.04[0.58 - 7.17]	1.81[0.85 - 3.85]
<i>42-49</i>	19(5.43)	2.68[0.34 - 21.14]	2.26[0.72 - 7.14]
Enough income			
<i>Yes</i>	154(44.00)	ref	ref
<i>No</i>	196(56.00)	1.39[0.74 - 2.60]	0.96[0.61 - 1.51]

**significant predictors at 95% CI

CHAPTER FIVE: DISCUSSION

5.1 Introduction

The present study was planned and conducted to assess knowledge, utilization and barriers to FP methods and services among women of reproductive age in Obunga. The discussion was guided by the specific objectives as outlined below.

5.2. Knowledge on Family Planning Methods and Services

Knowledge of family planning is considered the first stage toward the adoption of a contraceptive method. The knowledge on of family planning in this study was high and health workers were the main sources of information on FP. It's in agreement with findings from the Lesotho demographic health survey of 2004 (LDHS, 2004) which showed that about 97% of women knew of at least one method of contraceptive. This is consistent with Kenyan women knowledge of FP that is universal at 95% (KNBS ICF Macro, 2009). A study in Zambia revealed that a large number of the respondents (90%) had heard about modern contraceptive methods mainly from a health worker. This study in Zambia also found that information about family planning was mostly obtained through healthcare staff (67.4%); followed by TV (50.7%) and then via friends and radio (33% to 35% respectively) (USAID, 2007).The most commonly known methods of contraceptive in this study are condom (80.6%), oral pills (73.1%), injectable (80.6%) and nor plant (71.4%). Male vasectomy (12.3%), Copper coil (20%), Tubal ligation (14%) and emergency pills (17.7%) are least known methods this is similar to a study in Nigeria where the most popularly known and used method of FP among the respondents was a male condom (83%) followed by a pill (70%) (Garenne *et a.l*, 2000).

Knowledge on FP was generally high as respondents reported to be aware or have heard of FP methods from different source but this did not translate into utilization of FP methods, hospital was the common source of information on FP as they easily accessed FP information when attending antenatal clinic, taking children for medication at the health facility. The few women having knowledge on emergency pills is due to the fact that most of the respondents are married and want to use long term methods, emergency pill is also a new product in the market, hence few women know they have about its effectiveness and its expensive to acquire and maintain consistent use. For male vasectomy, it is due to the cost which is high for the respondents willing to use it, limited health facilities conducting the male vasectomy. Tubal ligation and copper coil was not known to respondents most probably because it's expensive and women did not know where to get the services.

5.3. Barriers to Family Planning Services

About two third of respondents (84.3%) can easily access FPS, the most commonly used facilities are the hospital/health centers (53.8 %), pharmacy stores (21.9%) and kiosk (9.1%). In Ethiopia inaccessibility to contraceptives was found to be a major cause of unwanted pregnancy (Senbetoet *al.*, 2005). This is inconsistent as for this study accessibility was not barrier affecting utilization as government health facility which is Jaramogi Teaching Hospital and Kisumu district hospital was mostly preferred and accessed by the respondents because FPS were free, there are a variety of contraceptive methods available and there are skilled healthcare providers than in reproductive health clinics (Mariestopes and Family health Options Kenya) accessed and

private health clinics (Lumumba, KMet and Nightingale) accessed by which are equipped with non-skilled health care providers and expensive.

A few numbers of respondents have encountered some difficulty while seeking FPS, 37.6% have been denied access to services at one time or the other. These complaints have been found to be a major barrier to access and use of family planning services among the study participants in Ethiopia too (Garenne *et al.*, 2000). The women were being turned away and denied FP services because they were too young to access family planning services or were not married and other health workers offered FP services in the morning hours or in particular days of the week which was not convenient for some women.

About one in ten (52.9%) never discussed the issue of family planning with their husbands due to fear of rejection, losing the partner or partner unwilling to engage in such discussion. This in comparison to a study done in Baba dogo and Chwele in Bungoma noted that one important barrier to contraceptive use was identified in couples wishing to space or limit further births (NCPD and UNFPA, 2013). Barriers to FP use included lack of agreement on contraceptive use and on reproductive intentions; husband's attitude on his role as a decision maker; perceived undesirable side effects, distribution and infant mortality; negative traditional practices and desires such as naming relatives, and preference for sons as security in old age (Karanja, 2010). This highlights the need for communication in issue relating to sexuality, women empowerment on their reproductive rights and male involvement in family planning services. Money has not been a barrier to family planning use for majority of the participants in this study and it is contrasting with a study in Zambia where only 26.8% of respondents that reported money is a

barrier to contraceptive use (Ohene and Akoto, 2008). This is due to factors such as transport required to reach the health facility which hinder them from accessing family planning services and those seeking family planning methods like male vasectomy, tubal ligation and copper coil complained that it was not affordable to them.

5.4 Utilization of Family Planning Services

The utilization rate in this study was 39.1%. The findings of other authors Agwanda and Kimani, (2008) report contraceptive utilization rate of 35% in Obunga. This finding is consistent with other studies as the utilization rate has slightly gone up from what KDHS 2014 identified as 30% and Agwanda 35%. They attribute the utilization to be going up because of the numerous door to door campaigns being done by the Government of Kenya and other Non-Governmental Organizations like Marie stopes and Tupange. Injectable (18.6%) and Norplant (16.9%) is the most FP method used by participants in this study this is inconsistent with a study in Zambia where the most used method of contraceptive among the respondents was a male condom followed by a pill. These contraceptive methods were popular among the respondents because the methods are readily available and accessible in the government health facilities than other methods of family planning such as injections. In addition, condom use is currently being promoted by the HIV and AIDS program as one of the methods of prevention. The high proportion of injectable and Norplant use as a contraceptive is due to the fact that after using these two contraceptives you do not need to frequent the health facility and it saves on their time and money and also their husbands will not easily recognize that they are on the contraceptives.

Over half of non-users in Nigeria are sexually active (73.1%) but not using FP methods because they are not doing so because of the fear of side effect (Oye-Adeniran *et al.*, 2006). This is consistent with the study as respondents (63.1%) have discontinued a form of contraceptive method in the past because of side effects. This reflects that despite the high sensitization on FP use, side effects is a threat to continual discontinuation of FP methods.

5.5. Association between Socio-Demographic Characteristic and FP Knowledge and Utilization by Women of Reproductive age in Obunga Slums

A study in Bangladesh showed that adolescent women who had secondary education and higher was found to 2.5 times practice contraception than those who had no education and had shown that 46% of women with no formal education were currently using a method compared with 51% of women with either incomplete or complete primary school and 56% of those with at least some secondary education (Garenne *et al.*, 2000). It is consistent with this study as on testing the association between the socio-demographic characteristics and the knowledge on contraceptives, there was no association except for the level of education that was statistically significant at $p=0.0461$. This indicates that age of the women, religion, marital status, occupation, age at first birth and if they have enough income does not affect or determine the knowledge one has on the contraceptives. But whether one went to school or not is associated with the knowledge one has on contraceptives as sexuality education in our Kenyan curriculum starts at secondary level which impacts knowledge on FP and this explains why primary level don't have knowledge on FP.

In Uganda, the median age at first marriage is 17.9 years

and young women are expected to prove their fertility soon after marriage (ICF International, 2012). Early marriage exposes these women to frequent and unprotected sexual intercourse, which can lead to early and risky first birth. In addition, these women have a limited chance to space their births, since contraceptive use within marriage is not expected (UNFPA, 2012). This in comparison with this study as age when one had first child affected how and when one will use an FP.

CHAPTER SIX: CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

The previous chapter has presented all the findings made in contraceptive utilization in Obunga slums. It is evident that a number of gaps exist regarding contraceptive utilization in the slums. This chapter therefore presents conclusion and recommendations regarding the different aspects of knowledge, barriers and utilization to family planning methods and services that need to be addressed so as to promote proper reproductive health and help achieve the millennium development goals.

6.2 Conclusions

1. The study concludes that knowledge on FP is high. Women of reproductive age in Obunga have knowledge on some of the available options of FP. Though knowledge was high not all FP methods were known to the women, knowledge on how some FP methods works was not known to the women. Knowledge on negative effects of FP like the side effects and medical complications was high among study respondents than knowledge on the benefits that come with use of FP methods and services consistently.
2. The study showed that FP utilization was poor in Obunga amidst the high reported knowledge, Oral pills, Injectable and Norplant was the most commonly used method. Emergency pills, male vasectomy and tubal ligation were not commonly used as they were expensive and not easily available. The national FP utilization rate of 50% has not been attained by women of reproductive age in Obunga.

3. The study revealed that all women were in favor of practicing FP; however they stated the main barrier to contraceptive use apart from the ones documented was lack of factual information on different FP methods which was misleading women in choosing FP method to use. Obunga Kasarani was adversely reported to not using FP use, as the village is not normally reached by health personnel and campaigns to access FP. Cost and accessibility was not a major barrier among women of Obunga as Obunga is located near major health facilities in Kisumu County.

4. The study concludes that level of education was key consistent use of FP. It revealed that those with tertiary and secondary education were likely to have knowledge on FP which translates to use FP than those with primary level and age when one had her first child also determined consistent use of FP as those who had their first child from age 24 and below were not likely to plan the families and space the children.

6.3 Recommendations

Based on this study the following are recommended for action.

1. The study has revealed that there is knowledge on injectable, pills, condoms and Norplant. It is recommended that active sensitization to be carried out through forums for relaying comprehensive information on FP methods like male vasectomy, emergency pills and copper coil that women of reproductive age in Obunga seem to have less knowledge. This should include detailed information on knowledge on how the FP method works, expected side effects when using that FP method and the costs involved.
2. The study also established, the high knowledge women are having on FP in Obunga is not translating to utilization as there is low level of FP utilization in Obunga. It is recommended that programmes put to address the barriers identified. Women should be lined to health facilities offering FP as health centers around are not offering FP. Government agencies should also ensure that local health centers have stocks of FP products and the health personnel at those health centers have adequate training on reproductive health.
3. The findings from the study indicate that side effects and partner's disapproval was a major barrier to FP use. The study therefore recommends that men should be incorporated in all sexual and reproductive programmes as men are the key decision makers in women's life and play a major role in influencing the uptake of FP methods and services. Intensive community awareness and door to door advocacy should be done in Obunga in all the five villages on available FP methods, expected side effects when using and when you stop using, myths and misconceptions on FP by service providers and all the relevant stakeholders.

4. Socio-demographic characteristics that are associated with contraceptive use in Obunga should be considered in designing of programmatic services of reproductive health that address them.

6.4 Further Areas of Research.

The study focused on FP use among women of reproductive age as they are the major users of FP methods. The researcher recommends that a comparative study on FP use be carried on men of reproductive age as they majorly influence contraceptive use

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APPENDICES

**APPENDIX A: INFORMED CONSENT FORM
INFORMED CONSENT FORM**

Introduction

My name is..... a second year student at Maseno University, School of Public Health and Community Development. I will be conducting a research as part of the requirements of the Masters course. The aim of this study is to assess knowledge, utilization and barriers to family planning methods and services among women (18-49) in Obunga slum, Kisumu County, Kenya. In order to better understand the existing situation in the field, am commissioned to carry out this survey.

BASIS OF PARTICIPATION: I would like to ask you a few questions concerning the above topic. To be in this study, you must be a resident of Obunga slums. Before you decide if you want to be in this research, you should know more about the benefits and the possible risks of being involved in this study.

RISKS TO YOU: There are no major risks expected from your participation, however, as I administer the questionnaire to you there may be questions uncomfortable to you.

BENEFITS TO YOU: The information from this study will strictly be for learning purposes but your participation in this study will not have a direct benefit to you.

CONFIDENTIALITY AND ANONYMITY: The information you share with us will remain strictly confidential and the information will be used only for the purpose of the study and that the confidentiality will be protected. The content will only be discussed with the research supervisor and committee members. Anonymity will be protected by not recording your name. Your name will not be used when presenting results and report.

I have read / had this form explained to me. I understand the reasons for the study and my questions have been answered. I know the risks and benefits. I choose to enroll in this study of my own free will.

Signature of Interviewer.....Date.....Contact: 0720110382

APPENDIX B: RESEARCH STRUCTURED QUESTIONNAIRE

STUDY TITLE: Assessment of knowledge, utilization and barriers to family planning services among women of reproductive age in Obunga informal settlement, Kisumu County, Kenya

ID CODE: **Date of Interview:**

A. SOCIAL AND DEMOGRAPHIC CHARACTERISTICS

- 1. Age
 - 1. 18 - 25
 - 2. 26 – 33 years
 - 3. 34– 41 years
 - 4. 42 – 49 Years
- 2. Level of Education
 - 1. None
 - 2. Primary Incomplete
 - 3. Primary Complete
 - 4. Secondary Incomplete
 - 5. Secondary complete
 - 6. Tertiary
- 3 Religion
 - 1. Catholic
 - 2. Protestants
 - 3. Islam
 - 4. Others: _____
- 4 Occupation
 - 1. Unemployed Totally
 - 2. Employed
 - 3. Self Employed
 - 4. Small Business Owner
 - 5. Others Specify _____
- 5 What is your marital Status?
 - 1. Currently Married
 - 2. Divorced/Separated
 - 3. Widow
 - 4. Singe
 - a. If the answer to the above questions is Married, how long have you been married
 - 1. Less than a year
 - 2. Between 2 to 5 years
 - 3. More than 5 Years
 - b. How old were you when you had you got married _____
 - c. How old were you when you had your first child.....
- 6 Do you have children or planning to have?
 - 1. Yes
 - 2. No
- 7 How many living children do you have as a family? _____
Please state their age's below 1: _____ 2: _____ 3: _____ 4: _____
- 8 Do you feel that your income is enough to feed all the members of the family?
 - 1. Yes
 - 3. No
- 9 Are you currently or have you ever used any family planning method?
 - 1. Yes
 - 2. No

SECTION B: KNOWLEDGE ON CONTRACEPTIVES AND FAMILY PLANNING SERVICES

1. Do you know about any contraceptives/family planning methods?
 1. Yes
 2. No
2. Which methods of family planning do you know (You can tick more than one)
 1. Oral Pills
 2. Injectable
 3. Intra Uterine Contraceptive (IUCD)
 4. Norplant/Implants
 5. Condom
 6. Emergency Contraceptive (Morning after Pills)
 7. Vaginal Rings
 8. Female Sterilization (Tubal Ligation)
 9. Natural Family Planning
 - 10 Others (Specify) _____
 11. DK
3. What were your sources of information about contraceptives
 1. Hospital/Health Worker
 2. Mass Media (TV/Radio, Newspaper) internet
 3. Friends/Relatives, Classroom
 4. Others (Specify): _____
4. Have you had any formal teaching or training on family planning?
 1. Yes
 2. No
 If yes, by which institution or organization?
 1. From the hospital
 2. From an NGO
 3. Others (Specify) _____
5. In your own knowledge what are the benefits of using contraceptives?
 1. Reduce risk of HIV/STI
 2. reduce cancers
 3. good spacing
 4. reduce maternal morbidity
 5. Reduce incidence of abortion
 6. child development
 - 7 remain youthful and attractive.

SECTION C: UTILIZATION OF FAMILY PLANNING METHODS AND SERVICES

1. Are you currently using any method now?
 1. Yes
 2. No
 If **yes**, what methods are you or your partner currently using (Tick?)
 1. Oral Pills
 2. Injectable
 3. Intra Uterine Contraceptive (IUCD)
 4. Norplant/Implants
 5. Condom
 6. Emergency contraceptives (morning after pills)
 7. Tubal ligation
 8. Male Sterilization Vasectomy
 9. Natural Family Planning
 - 10 Others (Specify): _____
 If **no** which one have you ever used?
 1. Oral Pills
 2. Injectable
 3. Intra Uterine Contraceptive (IUCD)
 4. Norplant/Implants
 5. Condom
 6. Emergency contraceptives (morning after pills)
 7. Tubal ligation
 8. Male Sterilization Vasectomy
 9. Natural Family Planning
 - 10 Others (Specify): _____
2. Have you discontinued family planning use in the past?
 1. Yes
 2. No
 b. If yes why did you discontinue? _____
3. What is your prime reason for using Family planning (If presently using any) for
 1. Prevent Pregnancy
 2. Prevent STIs (HIV)
 5. Plan our Family
 - 4 child development.
 6. Others (Specify) _____
4. Why are you not using family planning now (If not using any?)

1. Not sexually active to get pregnant 2.medical condition. 3religious objection
 5 Cost 5 Afraid of possible side effects 6 accessibility 7 fertility preference
 6 concerns about unfaithfulness 9 FP failure/risk of pregnancy 10Other reasons (Specify) _____

5. a). Can you easily access the service?

1. Yes [] 2. No []

b). If yes from where do you access the services?

- 1 Pharmacy [] 2Hospital []

- 3 Buy at a kiosk [] 4 others (Specify)

c) If hospital which hospital do you access family planning services?

1. Government health facility [] 2. Private health clinics []
 3. Local health center [] 4. Reproductive health clinic []

6. Are the services always available?

1. Yes [] 2. No []
 3. Don't Know [] 4. Not all the times []

8 Did the Nurse Counsel you on the available options of contraceptives

1. Yes [] 2. No []

5a. Was the last birth or current birth planned

1. Wanted by both couple [] 2. Wanted by me []
 3. Wanted by husband [] 4. Unplanned []

6a. Do you use protection while having sex?

1. Yes [] 2. No [] 3. Sometimes []

b If No give reasons for your answer

- 1 already using FP 2 faithful to my husband 3 husband disapproves 4 already HIV positive 5 others.....

SECTION D: BARRIERS TO FAMILY PLANNING SERVICES

1. a. Have you ever been turned back/refused services from family planning services during working hours before for any reason

1. Yes [] 2. No []

b. If yes, what was the problem /reason (Specify) _____

2. Are the hours the facility open convenient for you

1. Yes [] 2. No []
 3. Don't Know []

3. Does your religious discourage you from contraceptive use

1. Yes [] 2. No []

If yes, what are their sentiments about contraceptives?

4 What is the distance from service delivery sites?

1. Walking distance [] 2. Needs transport but affordable []
 3. Needs transport but not affordable []

4. a. Is your partner aware that you are using contraceptives

1. Yes [] 2. No []

b Have you discussed with your spouse /partner about the use of family planning at any time

1. Yes [] 2. No []

c. Did your partners agree to your use of family planning

1. Approve [] 2. Disapprove []

3. Unsure
5. Has money ever hindered you from the use of family planning?
 1. Yes [] 2. No []
6. a. Do you have a friend or a relative who has had a bad experience or side effects with family planning
 1. Yes [] 2. No []
- If Yes How:

c. Did the experience influence your decision on another option for family planning?

1. Yes [] 2. No []
7. Have you ever had side effects as a result of using contraceptives
 1. Yes [] 2. No []
- If yes, what are they?
- | | |
|----------------------------|----------------------------|
| 1. Vomiting [] | 2. Headache [] |
| 3. Bleeding [] | 4. Weight gain [] |
| 5. Scanty menstruation [] | 6. Dizziness [] |
| 7. Perforations [] | 8. Backache [] |
| 9. Weight loss [] | 10. Others (Specify) _____ |

8. If No why can't you access the FPS services?
 I don't want to do family planning [] the family planning services are far []
 The service providers are hostile [] Partner does not approve []
 Any other (Specify):

7 Any barrier/Challenges you think is stopping you from using contraceptives and accessing Family planning services

8 What recommendations would you suggest to help improve contraceptive use in Obunga?

APPENDIX C: ETHICAL APPROVAL FROM JOOTRH



MINISTRY OF HEALTH

Telegrams: "MEDICAL", Kisumu
Telephone: 057-2020801/2020803/2020321
Fax: 057-2024337
E-mail: medsuptnpgh@yahoo.com
When replying please quote

JARAMOGI OGINGA ODINGA TEACHING &
REFERRAL HOSPITAL
P.O. BOX 849
KISUMU

ERC 1B/VOL.I/59

12th May, 2013

Ref:

Date

Alice A. Abuya,
Maseno University,
PG/MPH/112/2012,
MASENO.

Dear Alice,

RE: FORMAL APPROVAL TO CONDUCT RESEARCH TITLED: *ASSESSMENT OF CONTRACEPTIVES UTILIZATION FOR FAMILY PLANNING SERVICES AMONG WOMEN OF PREPRODUCTIVE AGE IN OBUNGA SLUM – KISUMU COUNTY, KENYA.*"

The JOORTH ERC (ACCREDITATION NO.01713) has reviewed your protocol and found it ethically satisfactory. You are therefore permitted to commend the study immediately. Note that this approval is granted for a period of one year (12th May, 2013 to 13th May, 2014). If it is necessary to proceed with this research beyond the approved period, you will be required to apply for further extension.

Also note that you will be required to notify the committee of any protocol amendments(s), serious or unexpected outcomes related to the conduct of the study or termination of any reason.

Finally, note you will also be required to share the findings of the study in both hard and soft copies upon completion.

The JOORTH ERC takes this opportunity to thank you for choosing this institution and wishes you the best in your endeavours.

Yours sincerely

FRED O. AKWATTA,
SECRETARY – ERC,
JOOTRH – KISUMU.

APPENDIX D: MAP OF OBUNGA INFORMAL SETTLEMENT

