FACTORS INFLUENCING THE SATISFACTION WITH THE FAMILY PLANNING SERVICES AMONG WOMEN OF REPRODUCTIVE AGE SEEKING FAMILY PLANNING SEERVICES AT HEALTH FACILITIES IN SIAYA COUNTY, KENYA.

BY

DENNIS KIMANZI KINYOKI

H153/4286/2015

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF EPIDEMIOLOGY AND BIOSTATISTICS OF JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

2022

DECLARATION

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

Signature: _____ Date: _____

Dennis Kimanzi Kinyoki

H153/4286/2015

This thesis has been submitted for examination with our approval as supervisors.

Dr. Daniel Onguru, PhD

School of Health Science

Jaramogi Oginga Odinga University of Science and Technology

Signature…….. Date…….

Dr. George Ayodo, PhD

School of Health Science

JaramogiOginga Odinga University of Science and Technology

Signature…… Date……

DEDICATION

This research thesis is dedicated to my family and friend. A special feeling of gratitude to my loving wife, Ruth Mukuiya whose words of encouragement and push for tenacity ring in my ears. My son Nathan Mumo, blessings for rendering me the time that was otherwise meant his care as a father. My parents and siblings who never left my side and are very special to me. You have been my best cheerleaders.

ACKNOWLEDGEMENTS

First and foremost, I give God all the glory for having kept me alive and in good health during the research study. Without Him I would have not come this far. I would also like to acknowledge my supervisors, Dr. Dan Onguru and Dr. George Ayodo, for their dedication, concern, and close supervision that has enabled me to attain this level. They were ever ready to give guidance and provided very useful progressive comments and encouragement. I am sincerely thankful to my classmates for their great support and understanding during my study period not forgetting all my colleagues for the guidance and encouragement they gave me. I'm grateful to all the respondents especially the women and the healthcare providers who sacrificed their time to make the research successful.

TABLE OF CONTENTS

LIST OF TABLES

OPERATIONAL DEFINITIONS OF TERMS

Family planning: the practice of limiting one's number of children and the time between births, especially through contraception or voluntary sterilization.

Quality healthcare management: The goal of quality management is to improve the efficacy of therapies while also increasing client satisfaction with the service.

Health care system: The system is made up of small and major businesses including pharmacies, medical clinics, and hospitals, and all of them must give high-quality service in order for the system to function smoothly.

Satisfaction: the satisfaction obtained from the fulfillment of one's wishes, expectations, or needs, or the pleasure derived from this.

FP Users: The percentage of women of reproductive age who use (or whose partner uses) a contraceptive technique at any given moment, nearly generally reported for women who are married or in a sexual partnership.

Utilization: the action of making practical and effective use of something

Factors: a circumstance, fact, or influence that contributes to a result

ABSTRACT

Client satisfaction is one of the desired outcomes of health care, and it is directly tied to health service consumption. It reflects the disconnect between the service's expectations and the client's experience with it. Client retention is currently one of the most serious issues in health facilities, and this problem has been largely related to a lack of sufficient and satisfying service to clients. The goal of this facility-based, cross-sectional study was to find out what factors influence women of reproductive age's satisfaction with family planning services at health facilities in Siaya County, Kenya. The study was conducted among women of reproductive age seeking FP services in 4 sub-county public hospitals: Bondo, Ukwala, Madiany, and Yala, in Siaya County, as well as healthcare providers serving the women during the period of study. A simple random sampling technique was used to select the participants in quantitative findings while the purposive sampling technique was used for qualitative data. Data was collected using semi-structured questionnaires for women receiving service and a key informant interview guide for healthcare workers. Quantitative data were analyzed using descriptive statistics and inferential statistics using STATA (v 15) while qualitative data was analyzed using content analysis. Most (60.06%) of the clients served were aged between 20-24 years and 194 (56.56%) were married. The majority (92.71%) of the clients had high satisfaction with the services they received at the health facilities, and women with high levels of interaction with the providers were about 68% more likely to be satisfied with the FP services as compared to females with low provider-client interactions (OR= 0.68, p=.021<0.05). There was no statistically significant association between satisfaction and facility level, age category, marital status, who referred the females for FP services, the source of FP information, waiting time, cost of service, and level of education ($\alpha = 0.05$). The Ministry of Health, through the individual health facilities and relevant stakeholders, should identify mechanisms for maintaining the satisfaction of women using family planning methods, while ensuring more information is provided by the mainstream healthcare workers.

CHAPTER ONE: INTRODUCTION

1.1 Background

Globally, total quality management (TQM) in healthcare provision is imperative in fostering client satisfaction (Jackson, 2000). Total quality management (TQM) is a methodology that dates back to the 1950s and has progressively grown in popularity since the early 1980s. Farzianpour *et al.* (2010) on the other hand, reckoned that healthcare institutions need to improve healthcare services by having an experienced and competent staff. These statements ring true and draw parallels when it comes to quality of healthcare and client outcomes in addition to ensuing feedback.

Other studies have also been undertaken over time on the relationship between quality of healthcare and the client behavior both in the short and the long term (Cleary & McNeil, 1988). The significance of this precedence to health facilities and especially those taking part in private practice is absolute since clients naturally gravitate towards the institutions that prove they can deliver high quality healthcare services. There are, however, a wide range of aspects that have been identified as contributing to the quality of healthcare services. This is because outcomes are simply a sum of the various aspects compounding the operations within the health facilities. Studies have also covered these aspects with great depth.

Teamwork is one of the qualities perceived as being vital in fostering quality across all the departments in a healthcare facility. What this means is that various practitioners working together will advertently produce very desirable results in terms of client care. The traditional health facilities is characterized by facilities, human resource and medical resources including appropriate medication for different conditions (Bukenya *et al.*, 2017; Mutemwa *et al.*, 2017; Obwoya *et al.*, 2018). Of paramount importance to the client, however, is the close personalized care afforded by both doctors and nurses. Clients are more likely to get better when they feel that they are under great care (Cleary & McNeil, 1988) .

Technically speaking, having a dedicated staff monitoring clients also allows for efficient service delivery through accurate diagnosis and recommendation of the best remedies for the conditions diagnosed. There are extensive studies that have shown that such services may lead to client satisfaction. Farzianpour *et al.* (2010) noted that there is a correlation between client satisfaction

and retention, and that satisfied clients were highly likely to recommend that particular healthcare institution to other potential clients.

Ethiopia is one of the most populous countries in Sub-Saharan Africa, with a population growth rate of 2.6 percent and a total fertility rate of almost 5 percent.(Mariam *et al.*, 2018). Family planning (FP) services are unusual in that they allow couples to space or limit their births while also helping to keep the world's population in check. They also play a role in reducing maternal morbidity and death by lowering the absolute number of pregnancies among all women, lowering the number of pregnancies among high-risk women, and lowering the number of unwanted pregnancies that would otherwise result in abortion (Diamond-Smith *et al.*, 2018; Endriyas *et al.*, 2017). In nations with high birth rates, FP promotion has the ability to reduce poverty, malnutrition, and prevent all maternal deaths by 32 percent and virtually all children deaths by nearly ten percent.(Bates *et al.*, 2018; Endriyas *et al.*, 2017).

The Ethiopian Ministry of Health (MoH) has set a goal of reducing the total fertility rate (TFR), reducing morbidity and mortality thus improving maternal and child health, and increasing the contraceptive prevalence rate (CPR) to 66 percent by 2015 as part of the Ethiopian population policy, which was adopted in early 1993 (Mariam *et al.*, 2018). Because it is not one of the Millennium Development Goals (MDGs), but it can make valuable contributions to achieving many of them, the ministry has given priority to providing safe motherhood services such as FP in the community by increasing access to and use of FP. Although it is not one of the MDGs, increasing contraceptive use and significantly reducing the costs of achieving selected MDGs directly contributes to reductions in maternal and child mortality (Bates *et al.*, 2018; Endriyas *et al.*, 2017; Mariam *et al.*, 2018).

Clients are now aware of their requirements and rights, and they are aware that health-care facilities exist to offer them with adequate and high-quality health services (Farzianpour *et al.*, 2015). As a result, the best way to analyze the effectiveness of a health care facility is to measure client satisfaction, and a completely satisfied customer feels that the facilities has the ability to grasp client demands linked to health care (Bintabara *et al.*, 2018; Memon *et al.*, 2017; Nasr & Hassan, 2016). Client, provider, and facility perspectives can all be used to assess the quality of care. Client

satisfaction with services is a subjective way of assessing quality, but satisfied customers are more likely to return, pass on positive messages to others, and continue using a particular FP method, whereas dissatisfied customers are more likely to share their negative experiences with others and are less likely to return or continue using FP services (Bintabara *et al.*, 2018; Memon *et al.*, 2017). Improving the quality of services affects women's happiness with them, which can lead to increased service use, continued FP use, accomplishment of fertility goals, a higher contraceptive prevalence rate (CPR), and decreased fertility (Diamond-Smith *et al.*, 2018; Mutemwa *et al.*, 2017; Nasr & Hassan, 2016; Tsai *et al.*, 2015; Tumlinson *et al.*, 2015).

The impacts of FP quality on uptake and continuation were studied in Tanzania, Kenya, and Ghana. Overall client satisfaction with the services is the most important factor of FP uptake and maintained use, and contraceptive use discontinuation rates in Sub-Saharan Africa range from 19% to 36%. (Asaolu *et al.*, 2019), wanting a more effective approach, health concerns, side effects, lack of access, expense, uncomfortable to use, and service environment quality were all stated as reasons for termination. (Bintabara *et al.*, 2018; Butame, 2019; Coomson & Manu, 2019; Mutemwa *et al.*, 2017; Ochako *et al.*, 2015; Tumlinson *et al.*, 2015).

According to a survey conducted in Jimma Zone, Addis Ababa, and Bangladesh, the majority of customers were dissatisfied with the waiting time service, and age did not play a role (Endriyas *et al.*, 2017; Mariam *et al.*, 2018). Several studies have highlighted maternal education, facility cleanliness, frequency of visits, and proper and adequate explanations on how to use contraceptives as determinants of client satisfaction (Bintabara *et al.*, 2018; Kitapci *et al.*, 2014; Memon *et al.*, 2017; Nantsupawat *et al.*, 2017; Nasr & Hassan, 2016). In Ethiopia, the contraceptive prevalence rate (CPR) is at 28%, and abortion and unwanted pregnancy are two of the leading causes of maternal mortality. In 2008, there were 101 unplanned pregnancies per 1,000 women aged 15 to 44, accounting for 42 percent of all pregnancies. In Ethiopia, an estimated 382,500 induced abortions were done in the same year, a rate of 23 abortions per 1,000 women aged 15 to 44. (Lentiro *et al.*, 2019).

Client satisfaction is a significant indicator of care quality because it provides information on the provider's performance in meeting the client's expectations, as well as an important tool for

evaluating administration and planning the health-care process (Asaolu *et al.*, 2019; Butame, 2019; Porney, 2015). Farzianpour *et al.* (2010) asserts that evidence-based practice is vital in the promotion of quality health. This follows the shifting trends in the healthcare landscape and the advancement of more effective methods. In the past decades, there has been a paradigm shift from the traditional way of operations to knowledge-based actions within most health facilities. The medical industry is experiencing an overhaul of outdated modes of practice into novel ways meant to be more effective in advancing medical services. This informs the current need among nurses and other healthcare providers to access the most recent, updated information that would be useful in their tackling of the emerging challenges in healthcare. There are many parallels to be drawn within this shifting landscape of healthcare provision. The new age has come with new challenges in terms of the medical conditions of clients and a corresponding proliferation of solutions to the problems that arise as a result.

These mind-boggling advancements are estimated to be emerging at a very fast pace. The rapid emergence of such advertisement's present challenges to health facilities in terms of keeping up with the changes and constantly updating their level of service to patience. This, however, is not the only challenge faced by institutions in this front. Both the operational and medical requirements for different regions and subsequently different health facilities vary widely. What this means is that broad-based solutions would not be taken literally and applied within different health facilities in a blanket manner. Each individual institution would require an inward-looking approach with the solutions suggested being specific to the unique challenges facing the health facilities.

The significance of an evidence-based approach is in the fact that it allows for the development of objectives and suggestions following the situations experienced within that particular health facilities. This explains why evidence-based practices and the application of relevant technology have been found to reduce medical errors significantly and in turn improve medical outcomes in terms of quality of service rendered (Pascoe, 1983).

Other advantages that always come with evidence-based practice include reduced operational costs and the provision of unique and quality services to clients. There are different ways in which operational costs would be reduced following the application of evidence-approaches (Melnyk *et*

al., 2010). First, incorporating improvements by merging new initiative with existing operational procedures significantly reduce the implementation times since practitioners are able to quickly adopt the new practices and execute them within familiar operational procedures (Brown *et al.*, 2009). This is more cost-effective when compared with radical changes that would mean the undertaking of completely new training procedures and the consultation of the new personnel to aid in implementation. This would most likely lead to a longer period of change coupled with a higher bill given the need to remunerate both the existing workforce and the new personnel contracted for a given period. Having this would also mean repeat expenses each time there was an emergence of new procedural practices of technologies to be used within the health facilities. Farzianpour *et al.*, (2010) advocates for the adoption of continuous improvement initiatives to execute this kind of practice.

In summary, total quality management could be regarded as a necessary ingredient in the fostering of client satisfaction and retention. There are, however, a wide range of qualities that surround total quality management and it is these qualities that determine its effectiveness. The first is the nature of the management of the health facilities, and the second is the training and teamwork developed within the practitioners in the health facilities. In the long run, the important strategies for promotion of client satisfaction include effective communication, teamwork, enhanced efficiency in service delivery and excellent relationships between providers and client during and after treatment. Following total quality management, existing clients are retained while at the same time; new ones are attracted thus growing the number of clients visiting the institution. When this happens, the health facilities will be able to tap into the advantages that come with the economies of scale. The other advantage will be in the full utilization of resources following the presence of clients around the clock hence minimizing wastage of resources. When such benefits are being accrued by the health facilities, their operations will be seamless with time. Furthermore, improved quality will help the health facilities gain a competitive edge over similar institutions and facilitate the generation of more revenue.

It is apparent from the discussion above those profit-making hospitals depend on the revenue they get from clients. This means that they must attract as many clients as possible while at the same time maintaining the ones they already have. When clients become many in the name of clients,

then the hospital through the administration must plan for better ways of providing quality care. The use of Electronic medical records is also one way of ensuring that many clients can be served within the shortest time possible and this enhances client satisfaction as well. The report by Leapfrog group which showed how the performance of US hospitals is below the attainable safety levels of clients and general client value is an indication that hospital administrators have to take appropriate action to gain client satisfaction. On the other hand, the satisfaction level of 88% and 96% in terms of management plan and clinical picture respectively as reported by CHAPS need to be retained as further improvement are made.

1.2 Problem Statement

Client satisfaction is one of the anticipated outcomes of health care, and it is linked to the use of health services. It indicates the difference between what the client expects and what the client gets (Memon *et al.*, 2017; Nasr & Hassan, 2016). Currently, one of the most significant challenges in healthcare facilities is client retention as this problem has been largely attributed to the inherent lack of sufficient and satisfactory service to clients. The traditional client, in visiting an healthcare institution expects to get value for their money, which can only be achieved through the provision of unique, fulfilling, and quality services (Asaolu *et al.*, 2019; Bintabara *et al.*, 2018). The achievement of this requires the co-ordination of roles between the care givers in a healthcare institution. In addition, within health facilities, the relationship between the healthcare worker and clients is essential to fostering client satisfaction and subsequent retention (Nantsupawat *et al.*, 2017).

There is however inadequate assessment of the satisfaction of clients, especially in the public health sector (Balasubramanian, 2016; Porney, 2015; Tumlinson, 2016). This is in line with the observation by Porney (2015) that failure to enhance quality services through improvement in efficiency, effective communication and teamwork would come with unprecedented reduction in the number of clients and subsequent decrease in revenues earned within the health facilities. Today, there is not much area or region-specific information that describe the level of satisfaction of clients with the family planning services they receive in Siaya, making this study necessary, especially in order to unveil the unmet need in satisfaction, as well as describe the role of both the client and the health system, thereby improving the uptake of family planning methods.

1.3 Objectives

1.3.1 Broad objective

To investigate the factors influencing the satisfaction with the family planning services among women of reproductive age seeking family planning services at facilities in Siaya County, Western Kenya.

1.3.2 Specific objectives of the Study

1. To unveil clients' satisfaction level with the FP services among women of reproductive age seeking family planning services at health facilities in Siaya County, Western Kenya.
2. To determine the factors associated with the uptake of the family planning services among women of reproductive age seeking family planning services at health facilities in Siaya County, Western Kenya.
3. To establish the relationship between quality healthcare provision and family planning service utilization among women of reproductive age seeking family planning services at health facilities in Siaya County, Western Kenya.

1.4 Research Questions

1. What is the level of clients' satisfaction level with the FP services among women of reproductive age seeking family planning services at health facilities in Siaya County, Western Kenya?
2. What are the factors associated with the uptake of the family planning services among women of reproductive age seeking family planning services at health facilities in Siaya County, Western Kenya?
3. What is the relationship between quality healthcare provision and family planning service utilization among women of reproductive age seeking family planning services at health facilities in Siaya County, Western Kenya?

1.5 Justification of the study

With high healthcare standards being maintained around the world, there is a growing demand for better client services. This has been done all over the world in the form of measures aimed at improving healthcare quality. The primary methods of improving service quality would be the

hiring of competent personnel and the overall ability of healthcare management to accept evidence-based recommendations. Client satisfaction has also been shown to increase client attraction and retention. However, in Siaya County, women of reproductive age use family planning services at a low rate. This raises the question of why family planning services are underutilized. This study aimed to uncover client satisfaction with the FP service and determining factors that are considered key client satisfaction in order to determine the causes of such low use of FP planning.

1.6 Significance of the study

Promoting client satisfaction in healthcare has significant advantages for a health facilities. This study aims to add to the literature around client attraction and retention while utilizing family planning services. It can also be used by the industry policy makers to implement strategies geared towards attraction to services and quality management to foster client satisfaction and retention.

1.7 Scope of the study

The study was conducted in Siaya County in Western Kenya. Women who sought for FP services at public health facilities were requested to join the study and participate in an interview. Health workers who offered FP services were also interviewed. The study was looking at the interactions between providers and FP users, female's satisfaction while utilizing FP services and the associated factors among female using family planning services in Siaya County, Western Kenya. Data for this study was collected from women of reproductive age utilizing FP services between January 2019 and March 2019.

1.8 Limitation of the study

The study's limitations include the fact that it will be conducted at a single point in time, with no evidence of previous or future attempts to enhance service delivery, and the information provided will not be independently checked. Because of this, it is impossible to deduce causality, and because it is a snapshot, the circumstance may yield different findings if a different timeline is chosen.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

Family planning (FP) services are unusual in that they allow couples to space or limit their births while also helping to keep the world's population stable (Bukenya *et al.*, 2017). They also play a role in reducing maternal morbidity and death by lowering the total number of pregnancies among all women, lowering the number of pregnancies among high-risk women, and lowering the number of unwanted pregnancies that would otherwise result in abortion. In nations with high birth rates, FP promotion has the ability to reduce poverty, malnutrition, and prevent all maternal deaths by 32 percent and virtually all children deaths by nearly ten percent (Bawah *et al.*, 2019; Gavin *et al.*, 2014; Ochako *et al.*, 2015).

Client satisfaction with services is a subjective way of assessing quality, but satisfied customers are more likely to return, pass on positive messages to others, and continue using a particular FP method, whereas dissatisfied customers are more likely to share their negative experiences with others and are less likely to return or continue using FP services(Linder-Pelz, 1982; Memon *et al.*, 2017; Vuori, 1987). Improving the quality of services affects women's happiness with them, which can lead to increased service use, continued FP use, accomplishment of fertility goals, a higher contraceptive prevalence rate (CPR), and decreased fertility(Bintabara *et al.*, 2018).

Client satisfaction refers the perception or expression of the clients' fulfillment with the products or services, and is a psychological state that is measured by the client's expectations (Memon *et al.*, 2017). According to Linder-Pelz (1982) client satisfaction is a very important matter that can only be attained when the clients consistently feel that their expectations are met. Client satisfaction is one of the desired outcomes of health care, and it is directly tied to health service consumption. (Alrubaiee & Alkaa'ida, 2011; Bintabara *et al.*, 2018; Tsai *et al.*, 2015). It thus reflects the gap between the expected service and the experience of the service, from the client's point of view (Alrubaiee & Alkaa'ida, 2011; Cleary & McNeil, 1988; Tsai *et al.*, 2015; Vuori, 1987).

Measuring client satisfaction has become an integral part of public health facilities management strategies across the globe (Nasr & Hassan, 2016). Moreover, the quality assurance and

accreditation process in most countries requires that the satisfaction of clients be measured on a regular basis. This can be done in a number of ways such as asking clients what they think about. The care and treatment they have received is an important step towards improving the quality of care, since it can ensure local health services are set to meet clients' needs (Kitapci *et al.*, 2014; Nasr & Hassan, 2016). Client satisfaction is critical as a measure of care quality because it reveals whether or not the provider is satisfying the client's values and expectations, which are topics over which the client has final authority (Asaolu *et al.*, 2019; Mutemwa *et al.*, 2017).

2.2 Female Satisfaction while Utilizing FP Services

Families in Pakistan are compelled to employ family planning methods because they are satisfied with having enough living children (Memon *et al.*, 2017). According to a comparable study conducted in Egypt, the usage of modern contraceptive methods in the public sector is favorably associated with the number of living children (Kavle *et al.*, 2014). Similarly, about half of the females who attended the center in this study had been married for 6–10 years and had completed their families with up to three living children.

The uptake and continuation of family planning services are considered to be influenced by client satisfaction (Bintabara *et al.*, 2018). The majority of the time, women are the ones who are most affected by the FP technique they choose. As a result, their opinion of FP approaches is quite important. The study looked at the current state of FP services in Tanzania and the factors that influence women's satisfaction with them. It came to the conclusion that women are very satisfied with family planning services. According to Diamond-Smith *et al.* (2018) concern about contraceptive side effects is a common thing that nearly all women consider for not using contraception or discontinuing use. The goal of the study was to determine how women felt about the FP approach and how satisfied they were with it. The study found that women's contraceptive method preferences often matched their reported preferences for intended duration of efficacy, but not for anticipated side effects. It so stressed the need of clinicians discussing potential side effects during counseling, both to ensure that women choose procedures that are a good fit for their aspirations and to reassure them that common side effects are not hazardous.

Patients have a right to high-quality healthcare, and delivering high-quality family planning services is a critical duty for physicians in order to boost service utilization and coverage (Asaolu *et al.*, 2019; Coomson & Manu, 2019). In many locations, research on patient satisfaction with family planning services is rare, and both the availability and quality of family planning services are thought to have contributed to increased contraception usage and decreased birth rates in developing countries (Butame, 2019; Memon *et al.*, 2017; Mutemwa *et al.*, 2017; Obwoya *et al.*, 2018).

Mutemwa et al. (2017) also found that enhanced client satisfaction and contraceptive usage behavior are thought to influence reproductive health outcomes, whether measured according to objective standards or from the viewpoints of clients or providers. Client opinion, particularly service satisfaction, is a subjective approach of assessing the quality of family planning services. Clients who are happy with the services are more likely to return, to spread positive messages through word of mouth, and to continue using a certain family planning (Nasr & Hassan, 2016). Dissatisfied clients, on the other hand, are more likely to tell others about their bad experiences and are less likely to return or continue using family planning services (Mueser *et al.*, 2015).

Tumlinson et al. (2015) conducted research into the characteristics that influence Kenyan health facilities' ability to deliver quality and appropriate treatment to family planning clients. He looked at how well health care providers help patients make an informed decision about which contraceptive technique is best for them, as well as how well clients think their services are of high quality. Women's happiness with FP planning was found to be dependent on the type of facility, managing authority, sex of the provider, and the time it took to receive services. Female rather than male providers were more likely to satisfy them.

2.3 Factors Associated With the Use of Family Planning Services by Women

According to Barber (2007), the postpartum period is a critical entrance point for family planning services. However, according to (Bates *et al.*, 2018), Ethiopian women are frequently unsure about using family planning methods during this time, despite the fact that there are few studies on the topic. Khalifa et al. (2020) found that family planning is very advantageous to women's general health, particularly in developing nations, and that there is a need for more service delivery

locations in distant areas; however, they must also address concerns of service quality to be effective. Low-quality family planning services, according to several family planning specialists, are a barrier to high contraceptive prevalence use. Furthermore, significant gains in contraceptive use and accompanying fertility declines have been routinely documented throughout the developing globe, albeit such improvements have been more limited in Sub-Saharan Africa than in other emerging regions. Despite the fact that contraception has a wide range of benefits for women, Endriyas et al. (2017) claim that it is an underutilized public intervention in a number of nations. As a result, analyzing the status and factors influencing contraceptive use among women of reproductive age has been identified as a critical step in improving the program. The vast majority of women utilize short-term contraception. Overall knowledge of and attitudes regarding contraception, age, residence, number of alive children, and experience with child death, marital status, and choosing on the number of children are all factors that influence contraception and other FP use (Mariam *et al.*, 2018). Misconceptions about contraception also have an impact on its use.

According to Ochako et al. (2015), the determinants of family planning uptake are a complicated mix of various factors that can be challenging to address in real-world situations, particularly in conflict-affected areas where things change quickly. Individual and societal variables, cultural factors, availability, and access factors, as well as factors connected to the characteristics of contraceptive techniques, such as fear of adverse effects, are all considered. In conflict zones in Sub-Saharan Africa, such as South Sudan, there is inadequate information to explain how these factors interact to influence contraceptive use (Obwoya *et al.*, 2018).

Maguire and Westhoff (2011) conducted research to determine the characteristics that influence the quality of family planning services provided to women of reproductive age. According to the findings, family planning is extremely advantageous to women's general health. Improving the quality of care has long been a priority for family planning programs around the world, and the Kenyan government, in conjunction with other stakeholders, has implemented a number of strategies and policies to boost the use of family planning services. Patient satisfaction is a useful indicator of healthcare quality. Women's access to and use of family planning methods may be impeded if they do not obtain high-quality family planning services (Bakibinga *et al.*, 2016).

Finally, Magala et al. (2017) state that characteristics that make it easier for clients to use contraceptives are critical in ensuring consumer satisfaction and preventing risk, which could occur if services were not supplied. Exploring these characteristics is critical for users and stakeholders involved in contraception and family planning service provision. Youth reproductive health services are also crucial for improving FP services and enticing youngsters to use them (Bukenya *et al.*, 2017). As a result, reproductive health issues among female youth, such as unwanted pregnancy, pregnancy complications, and unsafe abortions, will be considerably reduced.

2.4 Relationship Between Providers and FP Users

Gavin et al. (2014) show that family planning is an important medical service. It is a method of promoting population control and well health. The study looked at client-provider interactions in family planning clinics in the United States and discovered that effective client-provider interactions increased access to FP services. It was also discovered that successful provider-client interaction necessitated the scheduling of follow-up appointments in the health facilities. Almost all of the health care providers at the Family Planning centers could then refer customers to other facilities for services that were unavailable.

According to Tumlinson (2016), FP providers tend to employ six aspects to interact directly with FP users: asking about themselves, telling clients about family planning techniques, assisting clients in choosing a method, explaining how to use a method, and returning for follow-up services. The interpersonal exchanges between a client who gets health information and services and the clinic-based and outreach health practitioners who provide those services are referred to as client-provider interaction. According to Gavin et al. (2014), the focus on enhancing the quality of family planning care has highlighted the need for client-centered services. Furthermore, the lack of FP provider-client interactions poses unique issues, particularly for FP providers, and service providers may confront an ethical dilemma if they push contraceptive techniques that clients oppose (Bakibinga *et al.*, 2016; Kavle *et al.*, 2014).

For women seeking the most appropriate FP services, the level of provider/client engagement during the consultation, as well as the general environment of the consultation and communication between provider and user, is crucial (Asaolu *et al.*, 2019; Diamond-Smith *et al.*, 2018;

Nantsupawat *et al.*, 2017). According to (Dzomeku *et al.*, 2020), over 70% of users said the clinician had told them about the FP methods accessible at the health institution, as well as their mechanism of action and negative effects. Almost the same percentage of women seeking FP services said they had received information from physicians regarding the health benefits of using FP, both for themselves and for their children.

According to Chavane et al. (2017), the provider/client relationship played a significant effect in determining the level of satisfaction among women. Other researchers have observed similar findings. According to research, users of healthcare services place a high importance on their interactions with providers, which adds greatly to their happiness. Patients typically value the ability to ask inquiries and obtain answers concerning their therapies (Agyemang *et al.*, 2019; Bawah *et al.*, 2019; Magala *et al.*, 2017).

Ochako et al. (2015) conducted research in Kenya on the quality of care and contraceptive use in urban areas. According to the findings, the quality of FP service delivery is determined by the dynamics of the provider-client contact. The findings of the study back up the idea of supporting facility-level improvements in contraceptive service delivery, particularly in terms of method selection, contraceptive side effect counseling, and client treatment. Increased focus on the importance of positive and informative interactions between clinicians and clients could be one strategy for improving contraception and other FP use. This can help meet the needs of the clients to a large extent.

2.5 Conceptual Framework

The study was guided by the following conceptual framework which shows the interactions between variables in the study. In this study, client satisfaction indicators will be identified, alongside the associated factors, and how these contribute to user satisfaction with the family planning methods given to them in Siaya County.

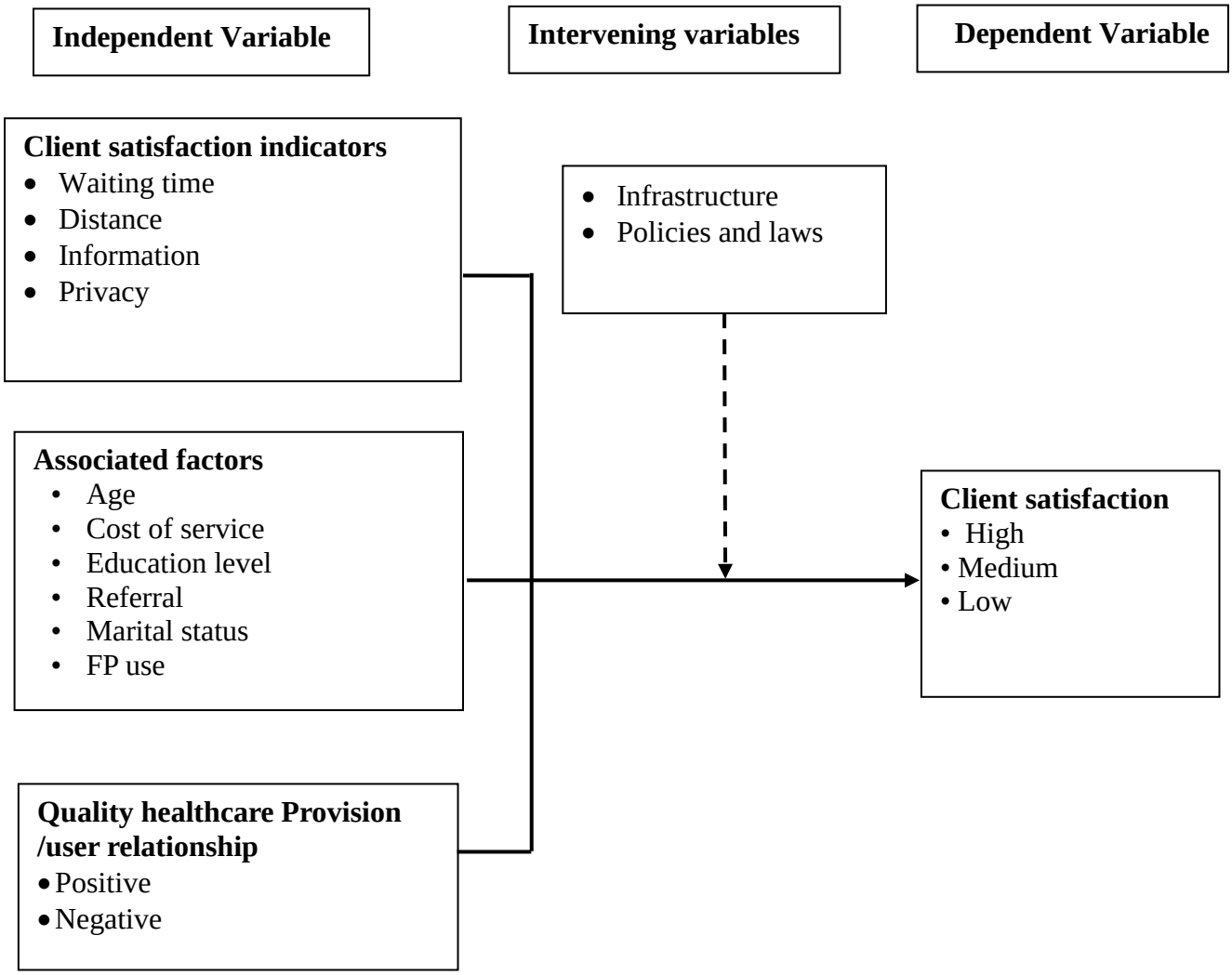

Fig. 2.1: A conceptual framework of the study (Source: Author)

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Research design

The study used a facility-based survey to investigate the determinants impacting satisfaction among women using family planning methods in Siaya County, Western Kenya, using both quantitative and qualitative research methodologies. This was a one-time point study that provided a "snapshot" of the situation, and the findings can be used to improve service delivery.

3.2 Study Area

This research was carried out in Siaya County, one of the counties in Kenya's old Nyanza Province. It is bordered on the north by Busia County, on the northeast by Kakamega County, on the east by Vihiga County, and on the southeast by Kisumu County. Homa Bay County, which is located south of Siaya County, shares a water border with it. The county's total size is roughly 2,496.1 km2. According to the 2009 Population and Housing Census, the county's population was predicted to be 842,304 people, with 398,650 men and 443,654 women. Gem, Ugunja, Ugenya, Alego-Usonga, Bondo, and Rarieda are the six administrative sub-counties that make up the county. The sub counties are further divided into wards, with a total of 30 wards in the county. Siaya has a high poverty rate, with subsistence farming, livestock keeping, fishing, rice farming, and small-scale trading being the main sources of income. As a result, residents are less knowledgeable about health concerns that are of public interest. The participants in this study will be drawn from four of the county's five sub-county hospitals: Bondo Sub-County Hospital, Ukwala Sub-County Hospital, Madiany Sub-County Hospital, and Yala Sub-County Hospital. Siaya County Referral serves Alego-Usonga Sub County as both a referral center and a facility.. It was left out of the analysis because it has a greater standing as a county referral hospital than the other four sub county hospitals.

3.3 Study Population

All women seeking FP treatments in four public health institutions in Siaya County, Western Kenya, were included in the study. To aid triangulation of data, healthcare personnel who provided direct assistance to the women during the study period were also questioned.

3.3.1 Inclusion criteria:

The following criteria was used for inclusion of participants into the study:

i. Willing to sign an informed consent for the study.
ii. Resident of Siaya County for more than a year.
iii. Previously or currently using FP.

3.3.2 Exclusion criteria:

This study excluded.

i. Unwillingness to sign an informed consent for the study.
ii. Women who have lived in Siaya County for less than one year.
iii. Women who have never used FP.

3.4 Sample Size Determination

To get the sample size, the Cochran formula was used for the sample size determination.

$n = (Z^2pq)/d^2$

Where,

n=the desired sample size, if the population is more than 10,000.

Z = standard normal deviate at required confidence level usually set at 95% (1.96).

p = proportion of the study population estimated to be have used or currently using FP is 50%

q = 1-p

d = level of statistical significance set, usually set as 0.05

$n=(1.96^2 X\ 0.5\ X\ 0.5)/0.05^2$

n = 384

Normally when the study population is less than 10,000, the final sample estimated (nf) using the formula:

Nf=n/(1-(n/N))

Where Nf = final sample size of the population less than 10,000

n = the desired sample size when the population is more than 10,000

N is the estimated study population

The women catchment population using FP services for Siaya County, Western Kenya is 22,641, (KNBS, 2009). However, since the study takes 3 months, 2850, (Kenya Health information system) which is the number of females who attended the public facility for FP services between Jan and March 2018 was used as estimated study population (Health Facility Monthly Reports)

Therefore, **N** is less than 10,000

Nf= 384/(1-(384/2850))

$\boldsymbol{Nf}$ = 343

The study collected data from 343 respondents who are the FP users.

The study respondents were distributed as follows, based on the number of women of reproductive age.

Table 3.1. Distribution of respondents by site

Site	n	%
Bondo District Hospital	135	39.36
Madiany Sub County Hospital	45	13.12
Ukwala Sub County Hospital	107	31.20
Yala Sub County Hospital	56	16.33
Total	**343**	**100.00**

3.5 Sampling

The purposive sample strategy was utilized to recruit health care practitioners who provide FP services to females at public facilities in one way or another. The participants were chosen using a simple random sample procedure after the number of females in the study was determined. In basic random sampling, the researcher chooses each person at random, and all members of the population have an equal chance of being included. This is the simplest and most widely used form

of probability sampling because not all members of the population are available at the same time. Unless the qualities of interest in the population are uncommon, the results are typical of the population. This is addressed by ensuring that the entire sampled population is made up of women who are receiving services at the health facilities.

3.6 Data collection Instruments

The study collected data using semi-structured questionnaires and key informant interviews. The tools were administered by the trained research assistants in language best understood by the respondents and interviewees i.e. English or Kiswahili or local language to collect data.

3.7 validity and Reliability of the research instruments

3.7.1 Validity

The validity of the instruments was defined in this study as the extent to which they covered the objectives. Expert opinion from other lecturers in the Department of Public Health was sought to determine the validity of the instruments. These lecturers critically examined the items of the instruments and provided professional advice that was helpful in the modification and improvement of the questionnaires. In addition, the questionnaire items have been simplified. Finally, the elements were sorted from easiest to most difficult.

3.7.2 Reliability

The instruments were pre-tested by the researcher at Emuhaya Sub County Hospital in adjacent County, which has similar features to those found in the study area. The Cronbach's reliability coefficient was used to determine the instrument's dependability after the pretest research. The reliability of the observation checklists was determined using the test-re-test procedure. According to George and Mallery (2003), a Cronbach's Alpha (0.89471) greater than 0.6 is regarded appropriate in the STATA output presented in Table 3.1. As a result, the measure was extremely reliable, indicating that the measuring tools employed were quite consistent..

Table 3.2: Reliability tests

Test scale = mean (unstandardized items)	Average interitem covariance: 1.15672
Number of items in the scale: 57	Scale reliability coefficient: **0.89471**

3.8 Data Collection Procedures

The methodical procedures that the researcher takes to get data from the field are referred to as data collection procedures (Moser & Kalton, 2017). Quantitative data was collected using CSpro which is a mobile app. After which, data was entered in the CSpro which was also data collection mobile app. The CSpro was preferred because it eases data analysis since the data was just downloaded as a CSV.xl for analysis. Finally, CSpro reduces the risk of losing hard copies of observation checklists since there will be no observation checklists forms to be written except keying into the mobile App of the CSpro system. Data collection was done from Novemebr 1st 2019 to January 31st, 2020 giving a total of 3 months. However, the qualitative data were collected by use of IDIs and analyzed by use of thematic approach. The qualitative data were used to triangulate and give support to the quantitative data.

3.9 Data analysis

Quantitative and qualitative methodologies were used to analyze the data. The quantitative data was first edited and double-checked for accuracy before being coded and entered into the computer for analysis. For data analysis, STATA version 15 was employed. The data was analyzed using both descriptive and inferential methods. Thematic content analysis was used to analyze the qualitative data in order to ensure a deeper degree of knowledge (Table 3.2).

Table 3.3 Phases of Thematic analysis

Phase	Description of the process
1. Familiarizing oneself with data	Data transcription (if necessary), reading and re-reading the data, and jotting down initial thoughts
2. Generating initial codes	Coding interesting data aspects in a systematic manner across the full data set, and compiling data pertinent to each code
3. Searching for themes	Organizing codes into potential themes and collecting all required data for each theme
4. Reviewing themes (Level 1)	Level 2: Creating a thematic 'map' of the analysis by testing themes in relation to coded extracts and the complete data set.
5. Defining and naming the themes	Ongoing study to fine-tune the specifics of each topic as well as the overall story told by the analysis, resulting in unambiguous definitions and titles for each subject.
6. Producing the report:	This is the last chance for analysis. Selection of colorful, extract instances, final analysis of selected extracts, linking the analysis to the research topic and literature, and writing a scholarly report on the analysis

3.10 Ethical considerations

The study was approved by the School of Health Sciences and the Board of Postgraduate Studies, JOOUST, and received ethical approval from JOOUST Ethics Review Committee. A written informed consent was obtained from each respondent prior to data collection. All information collected from patients' records were kept strictly confidential and names of clients were not included in the data capturing tools and/or any other document that formed part of the report. No patient identifiers or patient information was shared with any third parties, except those directly involved in data analysis, to uphold confidentiality.

CHAPTER FOUR: RESULTS

4.1 Participant characteristics

The data used in this research was drawn from 343 women clients seeking FP services in Siaya County, derived from the sub-county hospitals: Bondo Sub County Hospital, Ukwala Sub County Hospital, Madiany Sub County Hospital and Yala Sub-County Hospital. The distribution of the participants by site is as shown on Table 4.1.

Table 4.1. Distribution of respondents by site

Site	N	%
Bondo District Hospital	135	39.36
Madiany Sub County Hospital	45	13.12
Ukwala Sub County Hospital	107	31.20
Yala Sub County Hospital	56	16.33
Total	**343**	**100.00**

The 343 respondents were aged 14 - 42 (mean = 21.57) years, with 321 (93.6%) being 14-25 years old, while only 4 (1.17%) were aged 35 years and above. Figure 4.1 shows the distribution of respondents by age.

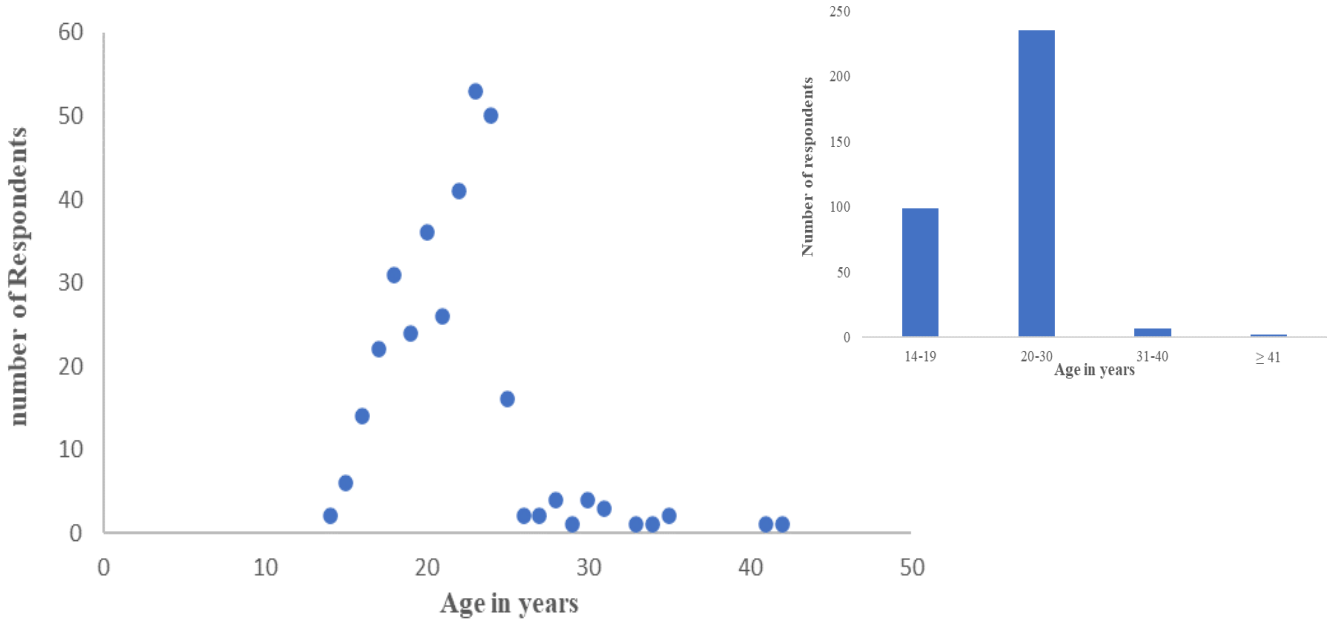

Figure 4.1 Distribution of Respondents by age

Majority (194; 56.56%) of the respondents were married while 123 (35.86%) were single, and only 26 (7.58%) of the clients were either divorced, separated or widowed. The results further reveal that about half (168; 48.98%) of the clients had only primary level of education, closely followed by 148 (43.15%) with secondary level of education, and only 8 (2.33%) had not received any formal education.

Out of the 343 clients, 36 (10.50) were not referred for FP services by anyone. On the other hand, CHVs played the greatest referral role, having been reported to have referred 140 (40.82%) of the clients, followed by family members, who referred 104 (30.32%), and healthcare providers (15.45%). Up to 10 (2.92%) of the clients were referred by other persons, which also included youth group or CBO members, and peer educators. Just like with referrals, the community health volunteers offered information on FP service availability at the health facility to majority (163; 47.52%) of the clients, followed by friend/family member (86; 25.07%), while the healthcare providers only informed 55 (16.03%) clients, as the media similarly trailed at 34 (9.91%).

Just over half (194; 56.56%) of the 343 clients had visited the health facility previously for FP services. Only 196 (57.14%) of the clients reported having used a contraceptive during their last sexual intercourse, with the most predominant being the condom, used by 115 (58.67%) of the clients, followed by pills (38; 19.39%), injectable (27; 13.78%) and implants (13; 6.63%). The remaining 3 (1.53%) mentioned other methods, citing *calendar method* (1) and *withdrawal* (2).

Various reasons for visiting the facility on the day of the interviews for this study were advanced, with 150 (43.73 percent) going for the first time or for the first time at this facility to acquire a contraceptive, get a prescription, or be referred for a contraceptive method. The second largest group consisted of 67 (19.53%) clients who came to the facility for supplies for procedures they already used or for a normal follow-up visit for ways they already used. There were also 41 (11.95 percent) clients who came for contraceptive method information or counseling, and another 6 (1.75 percent) who wanted to talk about a problem with the contraceptive technique they were using. Even so, 15 (4.37 percent) of the clients reported other difficulties that were unrelated to contraception. The remainder had gone to resume contraceptive method use after a break of at least six months (27; 7.87 percent); after a break of less than six months (6; 1.75). Furthermore, 31

(9.04%) individuals had come to change contraceptive techniques or restart a different method (after not using for less than 6 months)

Of the 202 clients who reported having used a method of contraception, 162 (80.20%) acknowledged that the healthcare provider had asked if they experienced any problem with the contraceptive method the were using. Of these, only 66 (40.74%) mentioned to the healthcare provider they had experienced any problems. On satisfaction with the manner in which the problem was addressed 77 (95.06%) of the 81 clients who responded to the question reported being satisfied.

There was a significant combination of the various methods of contraception, although most respondents reported having used implants, cited by 200 (99.01%) of the 202 clients who had used any method, followed at a significant distance by injectable contraceptives, which recorded 99 (49.01%) prevalence. Condoms were reported to have been used by only 47 923.27%), while pills were only reported by 38 (18.81%) respondents, trailed by IUD (28; 13.86%) and sterilization methods, reported by 10 (4.95%) respondents.

On the day of the interview, 294 (85.71%) clients had come to the health facility for a particular contraceptive method, during which the implant was sought by 194 (65.99%) clients, followed by injectable contraceptives (73; 24.83%), pills (19; 6.46%), IUDs (5; 1.70%), and condom (2; 0.68%). One person used *other* methods and cited *switching off implant*. During the visits, the health care provider discussed six types of contraception, namely pill, IUD, injectable, implant, sterilization, and condom. Only 74 (25.17%) of the 294 clients seeking contraceptive services reported the healthcare provider ad discussed with them all the six forms of contraception listed above. In particular, each of the individual contraceptive methods had been discussed with at least 35% of the clients. The implant was the most discussed (100%), followed by IUDs (63.27%), injectables (59.18%), condom (57.14%), pill (45.24%) and sterilization (38.10%). On the day of interview, 333 (97.1%) clients received a contraceptive method. Only 3 clients were prescribed for while 1 referred for another contraceptive method. The three main reasons clients did not receive the method they were looking for were: personal choice not to receive the method (50%), change of mind after listening to a provider (25%), and unavailability of the method at the facility (25%).

On waiting time, a majority comprising 255 (74.34%) of the clients confirmed that the waiting time was less than 1 hour, while 4 (1.17%) said that the waiting time was more than 2 hours.

A total of 296 (86.30%) of the clients confirmed that the services were free. However, 41 (11.95%) of the clients stated that the cost of services ranged from KSh. 100-1000. For the interaction between the provider and the client, findings indicate that a majority of the clients; 252 (73.47%) of the clients had high interaction level with the providers while 38 (11.08%) of the clients had a medium level of interaction with the providers. However, at least 3 (0.87%) of the clients experienced low interaction with the providers. Finally, the results on the satisfaction level indicate that majority of the clients; 318 (92.71%) had high satisfaction level (Table 4.2).

Table 4.2: Respondent characteristics

Characteristics	**n**	**(%)**
Age in years		
≤24	305	88.92
≥ 25	38	11.08
Marital status		
Single	123	35.86
Married	194	56.56
Divorced, Separated or Widowed	26	7.58
Level of education completed		
No education	8	2.33
Primary	168	48.98
Secondary	148	43.15
University/College	19	5.54
Person making referral		
Not referred	36	10.5
Provider	53	15.45
Community Health Volunteer	140	40.82
Family member	104	30.32

Characteristics	n	(%)
Others (including youth group/CBO member/peer educator)	10	2.92
Sources of FP information		
Provider	55	16.03
CHV	163	47.52
Friend/Family member	86	25.07
Media (radio, TV, newspaper)	34	9.91
Others	5	1.46
Waiting time		
< 1 hour	255	74.34
1-2 hours	72	20.99
> 2 hours	4	1.17
Others	12	3.50
Cost of service		
No Pay	296	86.30
Kes 10-80	6	1.75
Kes 100-1000	41	11.95
Provider client interaction		
Low	3	0.87
Medium	38	11.08
High	252	73.47
Others	50	14.58
Satisfaction		
Low	25	7.29
High	318	92.71

4.2 Women Satisfaction while Utilizing FP services

On client satisfaction, only 109 (31.78%) believed that the health facility was far from home, while only 67 (19.54%) held the opinion that the waiting time was too long. Facility hours seemed convenient since it was supported by 326 (95.04%) of the respondents. Furthermore, the

information given about the contraceptive method was sufficient, as stated by 329 (95.92%) of the respondents. Majority (336; 97.96%) of the respondents also confirmed that the privacy of the clients was maintained. Nearly all (328; 95.62%) had had sufficient consultation time to discuss their needs. Furthermore, 336 (97.96%) respondents were able to easily understand the information given during the counselling by the provider. Again, nearly all the staff within the facilities were friendly and respectful as was supported by 337 (98.25%). In addition, 337 (98.25%) felt confident that the information they shared with the provider during interview would be kept confidential. Nearly, all the participants (337; 98.25%) confirmed that they would go back to the same facility if they needed a contraceptive service again. Finally, 341 (99.42%) of the respondents would recommend contraceptive services to friends. The findings are summarized on Table 4.2.

Table 4.3: Women satisfaction while utilizing FP services

Variables	**SA, n (%)**	**A, n (%)**	**D, n (%)**	**SD, n (%)**
Health facility far from home	32 (9.33)	77 (22.45)	201 (58.60)	33 (9.62)
Too long waiting time	18 (5.25)	49 (14.29)	239 (69.68)	37 (10.79)
Facility hours convenient	66 (19.24)	260 (75.80)	17 (4.96)	
Sufficient information given on FP method	68 (19.83)	261 (76.09)	14 (4.08)	
Privacy maintained	173 (50.44)	163 (47.52)	7 (2.04)	
Sufficient consultation time	73 (21.28)	255 (74.34)	15 (4.37)	
Easily understood counselling information	72 (20.99)	264 (76.97)	7 (2.04)	
Friendly and respectful staff	104 (30.32)	233 (67.93)	6 (1.75)	
Information confidentiality	89 (25.95)	248 (72.30)	6 (1.75)	
Would come back if FP service is needed again	107 (31.20)	230 (67.06)	5 (1.46)	1 (0.29)
Would recommend the FP services to friends	111 (32.36)	230 (67.06)	2 (0.58)	17 (1.18)

Key: (SA=Strongly Agree A=Agree D=Disagree SD=Strongly Disagree)

"Basically a number of women forgo seeking for FP services citing factors associated to distance, waiting time and attitude of the service providers as key contributors their discouragement. Consequently they female dissatisfied and unable to continue using FP services." Healthcare Provider, IDI, – Gem Sub-County.

"Some women have been informed by their spouses and close relatives that FP uptake have side effects and are inferior compared to the traditional approaches. They therefore choose to adopt their tradition methods as opposed to medical FP services." Health Care Provider, IDI – Ugenya Health Centre.

"The main barriers to the uptake of FP services are linked to strong male-partner opposition," Health Care Provider, IDI– Rarieda Health Centre.

4.3 Relationship between providers and FP users

This study also established the level of provider-client interactions during the consultation as shown in Table 4.3. Most (324; 94.46%) respondents utilizing FP services agreed that the provider explained to them how to use their method of choice effectively. In addition, 314 (91.55%) of the females believed that the provider explained possible effects of the method decided upon effectively, whereas 21 (6.12%) were not convinced that the provider explained possible effects of the method decided upon effectively and 8 (2.33%) accounted for non-response. Moreover, 320 (93.29%) respondents reported they were told what to do in case they experienced certain problems while utilizing FP services. The findings also showed that only 294 (85.71%) of the females utilizing FP services were told that the method does not provide protection against STIs and AIDS. Further, 322 (93.88%) respondents were comfortable to ask questions during the consultation with the providers, although only 294 (85.71%) had an opportunity to talk about STIs/AIDS with the provider during consultation. Lastly, 238 (69.39%) respondents were encouraged by the provider to use condoms at the same time as the family planning method they had chosen or were currently using. On the other hand, 246 (71.72%) of the respondents utilizing FP services and the provider talked about future fertility intentions (if they would like children in the future).

Table 4.4: Interaction between healthcare providers and contraceptive service users (n = 343)

Variables	Response	n(%)
Provider effectively explained how to use the chosen method	Yes	324(94.46)
	No	12(3.5)
Provider effectively explained possible effects of the chosen method	Yes	314(91.55)
	No	21(6.12)
In case of FP problem, was told what to do	Yes	320(93.29)
	No	10(2.92)
Was told the method does not provide protection against STIs and AIDS	Yes	294(85.71)
	No	38(011.08)
Was comfortable to ask questions	Yes	322(93.88)
	No	11(3.21)
STIs/AIDS discussed during talk with the provider	Yes	294(85.71)
	No	39(11.37)
Encouraged by provider to use condom alongside the chosen FP method	Yes	238(69.39)
	No	82(23.91)
Talked with provider about intention to have children in future	Yes	246(71.72)
	No	85(24.78)

"The reason why some mothers are motivated to visit the health facility when pregnant is that they are afraid of delivering at home. When you deliver at home, their babies are not registered," Health Care Provider, IDI, ……. Centre.

For those women who take a bold step to seek for FP services from the hospitals, they are knowledgeable and always strive to build a good relation with the service providers. Most of them are inquisitive on the most appropriate FP methods available. They super engage service providers in order to settle for the most appropriate method with no or less side effect."

4.4 Factors Associated with the use of FPs

Table 4.4 summarizes the results of the logistic regression analysis and the factors that influence the use of financial planning services. Females with high levels of interaction with providers were around 68 percent more likely to be satisfied with FP services than females with minimal provider-client interactions (OR= 0.68; p=0.021), according to the research. There was no statistically significant relationship between satisfaction and facility level, age category, marital status, who referred the ladies for FP services, the source of FP information, waiting time, cost of service, or degree of education.

Table 4.5: Odds ratio estimates for satisfaction of the women utilizing FP services n=343.

			95% Cl	
Main Effect	**Odds Ratio**	**p-value**	**Lower**	**Upper**
Age_years				
≤24	1.095178	0.914	0.208522	5.751975
≥ 25	1.72042	0.637	0.18014	16.43076
Marital Status				
Married	0.367711	0.251	0.066687	2.027564
Divorced, Separated or Widowed	0.217713	0.205	0.020636	2.29696
Level of Education				
No Education	1			
Primary	1.8213	0.572	0.227627	14.57266
Secondary	1.486918	0.7	0.197713	11.18249
University/College	1			
Referred By				
Provider	0.387763	0.278	0.070054	2.146359
Family member	1.6574	0.594	0.258064	10.64455
Others	2.084373	0.352	0.444124	9.782414
Sources of Information				
CHV	1.279969	0.766	0.251406	6.516633
Friend/Family member	0.527624	0.486	0.08736	3.186659
Media	1			
Others	0.222879	0.3	0.013035	3.81104

Main Effect	Odds Ratio	p-value	95% Cl	
			Lower	Upper
Waiting Time				
1-2 hrs	1.839332	0.418	0.420797	8.039847
>2 hrs	1			
Others	0.230006	0.259	0.017903	2.954961
Cost of Service (KSh)				
10-80	1			
100-1000	0.238896	0.065	0.052089	1.095654
Provider-client interaction				
Low	1			
Medium	0.079533	0.021	0.009276	0.681925
High	0.680063	0.667	0.117336	3.941568
Others	1			

"In this area, residents have low income which is a contributing factor for low uptake of FP services. Sometimes, even getting their transport fare to the facility is a problem," Health Provider, IDI, Ugenya County Hospital.

"The literacy level among the reproductive age women is a key determinant to the FP utilization. Those who are well educated know the value of FP services thus they frequently seek for FP services. Unlike the uneducated, they have negative perception to FP services. Some actually think that they can contract some disease or experience severe side effect as a result of FP utilization." Health Provider, IDI, Gem County Hospital.

CHAPTER FIVE: DISCUSSION

5.1 Introduction

This study involved 343 women seeking family planning services in Siaya County, with the points of participant sampling being the four sub-county hospitals: Bondo, Ukwala, Madiany and Yala. The distribution of the participants was greatly leaned towards Bondo and Ukwala, which by their physical locations serve much more patients than Madiany and Yala.

5.1.1 Demographic Findings

The mean age of the respondents (21.57 years) was reflective of the global childbearing patterns, particularly in the less developed tropical countries, which have also recorded significant childbearing among teenage girls (Bukenya *et al.*, 2017; New *et al.*, 2017). This was further strengthened by the fact that over 75% the respondents were married, or were at least previously in marriage. Nearly all the respondents had at least some formal education, with about half of them having attained secondary and post-secondary education. This reflects a fairly good literacy, that could likely support and enhance the use of family planning methods, especially where instructions need to be issued and followed by the women. This is important as client's education has been shown to be related to family planning methods uptake in different settings (Coomson & Manu, 2019; Magala *et al.*, 2017; Obwoya *et al.*, 2018; Ochako *et al.*, 2015).

5.1.2 Women satisfaction while utilizing FP services

From the different reasons offered for the visit to the facility on the day of the interviews for this study, including coming to receive a contraceptive method, to get a prescription or counselling, having been referred for a contraceptive method for the first time, it is clear that majority of the respondents were aware of what FP services they were looking for at the health facility. This study reports that the community health volunteers (CHVs) played the most prominent role in referral and information provision, trailed by family and healthcare workers (HCWs), as the media contributed dismally to this effort. While it is expected that the CHVs play a key role, it is of concern that relevant FP information is not obtained by women from the HCWs, given the accuracy and detail in the information shared should be much better when delivered by the latter. It is even more worrying when the family members provide more information on birth control than HCWs, but, again, this may be attributed to the fact that the women stay entirely with the family, and so more likely to

access the information with more ease. Still, this could be a reflection of the changing dynamics in the health system (Asaolu *et al.*, 2019; Bukenya *et al.*, 2017), but may also be as a consequence of patient preference, based on satisfaction with the various components of the health care provision system (Alrubaiee & Alkaa'ida, 2011; Bintabara *et al.*, 2018; Brown *et al.*, 2009). It is also worth noting that up to 30% of the clients in this study had been referred for these services by a family member, illustrating the central role the community plays in reproductive health, particularly in birth control.

The level of previous experience with FP methods use among the respondents was only moderate, as just about half of them had visited the health facility previously for FP services, implying nearly half were receiving their very first FP method. It could also mean that a large proportion may not have visited a health facility, but still sourced the FP methods from other sources. While this was not delved into, there is the likelihood many sought services from private chemists/pharmacies, and other related institutions. Similar health-seeking behaviours for FP services have previously been reported in different areas (Agyemang *et al.*, 2019; Bawah *et al.*, 2019). The use of contraceptives was in tandem with the quest for them, as just slightly more than half the respondents reported having used a method during their last sexual intercourse, with the most predominant being the condom, which remains the predominant form across different ages in most settings (Butame, 2019; Endriyas *et al.*, 2017; New *et al.*, 2017; Ochako *et al.*, 2015).

5.1.3 Relationship between providers and FP users

Majority of the respondents who had used a contraceptive method acknowledged that the healthcare provider had asked if they experienced any problem with the contraceptive method they were using, of which about half reported they had experienced varied problems, for which nearly all expressed their satisfaction with the manner in which the problem was addressed. This is a key ingredient for the basis for continued and enhanced use of FP methods available at the health facilities (Alrubaiee & Alkaa'ida, 2011; Bintabara *et al.*, 2018; Brown *et al.*, 2009). The respondents had used the various methods of contraception variably, with implants being cited by close to 100% of the respondents, followed at a significant distance by injectable contraceptives, mentioned by about 50% of the respondents. Condoms were reported to have been used by just about 24%, while pills were only reported by 19% of the respondents. These methods were trailed by IUD (14%) and

sterilization (4.95%). This finding illustrates the degree of variation of use in contraceptive methods use, as majority reported having used various methods over time, a common observation in different settings (Bawah *et al.*, 2019; Magala *et al.*, 2017; Mariam *et al.*, 2018; Obwoya *et al.*, 2018; Ochako *et al.*, 2015).

This study has established that majority of the clients using family planning methods had high satisfaction level. The finding is in agreement previous reports (Asaolu *et al.*, 2019; Bintabara *et al.*, 2018) that client satisfaction is a very important matter that can only be attained when the clients consistently feel that their expectations are met and that in the instances when the actual product performance or services do not match the clients need, they will feel some degree of tension. Therefore, from the results of this study, there is evidence that in one way or the other, the FP clients were generally satisfied with the services received at the health facilities, thus the likelihood of continued use and compliance with the accompanying instructions. This is thus an indicator for the potential to properly plan family sizes in the study area. Majority of the clients reported had high interaction level with the healthcare service providers, a likely enhancer of improved use of FP services. Similarly, a study in USA by Gavin *et al.* (2014) established that good client provider-interactions promoted access to FP services. On the other hand, the less than 1% of the clients who experienced low interaction with the providers in one way or the other were not regularly using the FP services. This finding is supported by previous reports which confirmed that lack of FP provider-client interactions pose different challenges mainly to the FP providers (Ashcroft *et al.*, 2017; New *et al.*, 2017; Smith *et al.*, 2017).

According to Diamond-Smith *et al.* (2018), concerns about contraceptive side effects are a common reason that nearly all women consider when deciding whether or not to take contraception. The findings of this study showed that women's contraceptive method choices largely matched their stated preferences for intended duration of efficacy, but not for anticipated side effects. It so stressed the need of clinicians discussing potential side effects during counseling, both to ensure that women choose procedures that are a good fit for their aspirations and to reassure them that common side effects are not hazardous. These remarks are backed up by the findings of the survey, which show that the majority of people received enough consultation time to address their contraception needs. Even though the results showed that almost all respondents would recommend

the contraceptive services to friends, the few dissatisfied clients were more likely to share their negative experiences with others and were as such less likely to return or continue using the family planning services, and this may affect the quality of performances of the public health facilities in general, as previously established (Mueser *et al.*, 2015).

This study reports that women with high levels of interaction with the providers were about 68% more likely to be satisfied with the FP services as compared to females with low provider-client interactions. However, the study found no association between satisfaction and facility level, age category, marital status, the individual referring the women for FP services, the source of FP information, waiting time, cost of service, and level of education. The results were in agreement with the findings of Endriyas *et al.* (2017), that general awareness of and attitude toward contraception, age, residence, number of alive children, and experience with child death, marital status, and deciding number of children are all factors linked with contraception and other FP use. This finding, however, is contrary to the findings by Tumlinson *et al.* (2015), who found that in Kenya, women's satisfaction with FP services was dependent on the facility type, managing authority, sex of the provider, and the waiting time to receive services. In general, contraceptive service utilization is also affected by various misconceptions that differ with sociodemographic settings (Alrubaiee & Alkaa'ida, 2011; Bakibinga *et al.*, 2016; Kavle *et al.*, 2014).

5.1.4 Factors Associated with the use of FPs

Almost all the respondents were able to understand easily the information given during the counselling with the provider, which, among other factors, could have been due to the relatively high literacy reported (Endriyas *et al.*, 2017; Memon *et al.*, 2017; Obwoya *et al.*, 2018; Ochako *et al.*, 2015), quality of information as shared by the healthcare providers (Bukenya *et al.*, 2017; Nantsupawat *et al.*, 2017; Tumlinson, 2016; Tumlinson *et al.*, 2015), or simply client attitude and perception of the information being shared, or the healthcare system (Kavle *et al.*, 2014; Porney, 2015). This was further strengthened by the revelation that the clients felt the information given about the contraceptive methods was sufficient, including their availability at the health facility and about their mechanisms of action and respective side effects, both for the women themselves and their children. The respondents were also advised on what to do in case they experienced certain problems while utilizing FP services. Furthermore, most of the women utilizing FP services were

told that not all the methods could provide protection against STIs and AIDS. Dzomeku *et al.* (2020) argues that the level of provide-client interaction during the consultation is critical for the women who seek for the most appropriate FP services. This includes the general environment of the consultation and the communication between provider and user.

In summary, about 75% of the clients confirmed that the waiting time was less than one hour, and more than 65% believed that the health facility was not far from their homes. Facility hours was convenient for over 95% of the respondents, while the information given about the contraceptive method was sufficient to a similar proportion of the respondents. In addition, nearly all respondents were certain that their privacy was maintained, as well as the information they shared with the provider. The respondents also generally asserted that they had sufficient consultation time to discuss their needs. Furthermore, nearly all respondents were able to easily understand the information given during the counselling by the provider, and nearly all the staff within the facilities were friendly and respectful. Consequently, nearly, all the participants confirmed that they would go back to the same facility if they needed a contraceptive service again, and would as well recommend contraceptive services to others. Most of the clients recognized that the FP services were availed free-of-charge, although a small proportion stated that the cost of services ranged from KSh. 100-1000/. The foregoing indicate an overall satisfaction, and this would likely encourage them, as this is always an outstanding determinant of health-seeking behaviours (Bintabara *et al.*, 2018; Bukenya *et al.*, 2017; Endriyas *et al.*, 2017; Memon *et al.*, 2017; Ochako *et al.*, 2015).

CHAPTER SIX: CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

This study reports that overall, there was optimal use of family planning methods by women in Siaya County. However, information on and referral for these methods was mainly done by community health volunteers, and not healthcare workers at the health facilities. The women, on the other hand, were largely satisfied with the family planning services provided in Siaya County's health institutions. There was reasonable short waiting time, the counseling environment was conducive, and the healthcare workers were generally respectful, making the women feel that the information they share would remain confidential. The healthcare workers provided adequate information on the family planning methods available, and made it possible for the women to choose the preferred method to use. This study further confirms that women who experience more interaction with the healthcare provider are more likely to report satisfaction, and this is the single most important factor associated with client satisfaction.

6.2 Recommendations

1. The Ministry of Health, through the individual health facilities and relevant stakeholders should identify mechanisms of maintaining the satisfaction of women using family planning methods, while ensuring more information is provided by the mainstream healthcare workers.

2. The health facilities should ensure a conducive environment that guarantees confidential and adequate interaction between the healthcare provider and FP users, in order to boost the levels of interaction with the providers in all facilities, thereby enhancing satisfaction with FP services and increasing likelihood of continued use.

6.3 Suggestion for Further Research

The study recommends further research on the factors contributing to poor interaction with the providers in public health facilities that may deter the achievement of client satisfaction. Such a study should have a robust qualitative data collection, and spread to other lower cadre facilities across the county or in the region.

REFERENCES

Agyemang, J., Newton, S., Nkrumah, I., Tsoka-Gwegweni, J. M., & Cumber, S. N. (2019). Contraceptive use and associated factors among sexually active female adolescents in Atwima Kwanwoma District, Ashanti region-Ghana. *Pan Afr Med J, 32*, 182. doi: 10.11604/pamj.2019.32.182.15344

Alrubaiee, L., & Alkaa'ida, F. (2011). The mediating effect of patient satisfaction in the patients' perceptions of healthcare quality-patient trust relationship. *International Journal of Marketing Studies, 3*(3), 15.

Asaolu, I., Nuno, V. L., Ernst, K., Taren, D., & Ehiri, J. (2019). Healthcare system indicators associated with modern contraceptive use in Ghana, Kenya, and Nigeria: evidence from the Performance Monitoring and Accountability 2020 data. *Reprod Health, 16*(1), 152. doi: 10.1186/s12978-019-0816-4

Ashcroft, N., Shelus, V., Garg, H., McLarnon-Silk, C., & Jennings, V. H. (2017). Implementation of CycleTel Family Advice: an SMS-based service to provide family planning and fertility awareness information in India. *Mhealth, 3*, 20. doi: 10.21037/mhealth.2017.05.01

Bakibinga, P., Mutombo, N., Mukiira, C., Kamande, E., Ezeh, A., & Muga, R. (2016). The Influence of Religion and Ethnicity on Family Planning Approval: A Case for Women in Rural Western Kenya. *J Relig Health, 55*(1), 192-205. doi: 10.1007/s10943-015-0030-9

Balasubramanian, M. (2016). Total Quality Management [TQM] in the Healthcare Industry – Challenges, Barriers and Implementation Developing a Framework for TQM Implementation in a Healthcare Setup. *Science Journal of Public Health, 4*(4), 8. doi: 10.11648/j.sjph.20160404.11

Barber, S. L. (2007). Family planning advice and postpartum contraceptive use among low-income women in Mexico. *Int Fam Plan Perspect, 33*(1), 6-12. doi: 10.1363/3300607

Bates, L. A., Hicks, J. P., Walley, J., & Robinson, E. (2018). Evaluating the impact of Marie Stopes International's digital family planning counselling application on the uptake of long-acting and permanent methods of contraception in Vietnam and Ethiopia: a study protocol for a multi-country cluster randomised controlled trial. *Trials, 19*(1), 420. doi: 10.1186/s13063-018-2815-0

Bawah, A. A., Asuming, P., Achana, S. F., Kanmiki, E. W., Awoonor-Williams, J. K., & Phillips, J. F. (2019). Contraceptive use intentions and unmet need for family planning among reproductive-aged women in the Upper East Region of Ghana. *Reprod Health, 16*(1), 26. doi: 10.1186/s12978-019-0693-x

Bintabara, D., Ntwenya, J., Maro, II, Kibusi, S., Gunda, D. W., & Mpondo, B. C. T. (2018). Client satisfaction with family planning services in the area of high unmet need: evidence

from Tanzania Service Provision Assessment Survey, 2014-2015. *Reprod Health, 15*(1), 127. doi: 10.1186/s12978-018-0566-8

Brown, C. E., Wickline, M. A., Ecoff, L., & Glaser, D. (2009). Nursing practice, knowledge, attitudes and perceived barriers to evidence-based practice at an academic medical center. *J Adv Nurs, 65*(2), 371-381. doi: 10.1111/j.1365-2648.2008.04878.x

Bukenya, J. N., Mulogo, E., Kibira, S. P. S., Muhumuza, C., & Atuyambe, L. M. (2017). Health facilities' readiness to provide friendly reproductive health services to young people aged 10-24 years in Wakiso district, Uganda. *Glob J Reprod Med, 2*(3). doi: 10.19080/GJORM.2017.02.555588

Butame, S. A. (2019). The prevalence of modern contraceptive use and its associated socio-economic factors in Ghana: evidence from a demographic and health survey of Ghanaian men. *Public Health, 168*, 128-136. doi: 10.1016/j.puhe.2018.12.020

Chavane, L., Dgedge, M., Bailey, P., Loquiha, O., Aerts, M., & Temmerman, M. (2017). Assessing women's satisfaction with family planning services in Mozambique. *J Fam Plann Reprod Health Care, 43*(3), 222-228. doi: 10.1136/jfprhc-2015-101190

Cleary, P. D., & McNeil, B. J. (1988). Patient satisfaction as an indicator of quality care. *Inquiry, 25*(1), 25-36.

Coomson, J. I., & Manu, A. (2019). Determinants of modern contraceptive use among postpartum women in two health facilities in urban Ghana: a cross-sectional study. *Contracept Reprod Med, 4*, 17. doi: 10.1186/s40834-019-0098-9

Diamond-Smith, N., Warnock, R., & Sudhinaraset, M. (2018). Interventions to improve the person-centered quality of family planning services: a narrative review. *Reprod Health, 15*(1), 144. doi: 10.1186/s12978-018-0592-6

Dzomeku, V. M., Boamah Mensah, A. B., Nakua, K. E., Agbadi, P., Lori, J. R., & Donkor, P. (2020). Developing a tool for measuring postpartum women's experiences of respectful maternity care at a tertiary hospital in Kumasi, Ghana. *Heliyon, 6*(7), e04374. doi: 10.1016/j.heliyon.2020.e04374

Endriyas, M., Eshete, A., Mekonnen, E., Misganaw, T., Shiferaw, M., & Ayele, S. (2017). Contraceptive utilization and associated factors among women of reproductive age group in Southern Nations Nationalities and Peoples' Region, Ethiopia: cross-sectional survey, mixed-methods. *Contracept Reprod Med, 2*, 10. doi: 10.1186/s40834-016-0036-z

Farzianpour, F., Emami, A. H., Davari-Tanha, F., Hosseini, S., & Farzanehnejad, A. R. (2010). Educational programs' quality assessment based on graduates' comments. *Iranian Red Crescent Medical Journal, 12*(3), 6.

Farzianpour, F., Kazem Mohammad, K., Abbas Rahimi Foroushani, A. R.,, Alirezaei, S., & Manafi, F. (2015). A study on the feasibility of total quality management model and the awareness and attitude of the managers of health care. *Health, 7*(1), 7.

Gavin, L., Moskosky, S., Carter, M., Curtis, K., Glass, E., Godfrey, E., & Zapata, L. (2014). Providing quality family planning services: recommendations of CDC and the US Office of Population Affairs. *Morbidity and Mortality Weekly Report: Recommendations and Reports, 63*(4), 54.

Jackson, S. (2000). Successfully implementing total quality management tools within healthcare: what are the key actions? *International Journal of Health Care Quality Assurance, 14*(1), 7.

Kavle, J., Mehanna, S., Khan, G., Hassan, M., Saleh, G., & Galloway, R. (2014). Cultural beliefs and perceptions of maternal diet and weight gain during pregnancy and postpartum family planning in Egypt *USAID Report*. Washington DC: USAID.

Khalifa, M., Abdelaziz, W., Metwally, S., & Sakr, E. (2020). The recent increase in contraceptive discontinuation in Egypt. *J Biosoc Sci, 52*(1), 154-157. doi: 10.1017/S0021932019000269

Kitapci, O., Akdogan, C., & Dortyol, I. T. (2014). The impact of service quality dimensions on patient satisfaction, repurchase intentions and word-of-mouth communication in the public healthcare industry. *Procedia-Social and Behavioral Sciences, 148*, 9.

Lentiro, K., Gebru, T., Worku, A., Asfaw, A., Gebremariam, T., & Tesfaye, A. (2019). Risk factors of induced abortion among preparatory school student in Guraghe zone, Southern region, Ethiopia: a cross-sectional study. *BMC Womens Health, 19*(1), 115. doi: 10.1186/s12905-019-0813-3

Linder-Pelz, S. U. (1982). Toward a theory of patient satisfaction. *Soc Sci Med, 16*(5), 577-582. doi: 10.1016/0277-9536(82)90311-2

Magala, I., Onega, L., Nalubega, R., & Serunjogi, P. (2017). Factors influencing contraceptive uptake among sexually active HIV positive clients in TASO Masaka. *Uganda. J Public Health Policy Plan, 1*(2), 4.

Maguire, K., & Westhoff, C. (2011). The state of hormonal contraception today: established and emerging noncontraceptive health benefits. *Am J Obstet Gynecol, 205*(4 Suppl), S4-8. doi: 10.1016/j.ajog.2011.06.056

Mariam, T. G., Kebede, Y., Shibru, A., & Birhanu, A. (2018). Utilization of reversible long acting contraceptive methods and associated factors among women getting family planning service in governmental health institutions of Gondar City, Northwest Ethiopia 2015. *Austin J Public Health Epidemiol, 5*(1), 7.

Melnyk, B. M., Fineout-Overholt, E., Stillwell, S. B., & Williamson, K. M. (2010). Evidence-based practice: step by step: the seven steps of evidence-based practice. *Am J Nurs, 110*(1), 51-53. doi: 10.1097/01.NAJ.0000366056.06605.d2

Memon, A., Hamid, S., & Kumar, R. (2017). Client Satisfaction And Decision Making Amongst Females Visiting Family Planning Clinics In Hyderabad, Pakistan. *J Ayub Med Coll Abbottabad, 29*(4), 626-629.

Mueser, K. T., Penn, D. L., Addington, J., Brunette, M. F., Gingerich, S., Glynn, S. M., Lynde, D. W., Gottlieb, J. D., Meyer-Kalos, P., McGurk, S. R., Cather, C., Saade, S., Robinson, D. G., Schooler, N. R., Rosenheck, R. A., & Kane, J. M. (2015). The NAVIGATE Program for First-Episode Psychosis: Rationale, Overview, and Description of Psychosocial Components. *Psychiatr Serv, 66*(7), 680-690. doi: 10.1176/appi.ps.201400413

Mutemwa, R., Mayhew, S. H., Warren, C. E., Abuya, T., Ndwiga, C., & Kivunaga, J. (2017). Does service integration improve technical quality of care in low-resource settings? An evaluation of a model integrating HIV care into family planning services in Kenya. *Health Policy Plan, 32*(suppl_4), iv91-iv101. doi: 10.1093/heapol/czx090

Nantsupawat, A., Kunaviktikul, W., Nantsupawat, R., Wichaikhum, O. A., Thienthong, H., & Poghosyan, L. (2017). Effects of nurse work environment on job dissatisfaction, burnout, intention to leave. *Int Nurs Rev, 64*(1), 91-98. doi: 10.1111/inr.12342

Nasr, E., & Hassan, H. (2016). Association between quality of family planning services and client's satisfaction level in maternal and child health centers in Port Said City *J Nurs Educ Pract, 6*(1), 15.

New, J. R., Cahill, N., Stover, J., Gupta, Y. P., & Alkema, L. (2017). Levels and trends in contraceptive prevalence, unmet need, and demand for family planning for 29 states and union territories in India: a modelling study using the Family Planning Estimation Tool. *Lancet Glob Health, 5*(3), e350-e358. doi: 10.1016/S2214-109X(17)30033-5

Obwoya, J. G., Wulifan, J. K., & Kalolo, A. (2018). Factors influencing contraceptives use among women in the Juba city of South Sudan. *International Journal of Population Research, 1*, 7. doi: 10.1155/2018/6381842

Ochako, R., Mbondo, M., Aloo, S., Kaimenyi, S., Thompson, R., Temmerman, M., & Kays, M. (2015). Barriers to modern contraceptive methods uptake among young women in Kenya: a qualitative study. *BMC Public Health, 15*, 118. doi: 10.1186/s12889-015-1483-1

Pascoe, G. C. (1983). Patient satisfaction in primary health care: a literature review and analysis. *Eval Program Plann, 6*(3-4), 185-210. doi: 10.1016/0149-7189(83)90002-2

Porney, M. (2015). Patient partnership in quality improvement of health care services: Patients inputs and challenges faced. *Patient Experience Journal, 2*(1), 16.

Smith, E., Charantimath, U. S., Wilson, S. F., & Hoffman, M. K. (2017). Family planning in Southern India: A survey of women's attitudes. *Health Care Women Int, 38*(10), 1022-1033. doi: 10.1080/07399332.2017.1356306

Tsai, T. C., Orav, E. J., & Jha, A. K. (2015). Patient satisfaction and quality of surgical care in US hospitals. *Ann Surg, 261*(1), 2-8. doi: 10.1097/SLA.0000000000000765

Tumlinson, K. (2016). Measuring Quality of Care: A Review of Previously Used Methodologies and Indicators. Working Paper Two of the Measuring and Monitoring Quality of Services and Quality of Care Project. New York: Population Council.

Tumlinson, K., Pence, B. W., Curtis, S. L., Marshall, S. W., & Speizer, I. S. (2015). Quality of Care and Contraceptive Use in Urban Kenya. *Int Perspect Sex Reprod Health, 41*(2), 69-79. doi: 10.1363/4106915

Vuori, H. (1987). Patient satisfaction--an attribute or indicator of the quality of care? *QRB Qual Rev Bull, 13*(3), 106-108. doi: 10.1016/s0097-5990(16)30116-6

APPENDICES

APPENDIX I: RESEARCH ETHICS APPROVAL

JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE & TECHNOLOGY

BOARD OF POSTGRADUATE STUDIES

Office of the Director

Tel. 057-2501804
Email: bps@jooust.ac.ke

P.O. BOX 210 - 40601
BONDO

Our Ref: H153/4286/2015

Date: 25th June 2019

TO WHOM IT MAY CONCERN

RE: DENNIS KIMANZI KINYOKI – H153/4286/2015

The above person is a bona fide postgraduate student of Jaramogi Oginga Odinga University of Science and Technology in the School of Health Sciences pursuing Master of Science in Epidemiology and Biostatistics. He has been authorized by the University to undertake research on the topic: ***"Factors Influencing the Satisfaction among Women using Family Planning Methods in Siaya County, Western Kenya".***

Any assistance accorded to him shall be appreciated.

Thank you.

JARAMOGI OGINGA ODINGA
DIRECTOR BOARD OF
POST GRADUATE STUDIES
DATE .....
P. O. BOX 210 - 40601, BONDO,
UNIVERSITY OF SCIENCE & TECHNOLOGY

Prof. Dennis Ochuodho
DIRECTOR, BOARD OF POSTGRADUATE STUDIES

APPENDIX II: ETHICAL PERMIT

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **859358**

Date of Issue: **20/September/2019**

RESEARCH LICENSE

This is to Certify that Mr.. Dennis Kinyoki of Jaramogi Oginga Odinga University of Science and Technology, has been licensed to conduct research in Siaya on the topic: FACTORS INFLUENCING THE SATISFACTION AMONG WOMEN USING FAMILY PLANNING METHODS IN SIAYA COUNTY, WESTERN KENYA. for the period ending : 20/September/2020.

License No: **NACOSTI/P/19/1390**

859358

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Verification QR Code

NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.

APPENDIX III: INFORMED CONSENT FORM

Study Title: ***factors influencing the satisfaction among women using family planning methods in siaya county, western kenya.***

Research Investigator: Dennis Kinyoki
MOBILE NO: +254720986671 **Email:** dennis.kinyoki@gmail.com

Study funder: Self

Introduction

Dear Respondent,

My name is _____. I am collecting data on behalf of Mr. Dennis Kinyoki a Master of Science (Epidemiology & Biostatistics) student at Jaramogi Oginga Odinga University of Science and Technology. She is carrying out a research on "*factors influencing the satisfaction among women using family planning methods in siaya county, western kenya.*"

Purpose

You are invited to participate in this research study. The purpose of this study is to assess factors influencing the satisfaction among women using family planning methods in siaya county, western kenya. You have been invited because you are a woman of reproductive age seeking service in a facility in Siaya County.

Enrollment requirements

To be enrolled in this study you should be an adult of 18 years, utilizing FP services and a residence of Siaya County.

Study duration and enrollment

This study will last for three months though you are only required to participate once during this period.

Study Procedure

You will be interviewed, and specific questions will be asked about your experience while utilizing FP services.

Risks

There are no risks associated with your participation in this study because it will not involve any invasive procedure and you will be assigned a study number that will be used on all study documents. All study documents will be secured and will only be accessible to authorized study personnel.

Benefits

There will be no direct benefit to you for participating in the study, the results of the study will will be used to enhance the development of policy framework for use in family planning programmes in respect to client centered services.

Compensation

There will be no direct compensation or benefits for participating in this study.

Participation and withdrawal from study
Your participation is entirely voluntary. There is no penalty for refusing to participate if you choose not to. You can withdraw at any point during the study.

Confidentiality
All data will be kept under lock and key and will only be accessible to those involved in the data collection. Electronic files will be saved on Password. There will be no way to identify individual participants. We will not identify you or use any information that would make it possible for anyone to identify you in any presentations or written reports about this study.

Questions
Should you have questions about the content of this study or have been offended as a result of being in this study you may call or email the main study researcher Dennis Kinyoki 0724715262 or dennis.kinyoki@gmail.com. If you have any questions about your rights as study participant you can contact the chairperson of Ethics, JOOUST.

Consent statement
I have read this consent form (or it has been read to me), it has been explained to me why this study is being performed, and I feel that all my questions have been answered. The risks and benefits of being in the study have been explained to me. I have chosen freely to take part in the study and I can also choose to opt out of the study at any time. It has been explained to me that my personal information will not be shared with anyone except the authorized study personnel. It has also been brought to my attention that when I sign this form I do not give up my rights or deny the researcher from doing the thing they should do for me as a study participant. I will be given a signed copy of this consent form for my records.
If there is any portion of this consent agreement that you do not understand, please talk the researcher before signing.
Are you willing to participate in this study?
Yes_____ No_____

If yes, please sign

Participant	Name:……	Sign:……	Date……
Researcher's	Name: ……	Sign:…….	Date……

APPENDIX IV: PATIENT'S QUESTIONNAIRE

Instructions: Use this form to interview the client after she has received contraceptive services but before she leaves the facility. Ensure that the location of your interview has auditory privacy. All instructions for you as the interviewer are written in italics. For open-ended responses, write the response in space provided. For Yes/No questions, please select the correct box.

Name of Facility: _____ Today's Date (dd/mm/yyyy): __ __ / __ __ / __ __ __ __

Interviewer's initials: __ __ __ Questionnaire ID: __ __ - __ __ __ - __ __ __

SECTION 1: DEMOGRAPHIC AND REFERRAL INFORMATION		
101	How old are you?	_____ years ☐Don't know
102	What is your relationship status? *INSTRUCTIONS: Please read all answers and select the one that best describes the interviewee's relationship status.*	☐Single ☐Married ☐Divorced/Separated ☐Widowed
103	What is the highest level of school that you completed?	☐Completed primary school ☐Completed secondary school ☐Completed University/College ☐No formal education
104	Who referred you to the facility?	☐Friend / Family member ☐Health care provider ☐Community Health Volunteer ☐CBO/Youth Group members ☐University Peer Educator ☐Other (Specify) _____ ☐Was not referred for the service

105	Where did you get the information about availability of contraception services in this facility?	□Television □Radio □Newspaper □Poster/Billboard □Community health worker □Medical provider (nurse, doctor, midwife, etc.) □Pharmacist □Friend/Family member □Other (specify) _____
SECTION 2: QUALITY OF CARE		
201	Have you ever visited this facility for family planning services before today?	□Yes □No
202	Did you use anything to prevent pregnancy the last time you had sex?	□Yes □No → go to question 204 (DV)
203	If yes, what did you use?	□Pill □IUD □Injectable □Implant □Female/Male sterilization □Condom (female or male) □Other, please specify: _____
204	What was the reason for your visit today? *INSTRUCTIONS: Probe until you are able to classify the **main** reason for the client's visit.*	□**Get information and/or counseling** about a contraceptive method □**Receive, get prescribed or referred for** a contraceptive method for the first time or for the first time at this facility □**Restart** contraceptive method use (after not using for 6 months or more) □**Get supplies** for method already using or have a routine follow-up visit for method already using

		□**Restart same method** (after not using for *less than six months*) □**Switch** contraceptive methods **or restart a different method** (after not using *for less than 6 months*) □**Discuss a problem** about contraceptive method that you are currently using □**Other** issue, not about a contraceptive method go to question 207
205	Did the provider ask if you were having a problem with the method? *PROBE: or did you mention a problem?*	□Yes □No □N/A, never used a method → go to question 208
206	Have you had a problem with your method? *PROBE: that you wanted to discuss with your provider?*	□Yes □No → go to question 208
207	Were you satisfied with the advice or treatment that you received for your problem?	□Yes □No
208	Which method(s) did you receive or were given a prescription or a referral for? *PROBE: Any others?* *INSTRUCTIONS: Mark as many as apply*	□Pill □IUD □Injectable □Implant □Female/Male sterilization □Condom (female or male) □Other, please specify: _____ □No method provided → go to question 211

209	Did you come here today to obtain a specific contraceptive method?	□Yes □No → go to question 211
210	Which method did you want when you came here? *PROBE: Before your consultation, did you have a specific method in mind?*	□Pill □IUD □Injectable □Implant □Female/Male sterilization □Condom (female or male) □Other, please specify: _____
211	Which methods did the provider discuss with you? *INSTRUCTIONS: Please read all answers and select all that apply*	□Pill □IUD □Injectable □Implant □Female/Male sterilization □Condom (female or male) □Other, please specify: _____ □Don't know
212	Did you receive a contraceptive method today?	□Yes → go to question 216 □No
213	Were you given a prescription or a referral for a method today?	□Yes, prescribed a method □Yes, referred for a method □No (but a method was named in 210) □No (and no method was named in 210) → go to question 220
214	*INSTRUCTIONS: To be answered by the interviewer.* *Did the client receive her method of choice?* *INSTRUCTIONS: Check questions #208*	□Yes (client did receive her method of choice) → go to question 216 □Client had no preference → go to question 216 □No (client did not receive her method of choice

	and #210. Is the method named in #208 and #210 the same? If multiple methods are reported in #208, including the method for #210, mark yes for this question.	
215	Why do you think you did not get (**method named in 210**)? *INSTRUCTIONS: Mark most important reason only.*	□Chose not to accept a method at this time → go to question 220 □Preferred method was not appropriate (contraindications) □Provider recommended another method □Changed mind after listening to provider □Not available at facility today □Not available at all □Not available, referred to another source □ No provider who could supply method was available today □Other, specify: _____ □Don't know/ can't remember
	INSTRUCTIONS: If more than one method received/ prescribed/ referred for, only mark #216-219 for the MOST EFFECTIVE method (see Effectiveness of Family Planning Methods guide at the back of the questionnaire). If NO method is received/ prescribed/ referred, go to #220.	
216	For the method you just decided to accept, did the provider explain to you how to use the method effectively?	□Yes □No □Don't know/ can't remember
217	For the method you just decided to accept, did the provider describe possible side effects?	□Yes □No □Don't know/ can't remember

218	For the method you just decided to accept, did the provider tell you what to do if you have any problems?	□Yes □No □Don't know/ can't remember
219	For the method you just decided to accept, did the provider explain that this method does not provide protection against STIs and AIDS? *INSTRUCTIONS: Do not ask if method = condoms*	□Yes □No □Don't know/ can't remember
220	Did you feel comfortable to ask questions during the session?	□Yes □No □Don't know
221	About how long did you wait between the time you first arrived at this facility and the time you saw a staff person for a family planning consultation?	□< 15 minutes □16-30 minutes □31-60 minutes □1-2 hours □More than 2 hours □Don't know
222	During your talk with the provider were STIs/AIDS discussed?	□Yes □No □Don't know/ can't remember
223	*INSTRUCTIONS: Do not ask if method = condoms* Did the provider encourage you to use condoms at the same time as the family planning method you chose or are currently using?	□Yes □No □Don't know/ can't remember □Not Applicable *(method = condoms)*

224	How many living children of your own do you have? *INSTRUCTIONS: Record number given*	□Number of children _____ □Don't know
225	How long would you like to wait from now before the birth of (a/another) child?	□Less than a year □One to two years □More than two years □Don't know □I don't want any more children
226	Did you and the provider talk about whether or not you would like children in the future?	□Yes □No □Don't know
227	How much did you have to pay for your visit today?	Cost: _____Kshs
228	How do you feel about the amount that you had to pay?	□It was affordable □It was too much □Don't Know/Refused □N/A
229	If you did not pay for the service, what was the reason you didn't have to pay?	□The service was provided free of charge □Someone else paid the charge for me □There was a fee, but I was not able to pay for the service □Other (Specify): _____
230	Did the health care provider tell you to abstain from sex because you are too young?	□Yes □No
231	Did the health care provider tell you to abstain from sex because you are unmarried?	□Yes □No

SECTION 3: CLIENT SATISFACTION					
Item		**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**
301	The health facility is far from home	1	2	3	4
302	Waiting time was too long	1	2	3	4
303	Facility hours are convenient	1	2	3	4
304	Information given about the contraceptive method was sufficient	1	2	3	4
305	Privacy was maintained	1	2	3	4
306	I have had sufficient consultation time to discuss my needs	1	2	3	4
307	During the counselling with the provider, I was able to understand easily the information given	1	2	3	4
308	Staff here were really friendly and respectful	1	2	3	4
309	I feel confident that the information I shared with the provider today will be kept confidential	1	2	3	4
310	I would come back here if I need a contraceptive service again	1	2	3	4
311	I would recommend the contraceptive services to friends	1	2	3	4

APPENDIX IV: KEY INFORMANT INTERVIEW GUIDE

1. What is the level of clients' satisfaction level with the FP services among women of reproductive age seeking family planning services at health facilities in Siaya County, Western Kenya?

   ……

2. What are the factors associated with the uptake of the family planning services among women of reproductive age seeking family planning services at health facilities in Siaya County, Western Kenya?

   ……

3. What is the relationship between quality healthcare provision and family planning service utilization among women of reproductive age seeking family planning services at health facilities in Siaya County, Western Kenya?

   ……

4. Do you believe female clients are satisfied while utilizing FP services in Siaya County, Western Kenya? Explain

   ……

5. According to your opinion, are clients satisfied with the advice or treatment that they received for their problem?

   ……

APPENDIX V: MAP OF THE STUDY AREA