

**BARRIERS TO UPTAKE OF FAMILY PLANNING SERVICES AMONG WOMEN
OF REPRODUCTIVE AGE (18-45 YEARS) IN MFANGANO ISLAND, HOMABAY
COUNTY, KENYA**

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Degree of Master of Public Health of Pwani University.**

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DECLARATION

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

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P57/PU/2127/2013

Supervisors' Declaration

We confirm that the work reported in this thesis was carried out by the candidate under our supervision. No part of this Thesis may be reproduced without the prior written permission of the author and/or Pwani University

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DEDICATION

This work is dedicated to my wife Venah and my daughter Giannah-Ameliah.

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In the course of this research work, I got a lot of support from various individuals.

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ABSTRACT

Family Planning (FP) is voluntary prevention of pregnancy and it entails the interruption of a chain of events that leads to conception. Family planning is important because it helps reduce the Total Fertility Rate (TFR), maternal deaths and morbidity as well as improving the health of the child. In Kenya, only 58 % of women of reproductive age currently use family planning services, the uptake is even lower in Homabay County (56.4 %). The study explored the potential barriers to utilization of family planning services among women of reproductive ages (18-45 years) in Mfangano Island, Homabay County, Kenya.

A facility based cross-sectional study was conducted from January 2 to February 28, 2015 among women aged 18-45 years in Mfangano Island Homabay County. Simple random sampling technique was used to select five (5) health facilities out of the seven (7). The participants were selected through convenience sampling whereby a total of 396 participants were recruited from those who came to seek care in the facility and met the inclusion criteria. A pre-tested questionnaire was used for data collection. Barriers to uptake of FP were identified using logistic regression analysis.

Of the total sample of (396 participants) 183 (46 %) were using family planning methods. Knowledge level on the methods of family planning was high, with 87.3 % of the participants reporting knowledge of at least three methods. The study examined the challenges the clients experienced in seeking family planning services in the clinics. Results show that participants were not satisfied with the information offered by health care providers on FP. Clinics were closed on some days and sometimes the FP methods were out of stock for at least three months. In the multivariable regression model, secondary education level Adjusted Odds Ratio (AOR) 4.72 (95% CI 2.70 to 8.26) and above secondary education level (AOR 14.45 (95% CI 5.18 to 40.29) were associated

with higher odds of FP uptake compared to primary or no education. Being unemployed (AOR 0.36 (95% CI 0.20 to 0.64) and having at least eight children (AOR 0.23 (95% CI 0.06 to 0.84) were associated with lower odds of FP uptake after the adjustment.

Utilization of family planning services in Mfangano Island, Homabay County was lower (46%) compared to the national average of 58%. Although knowledge level on the methods of family planning was high, the uptake of family planning services was reported to be low. Lack of spousal consent was the main barrier hence, Program planners should put strategies geared towards education and involvement of men on family planning. Further longitudinal studies on uptake of family planning should be carried out to enhance generalizability of the results.

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ACRONYMS AND ABBREVIATIONS

AIDS - Acquired Immune Deficiency Syndrome

ANC - Ante Natal Care

CPR - Contraceptive Prevalence Rate

FP - Family Planning

HIV - Human Immune Deficiency Virus

HMIS - Health Management Information System

IFPP - International Family Planning Perspective

IUCDS - Inter-Uterine Contraceptive Devices

JHUCCP - John Hopkins University Centre of Communication Programs

KDHS - Kenya Demographic and Health Survey

SDGS - Sustainable Development Goals

NCAPD - National Coordinating Agency for Population and Development

SSA - Sub-Sahara Africa

STIS - Sexually Transmitted Infections

TFR - Total Fertility Rate

UNFPA - United Nations Population Fund

USAID - United States Agency for International Development

WHO - World Health Organization

CHAPTER ONE

INTRODUCTION

This chapter presents; the background of the study, statement of the problem, objectives and hypotheses of the study.

1.1 Background information

At the Alma-Ata conference (1978), Family Planning services were highlighted as one of the basic and important strategies for reducing high risk pregnancies that often occurred too early, too late, and too frequent and also as a way to improve child health. Family planning programs have helped women worldwide to avoid millions of unintended pregnancies often associated with high risk abortions since the sixties (WHO, 2006).

Developing countries are characterized by increase in population growth due to high fertility rate, high birth rates with decrease in death rates and low utilization of family planning (Oyedokun, 2007). The population growth rate in sub Saharan Africa is at 2.8% being the highest in Africa (USAID/HPI, 2007). This increase in population will lead to the need for more health facilities and schools, among other public goods hence requiring increased amount of resources, personnel and infrastructure to cope with the numbers. This will be a challenge towards the achievement of Sustainable Development Goals (SDGs), vision 2030; reduction of 434,306 child deaths, 14,040 of maternal deaths, environmental sustainability through safe water and sanitation, free primary education, combating HIV/AIDS, malaria and other diseases (Health Policy Initiative, 2007).

High Total Fertility Rate accompanied with unmet needs for family planning, low death rate and high birth rate continue to contribute towards high population growth which,

poses problems for developing countries (USAID, 2002). This can lead to high infant death rates due to lack of good health care facilities, prevent chances for economic growth, increase in maternal deaths and strain public resources (Bulatao, 1998). Women who experience problems related to pregnancy and delivery each year are roughly 50 million, out of those 529,000 die due to anaemia, malaria in pregnancy antepartum and postpartum hemorrhage (WHO, 2005).

Globally, it is projected that The main advantages of using family planning is that it can prevent 52 million high-risk pregnancies and helps mothers to space births, thus reducing 32 percent morbidity and deaths due to complications of pregnancy and childbirth (WHO, 1994; David et al., 2002). According to Oketch et al., (2011) family planning can help in the reduction of hunger and poverty. It can also reduce sexually transmitted diseases including HIV through promotion of dual protection since sexual and reproductive health problems account for 18 percent of the total global burden of disease and 32 percent of the burden among women of reproductive age worldwide (WHO, 2005). It helps in the decline of AIDS epidemic by reducing unwanted pregnancies among women infected with HIV thus preventing transmission of the virus to the child (Gillespie, 2004; Stover et al., 2004; Hawkins et al., 1995). The health of infants and children also benefits from mothers' ability to space births more widely and to prevent high risk pregnancies. Babies are more likely to be born prematurely, have low birth weight, be small for gestational age, die in infancy, and suffer from malnutrition when they are closely spaced (Gillespie, 2004).

Family planning enables women to advance in their education, increasing chances of getting better jobs, enable working for longer period and promote life opportunities by allowing women to have smaller and healthier families (USAID, 2005). All these are

achieved when countries are sufficiently meeting the growing demand for contraception (Deschner & Cohen, 2003).

Although Family planning uptake has increased in developing countries; the use in Africa is still low and is estimated at 31% (Singh et al., 2003; Akyeah, 2007). In Kenya, only 58% women of reproductive age were using family planning according to the Kenya Demographic and Health Survey 2014 (KDHS, 2014).

In Nyanza Region, only 56.4% women of reproductive age were using family planning (KDHS, 2014). In Mfangano Island, 2014 Sub County reproductive health report indicated that the contraceptive prevalence rate was 35%, which is below the national figure of 58 %. Unmet FP need results from growing demand in the face of service delivery and constraints including poor quality of care (Agwanda et al., 2000). Lack of support from family members on FP, misinformation about side effects, user fees, and transport restrictions also lead to low FP uptake (Okech et al., 2011). The key challenges to improving family planning use include; socio-economic problems, wide regional disparities in family planning prevalence rate (National Reproductive Health Policy, 2007) , stock out of family planning commodities, low male involvement and lack of adequate training for service providers (Mekonnen, 2011). Accordingly, the study aimed to identify the potential barriers to FP use in Mfangano Island, Homabay County, Kenya.

1.2 Problem Statement

Kenyan population growth is unsustainable given the projected economic growth in Vision 2030 and its socio-economic and political implications. Family planning is important because it helps to reduce the Total Fertility Rate, maternal deaths and morbidity as well as improving the health of the child. In Kenya, only 58% women of reproductive age are currently using family planning (KDHS, 2014). Nyanza Province

has a high total fertility rate of 5.4 compared to other Provinces like Nairobi, 2.8, Central, 3.4, Eastern, 4.4, and Rift Valley 4.7. Moreover, Nyanza has the highest percentage of 93 per cent of facilities offering family planning services that improve the health of women and provide tools to plan their families and their lives (Republic of Kenya, 2009). Despite the available reproductive health and family planning programmes that are offered by the Government in collaboration with other stakeholders, most men and women particularly in rural areas are still reluctant to embrace family planning methods in Nyanza.

According to Health Management Information System reports of the year 2014, Family Planning uptake in Mfangano is low at 35% like many other regions in Homabay County. However, the factors associated with low FP uptake in Homabay County have not been studied (HMIS, 2014). This has brought about high Total Fertility Rate in Mfangano Division. Approximately 6 children are born per woman and this is likely to compromise the health of the mother. The main aim of the study was therefore to describe the prevalence and factors associated with low family planning uptake in Mfangano Division of Homabay County, in Kenya.

1.3 Rationale for the Study

Mfangano Island is surrounded by Lake Victoria. The major economic activity carried out is fishing and farming. People living there have unique cultural practices from other Luo's since they are considered as "Bantu Luo's" (Abasuba). Mfangano Island depicted one of the highest total fertility rates in comparison to other counties in Kenya. Moreover, little research has been conducted on the subject matter. Better understanding of barriers affecting utilization of contraceptives is fundamental for realizing increased family planning uptake and the country's realization of its desired impact of family planning on unwanted fertility. From the study, the county reproductive health

coordinator will get information that will enhance proper planning and use of funds in order to overcome the barriers. This will in turn inform the policy makers and Non-Governmental Organizations (NGOs) to come up with interventions that are easy to achieve in order to increase family planning uptake and promote health.

In addition, the study provides information and awareness on population matters that address issues such as unwanted pregnancies and family planning. It is envisaged that these will encourage social modernization, specifically family planning, and in turn encourage a small family norm thus helping to reduce the population expansion problem. Local communities could also use the findings of this study in nursing education to emphasize the socio-cultural aspects of family planning practices by local communities

1.4 Objectives of the Study

1.4.1 Main Objective

To assess barriers to utilization of family planning services among women of reproductive age (18-45 years) in Mfangano Island, Homabay County, Kenya.

1.4.2 Specific Objectives

1. To assess knowledge and use of family planning services among women of reproductive age (18-45) in Mfangano island, Homabay County, Kenya
2. To assess socio-economic and cultural factors that determines family planning utilization in Mfangano Island, Homabay County in Kenya.
3. To assess the quality of care of family planning service offered in Mfangano Island, Homabay County in Kenya

1.5 Hypothesis

1.5.1 Null Hypothesis

Family planning services utilization is not influenced by knowledge on family planning, socio-economic factors, cultural factors and quality of family planning services offered.

1.5.2 Alternative Hypothesis

Family planning services utilization is influenced by knowledge on family planning, socio-economic factors, cultural factors and quality of family planning services offered.

CHAPTER TWO

LITERATURE REVIEW

This chapter reviews the literature on family planning obtained from various sources including refereed Journals and books.

2.1: Introduction

Family planning is the ability to attain a desired number of children which one can be able to take care of (WHO, 2014). Family planning enables one to attain the highest standard of reproductive health indeed, it enables people to space births, prevent unwanted birth and sexual transmitted diseases STDs (UNFPA, 2005). It has a major impact on the health of the mother and well-being of family members through reduction in maternal and child deaths, decreased cases of HIV transmission, therefore enabling the community improve in productivity and socio-economic status (Oketch et al., 2011). Proper child birth spacing and decrease in overall fertility helps in reducing infant deaths by 50 % and maternal deaths by 20% (USAID, 2000). Women who are infected with HIV need to space and reduce births, not only to reduce chances of mother to child transmission of HIV, but to preserve their strength to enable them care the children they have, thus ensuring their existence (Oketch et al., 2011). Short birth intervals also decrease the survival chances of the preceding child. The arrival of a new baby means that breast-feeding stops suddenly and the mother has less time to devote to caring for the older child. A birth interval of less than 12 months raises the overall average risk of death for the preceding child between ages one and five by at least 70 to 80 percent; a birth within 18 months raises the risk by 50 percent or more (Bulatao, 1998). Postponing first births until the mother is at least 18 years of age is another important factor in reducing child deaths. An infant born to a teenage mother is more likely to be born too early and weigh too little at birth and is 24 percent more likely to die in the first month

of life than is an infant born to a mother aged 25 to 34 years; the increased risk continues through early childhood (Akyeah, 2007). Delaying first births until women are at least 18 years old could potentially reduce the risk of death for first born children by up to 20 percent on average and by up to 30 percent in a few countries (Hawkins et al., 1995).

According to the World Bank report (2003), it was identified that the use of family planning services is an important factor for a developing country like Kenya. This is because of the advantages gained in terms of development through reductions in fertility levels. The advantages include prevention of health risks associated pregnancies (USAID and WHO, 2005). Family planning improves women's education by enabling them finish schooling hence increasing chances of getting jobs plus their contribution in social and political domains in the community (Hawkins et al., 1995).

Parents who have means to control their fertility are able to devote more resources in each child, which in turn raises the standard of health of the child, good education and prosperity in a population (David et al., 2002). Moreland & Talbird, (2006) identified that meeting unmet FP needs in Kenya could avert 14,040 maternal deaths and 434,306 child deaths to meet the SDGs target date of 2030.

Many researchers have identified several factors that affect women's use of family planning including or non-use of family planning. Numerous studies have been done in different countries in the past to find out the factors that affect family planning uptake. Some of these studies are reviewed in this chapter. The researchers give various reasons as discussed below.

2.2 Knowledge on Family Planning Methods and Contraceptive Use

Family planning use helps in improving reproductive health, which has a positive impact on women's overall health and quality of life (Campbell et al., 2006). To get these

beneficial effects, clients must be educated on correct and consistent use of the contraceptive method chosen. This can be achieved by imparting correct knowledge to women via good quality counseling techniques. Effectiveness of family planning counseling is usually affected by the counselor or information source. The most adequate source of information on family planning is the general practitioner (Campbell et al., 2006). Other sources of information have also been cited like friends, radio among others (USAID, 2007).

Knowledge on family planning methods is essential because women are more likely to embrace family planning when they are aware of the different methods available (Gwako, 1997). To enable people make decisions, right information about individual health can be stressed through proper communication so that they can make verdicts for themselves (USAID, 2001). Through communication one can point out the range of family planning methods available, describe mode of action, advantages, side effects, and convey how and where to find out family planning information and services. It can help people get the right information, ask questions for clarification and obtain answers from the provider during counseling process (USAID, 2007).

The main objective of counseling in family planning is to aid the client make informed choices about reproductive health issues. Informed choice, which is the key issue, should be given after the client has understood about the method. When one gives informed choice it helps to improve efficiency and compliance to contraceptive method used (Campbell et al., 2006).

A study conducted in Guatemala indicated that the levels of modern contraceptive knowledge and use among people living in rural areas of Guatemala differ substantially from those of people living in urban areas. The results suggest that lack of knowledge and familiarity with modern contraceptive methods remains an important barrier to

modern contraceptive use in Guatemala, particularly in the indigenous population. (Bulatao, 1998)

In another study in the United States (US) it was found that as black female teens age, their knowledge about family planning increases and they are more likely to report having ever used family planning and currently using contraceptives. In particular, black female teens who had received formal sex education (i.e., in school, a clinic, a community organization, or church) were more likely to have ever used contraceptives than black female teens who had not received such instruction (Topsever et al., 2006).

According to a study conducted in Kwazulu Province in South Africa, family planning clients are usually not provided with detailed information on family planning methods so that they can make an informed decision (USAID, 2002). Effectiveness, contraindications, advantages, disadvantages, possible side effects, and the managements of side effects are frequently not discussed with clients during FP counseling. More information is provided on advantages than on disadvantages, and less is provided on the management of side effects than on actual side effects. Providers do not mention the full range of contraceptives that are available to clients. That complete information on methods is not made available to clients (USAID, 2002).

Assessing the level of awareness on different methods of family planning gives a rough estimate of the accessibility of family planning information in the country. According to the KDHS, (2008/2009), 69% women get family planning messages through radio, 40% through television, and 34% through print media. Mekonnen, (2011) in his study which was conducted in Ethiopia pointed out that better mass media coverage increases people's knowledge on family planning hence increasing the uptake of the commodity. Accordingly they will be open-minded and self-directed to utilize health services

compared to their counterparts who don't have better media coverage (Mekonnen, 2011).

It was observed by (Adongo et.al., 1998) that educational status is related to maternal service utilization that includes family planning. Imbuki, (2010) identified that public awareness campaign's need to be put in place in order to improve education of women and their partners. This will help to exchange peer information sources which may circulate inaccurate information about family planning with reliable ones. Most women who intend to use FP opt for modern methods (Akello et al., 2013). This preference reflects the FP counseling structure in Kenya, which advocates on the use of modern methods and integrating them at the HIV care and treatment sites.

Wall, (1998) identified a combination of these factors that obstruct family planning knowledge, adoption, and use among Hausa women in northern Nigeria. He asserted that few Hausa women have any knowledge of birth control and they consider family planning as the moral agnate of murder (Wall, 1998). This is because birth is an antidote for bereavement in the cultural idioms of this Islam society and children are considered a divine benefaction. Children are the desired outcome of any Hausa marriage, and giving birth is traditionally viewed as the greatest fulfillment of being a woman (Wall, 1998). Such cultural beliefs and sentiments may render the adoption and use of contraceptive methods difficult in many sub-Saharan African communities.

Lack of knowledge about contraceptive methods, concerns about health side effects and effectiveness are also major barriers to adoption of family planning services. These factors may also militate against increased continuity of family planning uptake. For example, Bangladeshi women wishing to delay or prevent pregnancy chose not to practice contraception because of some of the above factors (Bongaarts & Bruce, 1995; Casterline et al., 2001; Feyistan & Casterline, 1999). However, Luck et al. (2000), in a

study of family planning services in Bangladesh, found that culturally appropriate counseling can mobilize the presumably latent demand for contraception by reassuring potential clients of the social acceptability and by allaying their fears about side effects of contraceptive methods (cf.

Amin et al., 2000; Phillips et al., 1997). Various cross-national studies have also found that health and social concerns are the principal causes of the unmet need for contraception in many countries (Bongaarts & Bruce, 1995; Casterline & Sinding, 2000).

Luck et al. (2000) concluded that individual face-to-face counseling by family planning service providers is an effective means of providing potential users with necessary information, particularly regarding their health concerns. For example, demand mobilization interventions resulted in increased knowledge and use of injectable contraceptives in rural Gambia (Luck et al., 2000). However, such interventions had little effect on women's knowledge and use of other methods. It appears that many women in rural Gambia perceive injectable contraceptives to be the most effective, private, and convenient contraceptive method. Similar results were reported from the Matlab region in Bangladesh (Biddlecom & Fapohunda, 1998 a; 1998b; Phillips et al., 1988; Simmons et al., 1988). Luck et al., (2000) found that the principal barriers to increased contraceptive use in rural Gambia are psychological.

Village-based interventions designed to provide socially appropriate counseling to potential contraceptive users can help to overcome these barriers. The demand for contraception in Africa is driven by a wish to postpone and space births rather than a desire to control family size, and traditionally postpartum abstinence was used to achieve these goals (Caldwell & Caldwell, 2002). Now, women in some regions of sub-Saharan Africa want a contraceptive they can control themselves and that can be

reversed, thus avoiding spousal quarrels or marital dissolutions (Caldwell & Caldwell, 2002; Kenya & Macro International Inc., 1999). For such purposes, women tend to prefer hormonal methods including the pill or, somewhat less frequently according to some studies, an injectable contraceptive (Luck et al., 2000). However, the 2008/09 Kenya Demographic and Health Survey revealed that most married women aged 15–49 years preferred injectable contraceptive (51.5%), pills (12.1%), female sterilization (8.4%), implants (7.7%), and male condoms (2.4%) (Kenya National Bureau of Statistics [KNBS] & Measure DHS, ICF Macro, 2010). Low contraceptive use is attributed to a number of barriers acting at policy, facility, community and individual level (Ezeh, 1997). At individual level, knowledge of family planning methods is crucial. Whereas evidence from a number of studies around the world reveal a near universal knowledge on family planning among the women of the reproductive age group, this has not translated into increased utilization of these methods (Karavus et al., 2004).

Low usage has been widely attributed to the negative attitude towards this form of contraception. Specifically, low levels of education (Rao et al., 1993), have been identified to influence use of family planning methods in Africa, Asia and other parts around the world. This observation suggests that both the women and their partners lack the right information that will aid decision making on use, an argument supported by evidence from related studies that showed increasing knowledge on the methods can result to higher utilization (Kumar et al., 2010). Women and their partners therefore need to be empowered with adequate knowledge particularly on the health effects of modern family planning methods to enable them make wise choices (Muia et al., 1999)

2.3: Social Economic and Cultural Factors that Determine Utilization of Family Planning Services

Generally, there are certain social economic and cultural factors that would affect the use of family planning by women in the society. Haile et al., (2000) viewed human reproduction in Africa as a natural course that should not be interfered with artificial methods. This belief is supported in most cultures due to lack of appropriate information and education. In Africa setting most family planning services targets women excluding men, who are, mostly responsible for decision making on reproductive health (Haile et al., 2000). Due to unsubstantiated rumors and lack of adequate information, many rural African men are generally not in favor of family planning (Gwako, 1997)

Developing nations are still dominated by male-cultures. For example, Africa ancestral customs give men rights over women's procreative power (Singh, 2003). In such situations, the authorization of the husband and in-laws act as a strong influence on a woman's ability to use family planning services (Gwako, 1997; Akininola et al., 1998). Akyeah, (2007) identified disapproval and punishment from husbands and in-laws as major problems that hinders family planning practice among women. This leads women to practice family planning in secret. Some studies have indicated that women who don't have control over their fertility prefer modern contraceptives like injectable since they are not detected easily (Akyeah, 2007). According to Mohammed et al., (2014) justified that lack of couples discussion on FP issues leads to disapproval by male partners. Approval and support from male partner are key issues to FP use (Akello et al., 2013). Cultural reputation of having adequate numbers of surviving children, sons and daughters is another factor leading to low uptake of FP (Akyeah, 2007). In communities where they don't have sons they will continue giving birth until they get "enough" sons (Caldwell, 1987; Caldwell, 1990). Biddlecom et al., (1996) also suggested that the cost

of contraception encompasses much more than accessibility to family planning services and that it includes all factors (social, psychological, and cultural) that may act as barriers to contraceptive practice among men and women. Casterline et al., (2001) noted that socio-cultural and religious disapprovals of contraception repeatedly emerge as important obstacles to the use of family planning.

Gwako in his research conducted among Kisii, Luyha and Masaai identified need for more children as a factor influencing current non-use of family planning methods by 40% of the respondents. They indicated their desire to start using family planning as soon as they have enough children according to their will (Gwako, 1997).

A study conducted in slums in Kenya pointed out that non-use of family planning was related to the desire for more children, which was related to traditional belief that when one has more children they are rich (Okech et al., 2011). For instance, those who had given birth to girls only desired to have boys in order to satisfy their parent in-laws, who prefer boys hindering them from using any FP methods (Okech et al., 2011). However, recent research in the Kassena- Nankana area in the Upper East region revealed that traditional religious messages regarding fertility behavior can be prejudiced by the usual social and economic climate (Adongo et al., 1998).

These societies do not identify with family planning and even though they vary greatly in culture, son preference is a common feature (Jegede, 2009). A boy child is considered as a woman's "seat" to mean that a woman's remains a visitor in her husband's home until she has a son. This is according to the Yoruba of Nigeria. This custom illuminates the lack of worth accorded to adult women (Jegede, 2009). This happens because of the social obligations expected of men, like being an heir to the father for continuity purposes and family's status and influence. A couple with only girls ends up giving birth

to many children with the hope of luckily getting a boy leading to large and unplanned families.

Therefore, son preference has been found to be a leading factor influencing contraceptive use especially for newly married women (Kamal and Islam, 2010). Just to mention, in Bangladesh, there is the desire for the first child to be a boy in couples and mother who already had a son were 60 percent more likely to use contraceptives than those who did not (Kamal and Islam, 2010). In Nepal as well, son preference is closely tied to women's fertility aspirations (Brunson, 2010). Brunson, (2010) conducted ethnographic work with Hindu women in one semi-urban village and concluded that son preference remains strong in Nepali culture. According to Brunson, women have internalized the expectations of their society, community and family, and still feel a strong pressure to produce sons.

Studies concerning the family planning beliefs of religious leaders are rare and, when conducted, they have typically relied on small samples. A study of the family planning attitudes and practices of Ethiopian elites was conducted with a sample of 99 Orthodox Christian priests and 86 Muslim religious leaders. The authors found that 24% of Orthodox Christian and 80% of Islamic religious leaders had heard of family planning. Among those who were married (89% and 92% respectively), 6% of the Orthodox Christians and 26% of the Muslims practiced contraception. Religious leaders were found to be less favorably disposed toward family planning than other elite groups such as teachers and community leaders (Carol, 2000).

In Swaziland, some Islamic women did not accept the birth that occurs as fatalism even though religious beliefs emphasize the spiritual importance of progeny (Ziyane and Ehlers, 2007); to them it signifies humility (Izugbara and Ezeh, 2010). The religious barriers are evident in Africa where 20 percent of the population is Catholic whose

doctrines emphasize that all sexual acts must be open to procreation. Thus, any artificial method of contraception is opposed. The worst affected are the permanent methods such as tubal ligation for women and vasectomy for men. The church only accepts the natural forms of birth control like natural family planning methods such as periodic abstinence outlined by the late Pope John Paul VI in his 1968 encyclical *Humanae Vitae*, which affirms the traditional teaching of the Roman Catholic Church regarding contraception and other reproductive issues. Between one-quarter and one-half of women in sub-Saharan Africa report that their religion negatively impacts their contraceptive use (Akintade et al., 2011 and Clements and Madise, 2004).

Data from Demographic and Health Surveys for nine Latin American countries, pointed out that uneducated women have large families of 6-7 children as compared to educated women who have both male and girl children, this is due to poverty which make them not to access family planning services (Akintade et al., 2011). Women who are educated have more knowledge, good jobs and a more positive attitude toward family planning. Results of a regression analysis pointed out that knowledge, good economic status and attitudinal assets aggravate the influence on reproductive behavior and somewhat clarify the wide fertility gap between educational strata (Clements and Madise, 2004).

A study in Kenya showed that high and low fertility areas correspond with particular ethnic groups where polygamy is characterized by high fertility areas (Ezeh, 1997). This emerges since the many wives may compete in giving birth resulting to high population growth rate. The scenario is evident among the Luo, Mijikenda and the Kamba communities. Wives symbolized wealth both in terms of the man's ability to provide bride wealth for several women, and increased labour provided by women and children that enhances the family wealth while ensuring a continued lineage. As a result, more

wives translated into increased social status. The reasons for this are inadequate exposure to contraceptives and early marriages. Nonetheless, the contraceptive use was substantially lower among women in polygamous marriages than among those in monogamous ones in Malawi (Baschieri, 2013).

There have been myths about misconceptions and fears of side effects especially the IUCDs performance from excessive bleeding, weight gain to added cancer risk. News of any complications arising from incompetence in handling the devices can spread easily, produce undesired effects among potential adopters, and indeed keep them away (Inaoka et al., 1999). The side effects noted by Inaoka et al., (1999) include nausea, vomiting, and weight gain. A Bangladesh study highlighted that women discontinued using injectable contraceptives and had wrong information about side effects and their significance due to lack of counselling (De Graaf, 2001). In Morocco, it was also noted that misinformation and fear of side effects reduced access to contraceptives (Westoff and Bankole, 1998). Fear of side effects can be overcome through good communications and information, especially through Community Based Distribution (CBD) programme (Omondi-Odhiambo, 1999).

Myths suggesting that the use of contraceptives lead to cancer or infertility can lead to discontinuation of use of contraceptives (Inaoka et al, 1999). A study in Ethiopia shows that another reason for discontinuation of use of contraceptives is the disturbance caused by menstrual cycle (Weldegerima and Denekeew, 2008). Westoff and Cross, (2006) study in Kenya show that discontinuation rate rose from 28 percent in 1998 to 33 percent in 2003 and was linked to side effects associated with hormonal methods like pills and injectable contraceptives.

Shane, (1996) however, discovered that oral contraceptives could protect a woman against pelvic inflammatory disease, ovarian and endometrial cancers, fibroids of uterus

and benign breast disease. Contraceptives also help decrease problems associated to menstrual cycle such as pain and cramps (common during adolescence), dysfunctional uterine bleeding, functional ovarian cyst, premenstrual tension syndrome and anaemia caused by heavy menstruation. Shane, (1996) also observes that consistent and correct use of condoms can prevent infection from sexually transmitted diseases including ectopic pregnancy, chronic pelvic pain, infertility (in both sexes), cervical dysplasia and cervical cancer. Most of all, it has continued to benefit any sexually active person who may be at risk of acquiring HIV / AIDS or other STIs. Yam, et al., (2007), note that health providers should demystify misinformation about contraceptives and instead provide factual information about risks, potential side effects, and incorporate it in family planning strategy that meet each client's personal needs. Educational and awareness programmes should also focus on providing specific knowledge, with special attention to correcting common misconceptions about the methods.

In developing countries, women also mention cost as another factor to access to contraceptives (Campbell et al., 2006; Nalwadda et al., 2011; Bankole and Malarcher, 2010). According to Ocholla-Ayayo, (1997), poverty is another factor that has led to high fertility. This in turn creates a heavy dependency load and ratios for families living in poor conditions as the money received is all spent on food, school fees, funerals, housing and clothing with nothing to invest or improve living conditions. Poor people tend to have no other source of entertainment apart from sexual enjoyment. Therefore, in the course of this, children would be born including those unplanned for. Unlike rich households that have a lot of money to spend in leisure activities other than sex, for example, travelling for leisure, enjoying drinks and other entertainment. Thus, securing transportation to family planning services by the poor is therefore a challenge as most of the finances go to basic needs.

National Council for Population and Development, NCPD (2012), records that Central, Nairobi, and Eastern Regions have the highest contraceptive use and have the lowest number of poorest people. In Kenya, family planning services are offered by the Ministry of Health, NGOs and the private sector. According to KNBS (2009), contraceptive use in Kenya is clinic based; suggesting the model of family planning delivery is expensive. This raises doubts as to whether it can be replicated in other regions that are still struggling to increase contraceptive use and reduce fertility, such as in our case of Mfangano Island. The MOH (2010) noted that health facilities in Kenya designated as Service Delivery Points (SDPS) for family planning services are not equitably distributed throughout the country. Sustainable provision of family planning methods, in addition to increased communication on the need for family planning, could help increase the uptake of the services.

Feyisetan (2000), Oyediran and Isiugo-Abanihe (2002b) observe that inter-spousal communication dictates whether or not to use family planning, the method to use, when to start and the number of and timing of children as well as enabling husbands and wives to know each other's attitudes towards family planning and use of contraceptives. It also allows spouses to say their concerns about reproductive health matters like unintended pregnancies, side effects method or STDs (Drennan, 1998). Communication may therefore affect contraceptive use by transforming attitudes into the physical act of using contraceptives. However, a study by DeRose et al. (2004) using DHS data from 21 sub-Saharan African countries contradicted the idea that discussion between partners helps increase knowledge of a partner's contraceptive attitudes (DeRose et al., 2004). They concluded that the anticipated reductions in unmet need for family planning may not be achieved through improvements in inter-spousal communication.

Many obstacles prevent men and women from talking about sexuality, family planning and reproductive issues and a complex web of social and cultural factors hamper such discussions (Islam, 2008). In most societies, discussing sexual matters is a taboo subject for men and women. In addition, men and women are often afraid of rejection by a sexual partner, especially if the discussion about sexuality takes place at the beginning of a relationship. Consequently, they may not feel comfortable discussing reproductive health issues, such as sexual history or contraception (Drennan, 1998). Furthermore, a husband might suspect his wife being promiscuous or unfaithful if she tries to discuss contraception with him.

Inter-spousal communication can be regarded as a way toward increasing men's participation in family planning and reproductive health (Lasee and Becker, 1997; Becker, 1996; Biddlecom et al., 1997; Omondi-Odhiambo, 1997). Male involvement does not refer to use of male methods alone, it also includes supporting female method use, which suggests that husbands should communicate family planning matters with their wives (Donahoe, 1996). Spousal family planning use communication has been described as a means that will make possible couples to disclose their fertility preferences to each other and make use of family planning as a result. The misconception that wives seem to have of their husband's family planning approval is one area that spousal communication is expected to improve.

In the community, there are different types of people in terms of education levels. There are those with no formal education, primary level of education, secondary level of education and tertiary level of education. Those with better levels of education tend to have better understating of their reproductive health than those with less levels of education.

Westoff and Cross (2006) cite an initial increase in unmet need of family planning with education, which is due to a gap between increasing desire to control fertility and the ability to do so, leading to an eventual decline in unmet need with education, as more women use family planning. Magadi et al., (2000) note that education is an alternative means of creation of status for women as well as a source of self-esteem and self-value. Therefore, education promotes the use of contraceptives as well as encouraging termination of a pregnancy if unwanted. Educated women tend to marry later, have fewer children and use family planning more (Caldwell and Caldwell, 2003). A study by Casterline (2001) reveals a significant relationship between a woman's level of education and contraceptive use. Schooling by women is an indicator of socio-economic development and the variable is negatively associated with infant mortality, thus reducing the overall demand for children (Addai, 1998). The cultural lag in women's education still encourages preference for large families and prevents women from having the number of children they need. Education improves reproductive health since educated women are more likely to seek adequate prenatal care, skilled attendance during childbirth and use of family planning.

Casterline (2001) observes that rapid mortality decline leads to even more rapid decline in fertility. Under-five mortality in Kenya stands at 74 deaths per 1000 live births, with Nyanza leading with 149.2 deaths per 1000 live births followed by Western at 121, Coast 87, North 18 Eastern 80, Nairobi 64, Rift Valley 59 and Central 51 (Republic of Kenya, 2009). Prevalent diseases such as malaria and typhoid do not solely cause high mortality rate of children. The situation in Nyanza is therefore dictated by how parents are able to cope with these prevalent diseases in the environment of the district. For instance, high mortality rate of children means low confidence in survival rates of infants hence the need for mothers to have many children as security against death.

Complications and infections that happen at birth due to inadequate care are the greatest cause of child deaths, leading to the hesitation in using contraceptives thinking that the use may lead to childlessness or small families should any of their children die. Cleland and Bernstein (2006) note that shorter spacing between births increases chances of fetal death because of non-use of family planning methods, low birth-weight, prematurity and or infant and child death. NCPD (2012) recommends three-year spacing after birth for another pregnancy to help reduce the child and maternal mortality rate. A three year spacing between children ensures full breast-feeding, the best possible emotional and physical development of the child in relation to the rest of the family, and a complete recovery of the mother from the effects of one pregnancy and childbirth before starting another.

Evidence from literature review points out that reduction in fertility, child and infant mortality rates are critical to record a decline in population growth rate. This is particularly relevant to the study to investigate the impact of infant and child mortality on the utilization of family planning.

2.4: The Quality of Family Planning Service Offered

Improving quality of care has been a necessary goal for family planning programmes worldwide. This increased interest has been accompanied with efforts to monitor quality of care at every level of service delivery point (Williams et al., 2000). The seminal work of Bruce, (1990) provided a basic framework and a point of reference for studying quality of care in family planning service delivery. The framework included a set of six core elements: choice of methods, information given to clients, technical competence of the provider, client-provider interpersonal relations, mechanisms to ensure follow-up and continuity, and the appropriate constellation of services.

However, a comprehensive and quality family planning service provision must include an assessment of the needs of clients, a range of available methods, and the provision of complete and accurate information about all methods offered, thus ensuring informed choice (Bruce, 1990; Kumar et al., 1989). Providers should have the necessary technical skills to offer the methods safely, be trained in technically accurate and culturally appropriate counselling techniques, and be able to use this knowledge effectively (Best, 2002). Services should be convenient, accessible and acceptable to clients (Kumar et al., 1989). In addition, it is essential to provide follow-up care to ensure continuity of services and an adequate logistics system to ensure continuity of supplies (Bruce, 1990; Kumar et al., 1989).

Several barriers may also limit providers' ability or willingness to provide quality care. Knowledge gaps, including both community myths and insufficient knowledge and skills among providers, represent one type of barrier (Best, 2002). Other factors include medical barriers and practices based on medical rationales that limit clients' access to contraception (Shelton et al., 1992; Speizer et al., 2000). For example, an examination of quality of care in five African countries by Miller et al., (1998) showed that a large proportion of providers imposed restrictions on family planning based on client characteristics such as age, marital status, spousal consent and number of children. On the other hand, some providers may believe that they are in a better position to choose the most appropriate method for the client while others may be biased toward certain methods, and hence preclude the client from choosing his or her own method (Speizer et al., 2000).

Williams et al., (2000) in a study of eight Latin American and Caribbean countries using client exit interviews, revealed that almost three quarters of clients were dissatisfied with

waiting time to obtain services. Also, about half of the clients were dissatisfied with ease of reaching service delivery and about half with the price of services.

A study conducted by Ndhlovu (1995) in Kenya reported that clients viewed low costs and proximity of services as the two most important factors that attracted them to services. Studies have also reported that social distance between providers and clients limits quality interactions between the two (Rutenberg and Watkins, 1997). An earlier study in Kenya suggested that providers were more likely to provide information on contraceptive side effects to older or better educated clients (Ndhlovu, 1995).

Research findings in various countries demonstrate that women who have access to better family planning services are more likely to use contraception, are less likely to have unintended pregnancies, and thus have fewer abortions. In settings where family planning services are introduced and promoted, abortion-related deaths decline as contraceptive use rises (USAID, 2001). This has to be achieved by monitoring quality of care at each level of family planning delivery point (Williams et al., 2000). Access to quality care can help reduce pregnancy related problems. Areas that introduce and promote family planning, deaths due to pregnancy-related problems go down as contraceptive use rises (USAID, 2001).

Good care enables one to make decision on family planning. It can inspire one to find out about family planning, continue using contraception and inform others hence influencing them (Bertrand et al., 1995). Quality of care is when clients get full information of all methods available and how each works (Bruce, 1990). Provider has technical competence, good communication skills, good attitude, and providing appropriate collection of services (Bruce, 1990).

Situation analysis in Kenya identified that use anatomical models and family planning samples during counseling sessions gave clients more information about their chosen

method (Ndhlovu, 1998). When using what people can see helps them choose a method that can match their reproductive goals and hence enhancing good quality of care (León, 2001). Deficits in provider competence, poor relationship between providers and clients, providers absence during working hours and informal fees for services hinders utilization of family planning services (Kasedde, 2000; Katherine et al., 2013).

Health advocates, human rights activists, researchers, program managers, governments and donors generally agree that quality of reproductive health care is important. Clients deserve to receive high-quality services and to be treated with dignity and respect when obtaining services (Oyedokum, 2007). Evidence from various settings suggests that for one to accept and continue using family planning quality of care is paramount. A setting with good-quality services tends to encourage family planning use (Oyedokum, 2007). Oketch, et al., (2011) supports that quality and standard care is important in decision making process regardless of family planning services available. This is in addition to other factors which account to use of services.

A study in Bangladesh showed that provision of good quality care promotes family planning use (Susheela et al., 2000). In the study, those who had a chance of receiving good quality services were likely to start and continue using family planning. Larry et al., (2006), identified that being provided with good-quality services on day one is accompanied with continuation of use. Quality of care is a paramount factor on family planning use, despite many influences (Larry et al., 2006). High quality care involves respecting and understand client's needs. When client perspectives are addressed, it leads to better client satisfaction, hence continuous use of services, plus better health outcomes (Bertrand et al., 1995; Kols & Sherman 1998).

The poor quality of (insufficient equipment, lack of counseling) and difficult access to FP services in the health facilities (often due to monetary demand) acts as barriers too

(Kols & Sherman 1998). Access to services is also a major concern because of the location of health facilities, cost of services, and the clients' uncertainty about these fees and services. Lack of facilities in close proximity to communities is a major limiting factor, as most women live far from the health centers and cannot afford to pay for transportation(). Women who live furthest from clinics use contraceptives less than those who easily access them (Dickinson et al., 2010; Campbell et al., 2006). In some cases, transportation simply does not exist.

Criticisms of the quality of many family planning programmes have led to sustained efforts to define, document, and enhance quality, both internationally and nationally (Bruce,1990; Ndhlovu 1998). Some aspects of quality continuity of supplies, presence and competence of staff, treating patients with dignity, and reasonable privacy are so fundamental that no evidence is needed to endorse them (Bongaarts, 1995).

The provision of family planning services in Africa is full of barriers that are unnecessary and often discouraging to potential users. Such barriers include age and parity requirements for certain methods, refusal to serve unmarried women, opposition to outreach program , health professionals who believe that family planning should be provided only in a medical set up, and unnecessary and time consuming medical and laboratory examinations. In Zanzibar, for example, health professionals refuse to provide contraceptives to unmarried women (Rao et al., 1993). In Botswana, Burkina Faso and Senegal on the other hand, it is easier for unmarried women to get a contraceptive method than for married women because of requirements for husbands' consent for those who are married. (Karavus et al.,2004)

In Zimbabwe, many service providers set minimum age requirement despite guidelines that allow the provision of family planning services to all without restriction (Rosen and Conly, 1998). In a few countries, overly restrictive medical requirements limit access to

contraception. In a few countries, unnecessary restrictions include requiring oral contraceptive users to have blood tests every three to six months and prohibiting injectable contraceptive use in women without children. Provider bias against certain methods also influences the choices offered to clients (Oyedokun, 2007).

Effective family planning services should offer a variety of methods and commodities so that the method most suitable for a client can be provided. Choice in family planning methods increases the level of acceptance and user continuation of services (Hatcher et al., 2001). Services also need to be available with a frequency convenient for clients. “Accessibility” of family planning services generally refers to the extent to which appropriate contraceptive methods are available and the extent to which those in a given location who are seeking contraceptives can obtain services. In a broad sense, however, accessibility is a multidimensional concept that not only includes physical proximity and travel time to services, but also involves economic, psychological and attitudinal costs, cognition and the perceptions of potential clients. A study in Vietnam indicated that accessibility was positively associated with contraceptive use for several subgroups of women (Singh et al., 2000).

Accessibility was negatively associated with nonuse of family planning methods and with current use of traditional methods. The study confirmed that physical distance from family planning services does not have an important effect on use of modern methods as the proportion of women using modern methods did not differ much between rural and urban settings and among different types of communities, despite significant differentials in contraceptive access (Singh et al., 2000). However accessibility has a significant impact on nonusers of modern methods and on current users of traditional methods. This suggests that improved access could substantially reduce the proportion of the population in these two groups. A considerable proportion of Vietnam’s unmet

need for family planning could be satisfied if the accessibility of different sources of services were increased. From a programmatic perspective, ensuring maximum access to contraceptive methods is a desirable goal that will strengthen programs among targeted populations (Bankole, 2002).

Use of family-planning methods falls only modestly with increasing distance or travel time to the nearest source of family planning point (Bongaarts, 1995; Tsui, 1992). In most societies, women are prepared to travel long distances for advice and contraceptives, especially for methods such as intrauterine devices and sterilization, which require infrequent or no further visits (Tsui, 1992).

Pending further evidence, the priority is to concentrate on the fundamental issues with particular attention to ensuring continuous availability of several alternative methods. Most women present at family-planning clinics having already decided which method they want; failure to obtain that method is probably the one biggest deterrent to adoption (Grimes, 2006).

Improvement in family planning programmes calls for expansion of the choice of the method used, providing adequate information, increase in technical competence of providers, increasing interpersonal relations between providers and clients and incorporating adequate client support and follow up. This is because failure to use existing services is attributed to lack of quality (Koc, 2000).

Investigations by the Government of Kenya, (Republic of Kenya, 2012) observed that contraceptive services in Western Kenya are free and are about 93 percent available; however, the demand for the products and services was low. Family planning methods like emergency pills expire in hospitals since nobody comes for them especially in rural areas (Republic of Kenya, 2012). It is realized that high birth rate, high fertility and large unmet need of family planning is most experienced in Western Kenya. Therefore, the

Government through the Ministry of Health has taken the initiatives of providing contraceptive services majorly free of charge to help control birth rate in order to achieve the 2030 vision of two (2) children per woman. Another study in Kenya by Magadi and Curtis, (2003) reveals that opening the choice of contraceptive methods increased overall contraceptive prevalence and the opportunity for individual couples to obtain a method that suits their needs.

2.5: Summary of literature review

The major sources of the literature review indicate that there are different barriers to family planning utilization. These are religion, son preference, quality of family planning services, polygamy, poverty, misconceptions and fears of side effects, educational level and literacy, and spousal approval. The literature review indicates that quite a number of studies have been in areas of unmet contraceptive use in various parts of the world and some parts of Kenya. The reviewed literature further indicates that lack of spousal consent record is the main barrier to family planning utilization. This revelation helps in the study in explaining how spousal consent and male involvement affect utilization of contraceptives. The reviewed literature also indicates that there are various misconceptions and fears that are related to contraceptive use. These reviews are important and shed some light that is significant to the current study. The reviewed literature further indicates that poverty and cultural practices are related to contraceptive use. Nevertheless, few studies have been done in Mfangano Island, hence the need for this study. The researcher, therefore, investigate the barriers to utilization of family planning services among women of reproductive age (18-45 years) in Mfangano Island to provide knowledge, information and ideas to people to enable them make enlightened decisions especially about demographic matters or changes with the purpose of developing positive and rational behaviour and attitudes.

2.6: Conceptual framework for the study

Family planning, identified as an essential component of primary health care in the Alma-Ata Declaration and of reproductive health at the International Conference on Population and Development, plays a major role in reducing maternal and newborn mortality. It contributes towards the achievement of the Sustainable Development goals (WHO,2005)

The implementation of family planning services in Africa is challenged by poverty, poor access to family planning services and commodities, conflicts situations, inadequate coordination of programmes and dwindling donor funding. Traditional beliefs favoring high fertility, religious barriers and lack of male involvement have weakened family planning interventions.(WHO,2005).

Utilization of family planning services is determined by a lot of factors ranging from economic, religious, social, political and many others as illustrated in Figure 2.1

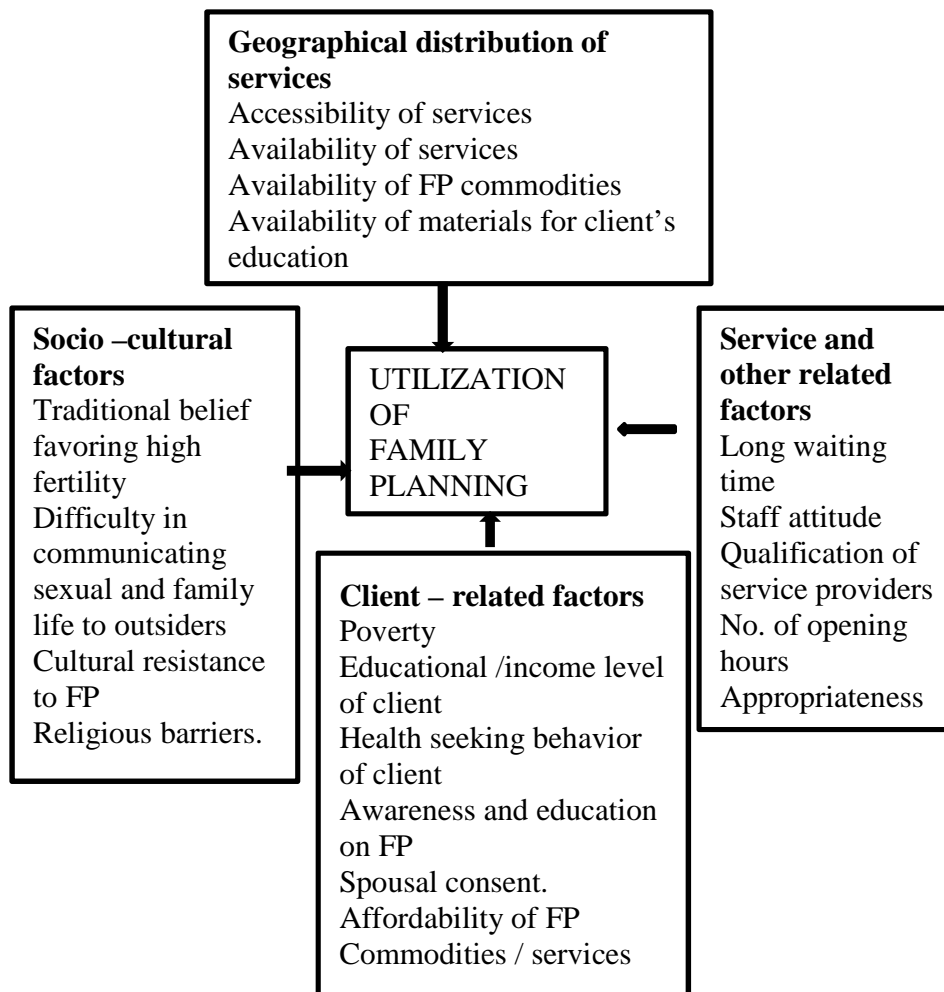


Figure 2.1 Conceptual framework for the determinants of family planning utilization.

Independent variables influence either positively or negatively on the dependent variable. In every case, it influences the impact as interpreted below.

The level of education, if high would promote contraceptive use. An enlightened person is well informed about the financial and mutual demands of child rearing. Hence, she would opt to get children only when planned so that she can accord quality upbringing. This would call for family planning use. In addition, a highly learned person does not look at children as the only form of wealth and at sex as the only form of entertainment.

Hence, such a person would not involve in un programmed sex and births. However, when the spouse to such an enlightened individual wills to have many children or does not for whatever reason approve of contraceptive use, she can prevail upon the spouse to stop using family planning, resulting to low contraceptive use instead.

Concerning level of education as an independent variable, the reverse is the situation when the individual's level of education is low. Level of family planning uptake would be low as well. A person who prevails upon his / her spouse to use contraceptives, or a religious faith that recommends contraceptive use for its followers would only reverse this to be high. Child mortality and son preference would have no impact, as contraceptive use would remain low.

It is possible that for women in polygamous marriages to use contraceptives. However, if their need were hindered by other factors such as men's opposition, son preference, religion and infant / child mortality, then these women would have low utilization of contraceptives.

Factors that affect the use of contraceptives also do so through quality of family planning services in terms of a wide access of contraceptive methods, provision of adequate information on potential users and increased technical competence of providers. Similarly, if quality of family planning services were hindered by men's disapproval, son preference, religion, then these women would have low use of contraceptives.

Accessibility to family planning services is also one of the components that encourage or discourage contraceptive use. Women who live furthest from clinics with family planning services are disadvantaged by high costs of transportation. Improved access motivates women to use family planning. Nevertheless, if family planning use were stalled by the independent variables here too, the overall result would still be low

utilization of family planning services. Spouses' perception on family planning is described as a tool that will enable couples to reveal their fertility preferences to each other and make use of family planning as a result. The study contributes to a better perception of the role played by contraception in Kenya's demographic changes by investigating the factors that affect the utilization of family planning among women of reproductive age (18-45years) in Mfangano Island.

CHAPTER THREE

MATERIAL AND METHODS

This chapter outlines research design, the target population, the study area, the sample size and sampling procedure. Also included are the research instruments, ethical considerations, and data collection procedures and data analysis techniques.

3.1 Study Design

A facility based cross-sectional survey study design was conducted to identify potential barriers to utilization of family planning among women of reproductive age (18-45years) in Mfangano Division, Homabay County. A quantitative approach to data collection and analysis was used. This design was used in this study as it enabled a researcher to gather data from a relatively large number of subjects at a single point in time.

3.2 Study Area

The study was carried out in Mfangano Island. It lies in the eastern part of Lake Victoria, at the mouth of the Winam Gulf. The Island is 65km² in area and rises to 1,694m at Mount Kwitutu. Mfangano lies between latitude 0⁰ 27' north and between longitude 34⁰ 60' East. It had a total population of 32,300 as of 2014, with five (5) Sub-locations, Wakinga, Waware, Wakula South, Soklo West, and Soklo North. It is served by ten (10) health facilities and clinics; seven are public, one Mission Hospital and two private clinics. Public health facilities and private clinics provide a wide range of family planning services which includes pills, condoms, Intra-Uterine Contraceptive Devices (IUCDs), implants, injectable plus natural ways of family planning, while Mission Hospital advocates for natural family planning like basal body temperature, calendar

based methods, lactation amenorrhea and withdraw method. Fishing and small scale farming are the main economic activities carried out in the area.

3.3 Operationalization of variables

Utilization of family planning was the dependent variable of this study. Independent variables in this study were categorized into socio-economic factors, client related factors, geographical distribution of services, cultural factors, service and other related factors.

3.3.1 Dependent variable

Family planning uptake was the dependent variable. Family planning uptake refers to a couple who have continuously used family planning in the past six months. Family planning uptake was measured by asking question on family planning use or not use.

3.3.2 Independent variables

Education: Education refers to the level of attainment in formal education by the individuals and it is classified into three categories: Primary or no education, Secondary education and College education. The variable was collected by use of questionnaire and analyzed

Religion: The variable was grouped into four categories: Catholic, Protestant, Islam and Indigenous. Information for the variable was collected by use of questionnaire.

Quality of family planning services: quality of family planning services are grouped according to satisfaction of existing services by family planning providers. The “yes” and “no” are answers to measure it. The data collection instruments were by use of questionnaire and analyzed.

3.4 Target Population

The study targeted; women aged 18-45 years attending the five sampled health facilities. Since they are in their reproductive years and are legally able to give informed consent. Family planning service providers in the 5 sampled health facilities were also involved to support the study.

3.4.1 Inclusion Criteria

Women

- Women who have not undergone hysterectomy
- Women seeking health care services at the sampled Hospital and are aged 18-45 years
- Women who provided an informed consent for study participation were included in the study.
- Clinically stable clients

Health care workers

- Health care workers providing family planning services within the sampled five health care facilities who were willing to participate by giving consent.
- At least 5years experience in family planning clinic

3.4.2 Exclusion Criteria

Women

- Severely ill female patients aged 18-49years incapable of participating.
- Women below 18 years of age
- Women who refused to consent for the study
- Those who do not stay within Mfangano Island
- Women who had undergone hysterectomy

Health care workers

- Health workers who refused to consent to the study
- Health workers who do not provide family planning services within the sampled five health care facilities.
- Those with less than 5 years working experience

3.5 Sampling Method.

The study chose five public health facilities in Mfangano Island out of the seven public health facilities. Simple random sampling procedure was adopted. The simple random sample was taken by writing the name of each facility on a slip of paper. These facilities were Sena, Ugina, Soklo, wakula, Takawiri, Yokia and Nyakweri. The seven slips of papers so prepared were put into a cup and mixed thoroughly and then the researcher drew as a lottery (without looking) the required number of slips, five, for the sample one after the other without replacement. The researcher ensured that in successive drawings each of the remaining elements of the division had the same chance of being selected.

The participants were selected through convenient sampling from those who came to seek care in the facility and met the inclusion criteria. They were selected as they visited the health facility between 8.30 a.m to 4.30 p.m from Monday to Friday for four weeks during the data collection period. Four clients were interviewed daily in each of the five sampled health care facilities. Ten (10) service providers were selected, using purposive sampling technique.

3.6 Sample Size

Cochran, (1963:75) formula was used to determine the number of participants. The formula was appropriate since the population was large and we were dealing with proportion.

This was determined as follows.

$$n = \frac{Z^2 pq}{d^2}$$

Where,

n = Desired sample size when population is greater than 10,000 (The Population in Mfangano Island according to Census 2010 was 32,300)

Z = standardization Z score at 1.96

P = Proportion of women using FP (women using Family Planning in Kenya cannot exceed 46 % KDHS)

q = 100% – 46% = 54%

d² = Level of precision expressed as a proportion (0.05)

$n = 1.96^2 \times 0.46 \times 0.54 / 0.05^2 = 380$

Sample size was increased to 400 to cater for dropouts and non-responders

3.7 Data Collection Techniques and Tools

Data collection was done between months of January and February 2015. The researcher trained five research assistants (one from each of the selected health care facility) to assist in data collection in their respective facilities. Eligible participants were recruited using the daily attendance register in maternal child health family planning clinic. The aim of the research and its procedures was explained (appendix iii) to the participants and those who signed the consent to participate were provided with the questionnaire to fill. Clients who were not able to read and write were assisted by the research assistants. The participants were asked of previous participation in the study before administration of the questionnaire to ensure no participant fills the questionnaire more than once. Administration time was approximately 30-45 Minutes. The questionnaire was

translated to dholuo verbally by the research assistants during data collection as it is widely understood and spoken within the study area. The responses were then translated back to English. The Participants were interviewed individually in a separate and private room within clinical study area. Data was collected between 8.00 a.m to 4.00 p.m daily. The researcher developed two questionnaires. The client's questionnaire had 42 items.

The questionnaire had questions, both open and closed ended, presented in three sections;

- i. Socio-demographic characteristics that included age, educational level, occupation, religion, marital status, ever given birth and number of children.
- ii. Knowledge section that inquired if; the clients has ever heard about family planning, source of information, number of family planning method known, family planning method that was being used by the client, reason for not using FP for clients who didn't use family planning, service provision areas, rationale for choice of the method, duration of use of the method, partner awareness, approval and participation in FP
- iii. Quality of family planning services that inquired about: Waiting time, information provided by health care workers during family planning counselling, requirements for service provision, level of satisfaction of the clients with the services provided and cost of the FP services.

The health workers questionnaire had sort to answer 22 items that included; qualification of health care workers, years of experience in providing family planning services, equipment and facilities available for family planning ,type of family planning methods available within the health facility, cost of providing the services, average time for provision of services, in service training received and challenges faced(appendix iv

b)The health workers questionnaire was taken approximately 30-40 minutes to fill and was returned immediately after completion.

3.8 Content validity and reliability of questionnaire

Content validity of the questionnaire was examined through piloting study by checking clarity of words to ensure respondents understood all questions in equal manner. The questionnaire was also assessed by the supervisor, with a wide knowledge on the subject and who declared no interest and with a social scientist on applicability, appropriateness and adequacy of the instruments. Further, the questionnaires were administered by research assistants who understood English, Kiswahili and local language and trained by the researcher on data collection.

3.9 Questionnaire Pretesting

Pretesting of the questionnaire was carried out at Remba Island, Homabay County since it had similar characteristics with study area. A sample of 20 women was recruited during this time. After pretesting, all problematic questions were identified and modified accordingly before collecting data

3.10 Sources of data

The study relied on two complimentary sources of data: primary and secondary. The important sources of secondary materials included books, journal articles, and MA theses, PhD dissertations, planning documents, statistical abstracts, sessional papers and population census reports. These were accessed through the libraries of Kenyatta University and University of Nairobi. The primary sources were the primary information gathered directly from respondents.

3.11 Data Management

Immediately after administration of the questionnaire the research assistant checked the returned questionnaire for completeness to include checking for errors and omissions and corrected them. Coding of the questionnaire was done then the data was double entered on EPI info database.

3.12 Data Analysis

Data were exported to R-statistic version 3.0.2 software for analysis. Bivariate analysis was performed to test for association between the dependent and each of the independent variables using Chi-square test of association or Fisher's exact test where appropriate. Prevalence of uptake of family planning services was reported as a proportion at 95% confidence interval. Multivariate association with uptake of family planning services was examined using Logistic Regression analysis and Crude odds ratios and their respective 95% confidence interval reported. All independent variables explored in the univariate regression analysis were retained in the multivariable regression model. Statistical significance was considered at $\alpha < 0.05$

3.13 Ethical Considerations

Ethical approval to carry out the research was obtained from the Institutional Review Board of Pwani University and Sub - County Health Office.

Women who visit the sampled health care facilities during data collection period were explained to about the study and the procedures by health care providers providing family planning services. The subject information sheet was given to them to read (Appendix iii); for those unable to read the information was explained to them in the language they understood best (Dholuo/Kiswahili/ English). Enough time was given for clients to read the information sheet, ask questions and receive explanation. Those who

agreed to participate signed the informed consent. There were no measure taken against those who declined to participate and neither was there any reward for participation.

All data collected during the course of the research was kept confidential, the participant's identities were not revealed at any instance as no individual identities were used in any part of the report from the study. Data was entered in a safe database accessible only to the research team to maintain confidentiality. All information provided by respondents was kept under lock and key, only accessible by the researcher and the supervisor.

CHAPTER FOUR

RESULTS

Study participants

From January 2 to February 28, 2015, we recruited 396 participants. A total of one hundred and eighty three were using modern family planning methods (Family planning uptake prevalence of 46% (95% confidence interval (CI) 41 to 51%). Of the 396 study participants, 321 (81%) were youths aged between 18 and 35 years. Our study participants were; self-employed 223 (56%), had completed at least primary school 387 (98%), Christians 306 (77%), married 282 (71%) and had given birth 376 (95%) details of representation per variable are presented in Table 1.

Characteristics*	All participants (N=396)	Using family planning (N=183)	Not using family planning(N=213)	p-value
Age in years				
18 to 35	321 (81)	160 (88)	160 (75)	0.002
36 to 45	75 (19)	22 (12)	53 (25)	
Education levels				
Primary or no education	231 (60)	65 (36)	166 (78)	< 0.001
Secondary education	115 (29)	75 (41)	40 (19)	
College education	50 (13)	43 (23)	7 (3.3)	
Occupation				
Employed	262 (66)	141 (77)	121 (57)	<0.001
Unemployed	118 (30)	32 (17)	86 (40)	
Student	16 (4.2)	10 (5.5)	6 (2.8)	
Religion				
Catholic	123 (31)	56 (31)	67 (31)	<0.001
Protestant	183 (46)	102 (56)	81 (38)	
Islam	1 (0.3)	1 (0.5)	0	
Indigenous	89 (23)	24 (13)	65 (31)	

Characteristics*	All participants (N=396)	Using family planning (N=183)	Not using family planning(N=213)	p-value
Marital status				
Married	282 (71)	144 (79)	138 (65)	<0.001
Single	43 (11)	19 (10)	24 (11)	
Divorced/widow/cohabiting	71 (18)	20 (11)	51 (24)	
Ever given birth				
Yes	376 (95)	174 (95)	202 (95)	0.990
No	20 (5)	9 (5)	11 (5)	
Number of children				
1 to 4	254 (64)	128 (70)	126 (59)	0.020
5 to 8	100 (25)	43 (23)	57 (28)	
Above 8	42 (11)	12 (6.6)	30 (14)	
* all the results are N (%) unless specified				

Apart from whether the woman had ever given birth ($P = 0.99$), all other variables examined (age, education, occupation, religion, marital status and number of children) $P < 0.05$ were different between those women on FP and those not on FP as shown in Table 1.

In this study, 213/396 (54%, 95 % CI 49 to 59%) were not using any modern FP method during the time of this study. The main reasons cited for non-use of any modern family planning method includes; lack of spousal consent (28.1%), desire to have more children (23.4%), lack of information on FP methods (3.3%), sexually inactive (1.8%) and either religious or cultural reasons 3 (1.3%).

Knowledge and use of family planning services

The two main sources of information on family planning services were through radio 200 (51%) and from fellow women 96 (24%). Study participants rarely got FP information from the internet 5 (1.3%) as evident in Table 2. Only 20 (5.0%) of the participants never knew of any family planning methods. At least 210 (53%) knew three family planning methods and more as captured in Table 2.

Table 2: Sources of information and knowledge of family planning	
	N=396
Family planning sources of information,	N (%)
Radio	200 (51)
Other women	96 (24)
Print media	24 (6.0)
Television	13 (3.3)
Internet	5 (1.3)
Total	396 (100)
Number of family planning methods known,	
Zero	20 (5.0)
1	66 (17)
2	100 (25)
3	160 (40)
4 and above	50 (13)
Total	396 (100)

On average, 109 (60%) study participants involved their spouses in deciding on use of family planning methods. Injection and use of pills were the most commonly preferred methods of family planning reported at 88 (40.3%) and 44 (24%) respectively. Most of these family planning services were accessed from hospital as shown in Table 3.

Table 3: Sources and type of FP methods used	
	n=183
Types of FP methods used	n (%)
Injection	88 (40.3)
Pills	44 (24)
Implant	28 (15)
IUCD	17 (9.1)
Condoms	10 (5.3)
Surgical	7 (3.7)
Natural methods	6 (2.7)
Total	183 (100)
Area of access for FP methods	
Hospital	143 (78)
Chemist	26 (14)
Clinics	14 (7.7)
Total	183 (100)

Social economic and cultural factors associated with uptake of family planning services

In the multivariate regression analysis, elderly age (36 to 45 years), secondary and above secondary education levels were associated with high odds of uptake of FP; crude Odds ratios (COR) 2.4 (95% CI 1.4 to 4.2), 5.8 (95% CI 1.4 to 12.9) and 4.5 (95% CI 2.8 to 7.4) respectively. Being unemployed (COR 0.4 (95% CI 0.3 to 0.7), a catholic (COR 0.4 (95% CI 0.2 to 0.8), a protestant (COR 0.3 (95% CI 0.2 to 0.5) and having at least eight children (COR 0.4 (95% CI 0.2 to 0.8) were associated with lower odds of FP uptake (Table 4). Further, in the multivariable regression model, secondary education level (adjusted OR (AOR) 4.72 (95% CI 2.70 to 8.26) and above secondary education level (AOR 14.45 (95% CI 5.18 to 40.29) were associated with higher odds of FP uptake compared to primary or no education. Being unemployed (AOR 0.36 (95% CI 0.20 to 0.64) and having at least eight children (AOR 0.23 (95% CI 0.06 to 0.84) were associated with lower odds of FP uptake after the adjustment as shown in Table 4.

<i>Characteristics</i>	<i>Crude Odds ratios (95 %</i>	<i>P-values</i>	<i>Adjusted odds ratios (95% CI)</i>	<i>P-values</i>
Age in years				
18-35	1.0 (Reference)		1.0 (Reference)	
36-45	2.4 (1.4 to 4.2)	0.001	0.69 (0.32 to 1.47)	0.34
Occupation				
Employed	1.0 (Reference)		1.0 (Reference)	
Unemployed	0.4 (0.3 to 0.7)	0.004	0.36 (0.20 to 0.64)	0.001
Student	1.9 (0.7 to 5.3)	0.24	1.02 (0.12 to 8.40)	0.980
Education level				
Primary or no education	1.0 (Reference)		1.0 (Reference)	
Secondary level	5.8 (1.4 to 12.9)	0.01	4.72 (2.70 to 8.26)	<0.0001
Above secondary level	4.5 (2.8 to 7.4)	0.0001	14.45 (5.18 to 40.29)	<0.0001
Religion				
Indigenous	1.0 (Reference)		1.0 (Reference)	
Catholic	0.4 (0.2 to 0.8)	0.009	0.82 (0.46 to 1.45)	0.49
Protestants	0.3 (0.2 to 0.5)	<0.0001	0.68 (0.32 to 1.42)	0.30
Marital status				
Married	1.0 (Reference)		1.0 (Reference)	
Single	1.3 (0.7 to 2.5)	0.40	0.33 (0.11 to 1.00)	0.05
Divorced/widowed	1.4 (0.5 to 3.7)	0.54	0.67 (0.31 to 1.43)	0.30
Number of children				
1-4	1.0 (Reference)		1.0 (Reference)	
5-8	0.7 (0.5 to 1.2)	0.21	1.20 (0.65 to 2.21)	0.56
Above 8	0.4 (0.2 to 0.8)	0.01	0.23 (0.06 to 0.84)	0.03

Quality of care in family planning service provided

The average time spent at the FP provision clinics/hospitals was <1 hour for majority of participants on modern FP methods; 151/183 (83%).

A total of 10/183 (5.5%) could not get any information about modern FP methods from the clinic. Information about FP provided were predominately on advantages of each method 53/183 (29%) and the correct use of the specific FP method 42/183 (23%). Of the 183 study participants, currently on modern FP; 99(54%) were provided with more than six FP methods. Women were recruited for modern FP services mostly on their ability to pay for the service 133/183 (73%). Among the 183 study participants currently

on modern FP methods; 108 (59%) had access to their family planning method of choice and 75 (41%) could not access FP methods of their choice. Despite the challenges of accessing the FP services, 163/183 (89%) reported good satisfaction with the services as revealed in Table 5

Table 5: Quality of FP services offered	
	n=183
Average time (hours) spent in FP clinics	n (%)
<1 hrs	
1 to 2 hrs	151 (83)
>2hrs	24 (13)
	8 (4.3)
FP methods information provided	
Advantage of each method	53 (29)
Correct use of the method	42 (23)
Side effect	36 (20)
What to do in case of side effect	27 (15)
Mode of action	15 (8)
No information	10 (5.5)
Distribution of FP methods provided	
At least 2	9 (4.9)
3 to 6	68 (37)
> 6	99 (54)
Criteria for qualifying for FP services	
Ability to pay	133 (73)
Being a woman in reproductive age	23 (13)
Return date	11 (6.0)
Number children	8 (4.4)
Pregnancy test	5 (2.7)
Spousal consent	3 (1.6)
Satisfaction with FP services	
Good	163 (89)
Better	15 (8.2)
Bad	1 (0.6)
Don't know	4 (2.2)
Total	176(100)
#-7 participants missing data	

Ten health care providers were involved to support the study, it came out clearly that they face a lot of challenges like lack of proper instruments in family planning clinics and stock out of family planning commodities which hinders them from giving the services. It was also identified that most of the health care providers use the knowledge the gained from college to offer family planning services. From the study it was identified that some health facilities did not have material for client education hence making it had for the providers to give proper counselling. Additional the health care providers most of the times face cultural challenge that hinder clients from seeking family planning services.

A tour of Mfangano Island showed that potential clients of family planning services needed not to travel long distances to assess family planning services. Health care providers also go on outreach Programmes to offer both immunization and family planning services to people in the remote parts of the Island. Therefore, family planning services are readily available to the people.

CHAPTER FIVE

DISCUSSION

5.1 Discussion

This study assessed the potential barriers to family planning utilization among women of reproductive age in Mfangano Island, Homabay County. In our study, the prevalence of family planning uptake was 46%. This finding concurs with those of a study done in Nairobi slums among women of reproductive age which recorded 46% (Oketch et al., 2011) Contraceptive Prevalence Rate (CPR). But these findings were higher than the previous study conducted in rural Kenya in 1997 which recorded 35.5% CPR (Gwako, 1997). This increase could be due to the increase in; the use of injectable contraceptives, media coverage on the importance of family planning and where the services are offered without payment. The decline in use of traditional methods could also partly explain the increase in uptake of modern family planning services. Globally and nationally there has been an increase in uptake of modern family planning services and our results would be a reflection of this increase from 39% in 2008-2009 to 53% in 2014 (KDHS, 2014).

We found that 54% of the participants were not using any form of family planning. The main barrier for uptake of FP among respondents in this study was lack of spousal consent. This concurs with a study done in Nairobi Kenya where it was reported that most women who would need modern family planning were not on family planning because they needed spouse and in-laws concurrence (Akelo et al., 2013). These findings suggest that in improving family planning uptake, male spouse involvement plays a vital role. The other barrier to uptake of FP among the participants was desire for more children. This was in line with studies done in Kenya, Ethiopia and Ghana where it

was identified that women who have not attained the desired number of children will not go for family planning services (Akyeah, 2007; Kekkonen, 2011; Okech et al., 2011). The desire to have more children was in line with the findings of a study conducted in the slums of Kenya that pointed out that low utilization of family planning services was related to the desire for more children which was related to traditional belief of associating richness with number of children (Okech et al., 2011). In communities where women don't have sons; they will continue giving birth until they get enough sons (Caldwell, 1987; Caldwell, 1990; Gwako, 1997 & Imbuki et al., 2010). We found out that some FP services were not free; this could have reduced access mostly among the poor who prioritized their meager resources on other basic needs like food. Similarly, a study conducted in Sudan revealed that poverty was a major factor to underutilization of family planning services (Ibnouf et al., 2007).

Our study showed that higher education levels were associated with increased odds of uptake of modern family planning. This might be partly explained by the fact that these women understand the importance of family planning and they would like to space their births (KDHS, 2014). The findings concur with those of Imbuki et al., (2010) that; better educated women have less fatalistic attitudes towards reproduction and would therefore use contraception to space and limit family size. Education of women therefore plays an important role in terms of family planning use. Similarly, results from previous research conducted in Kenya and Sudan it was evident that the higher one goes in the ladder of education the more likelihood of family planning uptake (Ibnouf et al., 2007).

Being unemployed was associated with lower odds of family planning uptake. This concurs with a study conducted in Sudan and data from Demographic and Health Surveys for nine Latin American countries, whereby they reported that poverty was a major factor to underutilization of family planning services (Ibnouf et al., 2007; Imbuki

et al., 2010). Having at least eight children was associated with lower odds of family planning uptake. This differs with previous studies from Nigeria, Bangladesh, Tanzania and Kenya which reported that as number of living children increases family planning uptake increases (Lawoyin et al., 2002; Bertrand et al., 1995; Oketch et al., 2011).

In our study the main source of information on family planning was through radio. This choice could be because radio is easily available in community setting than other sources such as newspaper and internet, which can be accessed by those in high social economic status. This finding concurs with a survey conducted by KDHS, (2008/2009) which indicated that 69% women get family planning messages through radio, 40% through television, and 34% through print media.

Likewise, Mekonnen, (2011) in his study which was conducted in Ethiopia pointed out that better mass media coverage increases peoples knowledge on FP hence increasing the uptake of the commodity.

In our study, most of the participants were aware of at least three methods of family planning. Knowledge on family planning methods is essential; because women are more likely to embrace family planning when they are aware of the available methods (Gwako, 1997). This finding was similar to a study conducted in Kenya whereby it was pointed out that those women who knew less methods of family planning were less likely to use family planning. Assessing the level of awareness on different methods of family planning gives a rough estimate of the accessibility of family planning information in the country (KDHS, 2008/ 2009).

The average time spent at the FP provision clinics/hospitals was <1 hour for majority of participants on modern FP methods. The study also identified that a wide range of family planning methods were mentioned to participants though just a few were available at the hospital and clinics: this concurs with a study carried out in Nyanza

Kenya where they reported that providing a range of family planning methods improves the utilization of the services. The study indicated that the providers give incomplete or no information about the method that one has chosen. This indicates that the counseling being provided was poor. These findings are similar to those by Kasadde, (2000) where poor information provision due to limited counseling about modern FP methods was noted. For women who seek family planning, it is important to improve the quality of care particularly counseling on the full range of available methods so that women can choose the method that best matches their individual circumstances and intentions and can change methods when they want to. Hence basing on the availability of different method, the quality of the services offered was low.

Notably, the quality of family planning is good when clients gets full information of all methods available and how each works. Provider has technical competence, good communication skills, good attitude, and providing appropriate collection of services. Majority of our study participants were very satisfied with the client provider interaction during service provision. These findings indicate that the quality of family planning services offered was good and should have transformed to high prevalence of family planning services utilization as Bertrand et al., (1995) identified that good care enables one to make decision on family planning. It can inspire one to find out about family planning, continue using contraception and inform others hence influencing them.

The major strength of the study was that it utilized facility-based participants to sample views and satisfaction with FP services offered at the respective health facilities. We also recorded very low non-response rate.

The limitation of our study was that, our data were self-reported and therefore subject to reporting bias. This was also a cross-section study meaning we could not follow up the study participants to confirm uptake of FP services and changing trends in FP uptake.

Our study being a facility based survey conducted in the rural areas, might not be generalizable to urban regions or among community women who don't seek FP services in public health facilities.

CHAPTER SIX

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter summarizes the major findings of the study; provides conclusions derived from the study and makes the recommendations for appropriate interventions for increasing family planning uptake among women of reproductive age (18-45 years) in Mfangano Island. It also gives suggestions for further research on the issue of contraceptive use.

6.1 Summary of Key Findings

Family planning uptake was found to be 46%. Among the women 51% got information on family planning from radio. Generally 40% of the women knew at least 3 methods of family planning while the preferred method was injectable contraceptive. Natural FP was the least preferred method. Health care facilities were found to be the preferred area where women sort FP services.

The cultural factors that contributed to low uptake of family planning include; lack of spousal consent (28%) and desire to have more children (23%).

Age (36 years and above) and higher level of education were associated with higher uptake of family planning while unemployment, religion and number of children (more than 5) were associated with low uptake of FP.

On quality of FP services offered 59% of those clients who were using FP method accessed FP services of their choice, among them (89%) were satisfied with the services offered. This study identified stock out of family planning commodities as the main challenge experienced by health care workers and clients seeking family planning services that affected the quality of family planning services offered.

On average most facilities provided 3-6 family planning methods.

Ability to pay for the services was the main qualifying criteria to access family planning services among women of reproductive age,

Health workers predominantly gave information on advantages and disadvantage of family planning methods available during the counselling sessions.

6.2 Conclusion

Utilization of family planning services in Mfangano Island Homabay County was lower 46% in comparison to national average which stands at 58%, (KDHS, 2014).

However the knowledge level on the methods of family planning was high, the uptake of family planning services was low. Most clients preferred using short term methods of family planning maybe due to the information provided by health workers which mainly targeted on advantages and disadvantages of family planning methods and the skills of the health care workers on provision of the methods.

Most health facilities within Mfangano Island were accessible in terms of distance and a wide range of family planning services available (most hospitals provided 3-6 methods).

In socio- economic and cultural factors older age and higher level of education was the main factor associated to high uptake of family planning services. Higher literacy lead to reduced ignorance, improved health seeking behavior, better adherence to health related interventions and ability to pay for health services (Imbuki et al., 2010).

Unemployment, religion, high parity, spousal consent and preference of male child were the main social cultural issues that contributed to low up take of family planning.

From the findings of this study the level of satisfaction was high however, the counselling on family planning was not sufficient. Availability of the family planning commodities was not consistent. Ability of the clients to pay for service was the main determinant of accessing family planning services; this could have made the services inaccessible to some of the clients who were willing to use family planning.

6.3 Recommendation

6.3.1 Recommendations to policy and practice

1. The findings of the study have shown serious issues of concern in family planning service uptake. Low family planning uptake results to high fertility rate which in turn contributes to high infant and maternal morbidity and mortality rates thus the government of Kenya, County Government of Homabay and other stakeholders like implementing partners should acknowledge that family planning and control of population growth is a major public health concern that should be prioritized among other health care services. This can be realized by increasing health care budgets allocations on family planning commodities and equipment, reduce the cost of the family planning commodities, especially the long term methods and support outreach and health education programs.
2. Since family planning uptake is lower within Mfangano Island, more public and community based health awareness and education programs should be directed to women and men to provide them with information they need on family planning that includes: importance of family planning, methods of family planning, eligibility criteria for various family planning methods, mode of action, side effects, how to use the method, effectiveness, myths, follow up, advantages and disadvantages. This will empower them to come forward for the family planning services. This can be achieved through providing outreach FP services, carrying health education sessions at the health facility especially maternal child health clinic and maternity department that have access to high numbers of women of reproductive age and their spouses, carrying out public rallies target towards educating the public on family planning, use of posters and used of media especially the local stations that use vernacular in its programs.

3. The Homabay county government should Sensitize and train health workers on family planning services to include in-service training on the modern family planning methods to enhance their ability to counsel clients comprehensively and provide a wide variety of methods to the clients. This can be achieved through support supervision to assess gaps in service provision and on job training to update the health care worker's knowledge and skills especially on changing technology and procedure in service provision.
4. There is need for the Mbita sub county department of reproductive health to improve the health information system and link it to the County health information system. These will assist in effective provision of information that will inform family planning related interventions, effective and timely support , guiding making of informed decisions on family planning issues, ongoing monitoring and evaluation of the coverage or progress as well as support supervision.
5. Maternal and child health care and family planning is an element in primary health care and according to the theory of family planning it should be based on practical, scientifically sound and socially acceptable methods and technology, that should be made universally accessible to individuals and families in the community through their full participation, and at a cost that the community and country can afford to maintain (Wood, 2008). The government through the county government of Homabay, department of health should ensure that family services are:
 - a. Accessible; that is, the services are geographically, financially and culturally within easy reach to the whole community within the county.

- b. Acceptable; the quality of family planning services offered are appropriate, adequate, and able to satisfy the health needs of the target population and are provided by methods which are within their social cultural norms.
- c. Affordable; the services are provided at a cost that the community can afford.
- d. Available; the health structures and family planning services are easily available to the community members and they also help them to assume responsibility in promoting their own health.
- e. Appropriate Technology; utilising current family planning methods, techniques, and updated technology in provision of family planning services. Staff training and adequate budgetary allocation is essential to realize this.

6.3.2 Recommendations for further research

- There no Facility based study that has been carried out within Mfangano to assess barriers to uptake of family planning. More studies in different settings would need to be done to enhance generalizability of findings .Similar studies should be carried out in other parts of the county with respect to diversity of socio-cultural beliefs and infrastructure of the County are recommended.
- The study did not focus on use of emergency family planning, the relationship between infant mortality rate and uptake of family planning services, uptake of long-term and short-term methods of family planning and the current political influence of regional population numbers in selection of leaders as a factor that would influence the uptake of family planning. These are some of the areas recommended for further research.

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Appendix I: Work Plan

ACTIVITY	MONTH
Preparation of proposal, literature review, preparation of tools	June / July, 2014
Ethical review and approval	August, 2014
Training of research assistants and pilot study	September , 2014
Data collection	October -November , 2014
Data editing, cleaning, entry and analysis	December, 2014
Report writing	January 2014- April, 2015
Dissemination of research findings	May, 2015
Final report of the project	June ,2015

Appendix ii: Budget Allocation

ACTIVITIES	QUANTITY	KSH
Training activities		
Research assistant 5 (travelling allowance)	1 day ×300×5	1,500
Research assistant 5(lunch allowances)	1 day ×300×5	1,500
Researchers travelling allowance	1 day ×500	500
Field activities		
Research assistant5 (travelling allowances)	5 ×300×20	30,000
Research assistants 5 (lunch allowances)	5×300×20	30,000
Researchers travelling allowance	500×20	10,000
Equipment		
Data storage equipment (external hard disk)	250 GB transcend	20,000
Flash Disk	2GB	2,000
Others		
Meals	14×300	4,200
Miscellaneous		9,970
TOTAL		109,670

The above rates are estimates of the researcher.

Appendix iii: Participant Information Sheet

Title; To determine barriers to utilization of family planning services among women of reproductive age (18-45 years) in Mfangano division, Homabay county.

I am an MPH student at Pwani University conducting a research study to determine barriers to utilization of family planning services among women of reproductive age (18-45 years) in Mfangano division, Homabay County.

You are invited to volunteer for a study/research. This information sheet will assist you in deciding if you would like to participate, before you agree to take part in this study you should fully understand what is involved.

The aim of this study is to assess the potential barriers to utilization of family planning services among women of reproductive age (18-49 years) in Mfangano Island, Homabay County.

Participation is voluntary and note that you will receive no direct benefit from taking part in this study. The information will be used to inform the policy-makers and program officers to identify action plan, resource and capacity constraints required that are both cost- effective and health improving in providing family planning.

During the study you will be expected to fill a questionnaire and this will take approximately one hour, if you are unable to read and write the researcher will assist you

This Subject information sheet will be explained to you in a language you understand best (dholuo/Kiswahili/English). Adequate time will be given for you to decide whether or not you want to take part.

All the information which will be collected during the course of the research will be kept confidential, your identity will not be revealed at any instance as No individual

identities will be used in any report from the study .The data will be entered in a safe database accessible only to the research team.

Your participation in this study is voluntary and you are free to withdraw anytime without penalty.

If you have any questions which are not fully explained in this leaflet, do not hesitate to ask the researcher (cell no: 0724244192).

You will be expected to give a written consent if you agree to participate

CONSENT FORM

I have read the information sheet and understood it. The purpose and procedures involved in this research have been explained to me by the researcher and I voluntarily consent to participate.

Participants signature.....Date.....

Researcher's signature.....Date.....

Appendix iv (a): Questionnaire

I am MPH student at the Department of Biomedical Sciences, School of Pure and Applied Sciences at Pwani University. I am conducting a study on Barriers to Utilization of family planning services among women of reproductive age (18-49 years).

PART A: RESPONDENT BACKGROUND INFORMATION

1. How old were you at your last birthday?
2. What is the highest level of school attended.....
3. What is your occupation? Farming fishing business teaching Hair dressing others
4. What is your denomination? Roman catholic
Seventh Day Adventist Legio Maria others
(specify).....
5. What is your marital status? Single Married
Divorced Widower
6. Have you ever given birth? YES NO
7. If Yes how many children do you have at the moment?
8. If you could choose exactly the number of children to have in your whole life how many would you choose?.....
9. Assuming that due to circumstances beyond your control. You couldn't obtain the actual number of boys or girls you wanted but you have gotten the total number of children you want. Would you continue?
YES NO
10. What interval would you prefer between two successive births?.....

PART B: RESPONDENTS KNOWLEDGE, ACCEPTANCE AND UTILIZATION OF FAMILY PLANNING

11. Have you ever heard of family planning methods? YES NO
12. Where do you obtain information on family planning? Radio
13. Print Media Television Health Staff
- Others (specify).....
14. Which family planning methods do you know?.....
15. Have you ever used any family planning methods before? YES NO
16. If yes which one?.....
17. Are you currently using any family planning method? YES NO
18. If yes did you decide with your partner /husband? YES NO
19. If no why are you not using any method? Desired for more children
- Fear of side effects Non-affordability
- Lack of information on family planning Lack of spousal consent
20. If yes, why are/ were you practicing family planning?
- Limit family size Space birth
- others (specify).....
21. Where do you get the services? Hospital Pharmacy shop
- Clinic others
22. For how long have you been using this method?
- 6 months 1 year 2years 5years
- more than 5 years
23. What are the reasons for using the method?
- Minimal side effect Affordable Convenient Easy to use
24. Have you ever changed a family planning method before?

YES [] NO []

25. If yes why did you change the method

Side effects [] Cost In-effectiveness of method []

others (specify).....

26. Will you advise a friend or relative to practice planning?

YES [] NO []

27. If Yes /No why?.....

28. Is your partner aware that you are practicing family planning?

YES [] NO []

29. If no why?

30. If yes does he approve it? YES [] NO []

31. Does he accompany you to the family planning clinic?

YES [] NO []

PART C:QUALITY OF SERVICE OFFERED

These questions do not apply for those not utilizing family planning services

32. Do you wait for a long time at the clinic before you are served?

YES [] NO []

33. How many hours on the average do you spend at the clinic?

15 mins [] 30 mins [] 1hour [] 2 hours []

others (specify).....

34. What sort of information is given about family planning methods?

Side effects [] Correct use of method []

Advantage of the method [] Mode of action []

What to do in case of side effects [] No information []

35. How many methods are mentioned to you?

36. Do providers make demands of any requirements before offering a service?

YES [] NO []

37. If Yes what sort of requirements do they demand?

Spousal consent [] Number of Children [] Age []

Others

38. Are you satisfied with the way the providers interact with you during service?

No satisfied [] Very satisfied []

39. How will you describe the services offered at the clinic?

Bad [] good [] better [] don't know []

40. How much does it cost you to get family planning services ?

Ksh 50 [] Ksh100 [] Ksh 150 [] Ksh 200 []

Others (specify).....

41. What is your reaction on the cost of getting family planning services?

Discourages me [] Motivates me []

Others.....

42. Do you get the family planning method you want all the time you go to the facility?

YES [] NO []

Thank you very much for your time and participation

Appendix iv (b)

QUESTIONNAIRE FOR SERVICE PROVIDERS (KEY INFORMANT)

Qualification of care provider.....

1. How long have you worked in MCH/FP clinic?
2. What essential equipment's for family planning are available in the clinic?
Examination table [] Gloves [] Blood pressure machine [] Stethoscope
[] speculum []
others.....
3. What facilities or equipment's are lacking?.....
4. Which type of family planning methods do you provide in the clinic?.....
5. Which methods of family planning are usually utilized most?.....
6. Who utilize the services more?.....
7. Do you experience stock out? Yes [] No []
8. If yes for how long?.....
9. Do you offer family planning services to young youths YES [] NO []
10. If No why?
11. How much does it cost to provide family planning services?.....
12. What reaction do you receive from client on the cost of family planning serves? No reaction [] Discourages client []
Others
13. What do you to ensure that clients come to the clinic for follow- ups?.....
.....
14. When clients delay with follow ups what reason do they give?.....
.....

15. How long is the current waiting time from when a client reports to the clinic until she is served ?.....

16. Do clients always get the family planning services they want?

Yes [] No []

17. If No why.....

18. How long does the clinic operate each day to provide family planning services for client?

Day	Open	Close
Monday		
Tuesday		
Wednesday		
Thursday		
Friday		

19. What materials for client education about family planning are available?

.....

20. Are the materials put in areas where clients can easily see?

.....

21. Have you received in-service training in family planning especially in counseling?

YES [] NO []

22. What do you think is the major barrier to family planning service utilization?.....

.....

Thank you very much for your time and participation