UNIVERSITY OF NAIROBI

DEPARTMENT OF SOCIOLOGY AND SOCIAL WORK

ATTITUDE, KNOWLEDGE AND COVERAGE OF MATERNAL HEALTH CARE SERVICES AMONG WOMEN OF REPRODUCTIVE AGE: A CASE STUDY OF KAYOLE SOUTH WARD, NAIROBI COUNTY.

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C50/81812/2015

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF THE DEGREE OF MASTER OF ARTS IN SOCIOLOGY (MEDICAL SOCIOLOGY), OF THE UNIVERSITY OF NAIROBI.

DECLARATION

This research project is the result of an independent investigation that has not been presented to other certification in any other institution to the best of my knowledge;

SUNDA VINCENT ONDIEKI

Reg. NO: C5081812/2015

SIGNATURE:……..

DATE:……..

This research project has been submitted for presentation with my approval as the university candidate's supervisor:

MR.KORONGO ALLAN

SIGNATURE…….

DATE:……..

DEDICATION

I dedicate this work to God, my lovely family and women of reproductive age, Nairobi county health services and all community health workers at Ribakia community unit, who held my hand throughout my research writing, big thanks to my supervisor who helped me make valuable corrections that made it possible for me to produce this copy.

ACKNOWLEDGEMENTS

I sincerely acknowledge and appreciate God whole heartedly; the guidance, support, encouragement and assistance that enabled me come up with the study concept. My gratitude goes to the people who gave me the peace of mind which enabled me write the research project and its production, to my lovely wife Christine and son Oliver and my siblings for their endless support both physiological, physically and spiritually. My workmates at Embakasi west sub county MOH, department of community health services, who have been a source of encouragement not forgetting my parents Mr. and Mrs. Sunda. This could not have succeeded without the kind assistance from my internal supervisor Mr. Korongo his advice and thorough supervision ensured this work is successful. I recognize the community health workers at Kayole south ward who agreed to be my research assistants and help me to find the research target group of women of reproductive age for data collection and response to the questioners.

LIST OF ABREVIATIONS

ANC	Antenatal care
BCC	Behaviour change communication
CHS	Community Health Services
CHW	Community Health worker
HH	House Hold
IFAS	Iron Folate Supplement
IMR	Infant Mortality Rate
KDHS	Kenya Demographic and Health Survey
M.A	Master of Arts
MDG	Millennium Development Goals
MMR	Maternal Mortality Ratio
MOH	Ministry of Health
P.N.C	Postnatal care
SPSS	Statistical Package for Social Sciences
SDG	Sustainable Development Goals
TBA	Traditional Birth Attendants
UNICEF	United Nations Children Fund
W.H.O	World Health Organization
SCHMT	Sub County Health Management Team
SCHRIO	Sub County Health Records Information Office

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ABSTRACT

This study sought to explore the attitude, knowledge and coverage of maternal health services among women of reproductive age (18-49 years) in Kayole south ward, Nairobi County. The objectives of the study were to; establish the knowledge level on maternal heath among women of reproductive age; assess the attitude of women of reproductive age towards Maternal Health services offered to them and identify the coverage of maternal health services within Kayole south ward.

The study used Health Belief Model and Social Cognitive Theory to explain perceptions, attitudes, knowledge, and coverage practices in maternal health. The research used mixed-methods design, with both qualitative and quantitative data collections from respondents. Interviewer-guided questionnaires were used for the quantitative data while in-depth interview guide was used for qualitative data. The study target population was of women of reproductive age between 18-49 years, with a sample size of 254 respondents. A total of four technical interviewees were selected through purposive sampling technique for the in-depth interviews.

From the findings, the researcher can state that women of reproductive age in Kayole south ward Nairobi County were aware about maternal health care services. The study established that most women of reproductive age knew the importance of attending Antenatal Care from a health facility and more so they could identify danger signs, before delivery but not after delivery. The attitude of the women towards maternal health care was generally good as a result of the services they received and the coverage was sufficient within the area of study.

From the study, it is realized that woman maternal care attendance was influenced by the perceived benefits and attitude towards the health care workers who served them and with the extent of the coverage, which enables access of the health services.

The research recommends that health professionals implement respectful maternal care which enhances the clients' attitudes towards seeking the services which intern boosts the coverage and quality improvement. Reduction of disrespect and abuse enhance human rights and consequently progress towards achieving millennium development goal (MDG5) which is also a priority under goal 3 of the sustainable development goals (SDGs) agenda through 2030.

Both levels of government at county and national level should have proper policies on maternal health, and departments within the ministry whose focus is strengthening aspects of maternal health care service delivery and accountability especially in free public health facilities, to ensure sustainable quality services and working environment.

It is recommended that a study on embedding quality on maternal health care services is very vital especially in the devolved systems of health care governance to ensure healthy lives and promote wellbeing for all at all ages.

CHAPTER ONE: INTRODUCTION

1.1 Background

The Government of Kenya within its state department of health came up with a Health Policy, 2014–2030 which gives guideline to foster vital improvement in the whole sector of health in Kenya, so as to act in accordance to the Kenyan constitution 2010 and vision 2030 development agenda is the long run. It also targets to meet set global obligations and shows the ministry of health's commitment through the government's stewardship, to ensuring that all Kenyans attain the highest possible standards of health, as per the needs of the society.

The Constitution of Kenya 2010 Article 43 grants citizens the opportunity of a legal framework in which an all-inclusive rights-based approach is applied in health delivery. It stipulates that every person has a right to the highest attainable standard of health, including reproductive health rights. While article 53−57 of the constitution gives rights of special groups where, Children have right to basic nutrition and healthcare. (www.health.go.ke)

Kenya being a member state of the united nations (UN) The United Nations Department of Economic and Social Affairs has the third UN Sustainable Development Goal (SDG), as launched at the UN Post-2015 Summit, has its first two targets focused on maternal and child health, specifically by 2030, to reduce the global maternal mortality ratio to less than 70 per 100,000 live births.

It's also targeted bring to an end preventable deaths of newborns and children under 5 years, with all countries globally aiming to reduce neonatal mortality rates to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births. (www.sustainabledevelopment.un.org; 2015).

According to Kenya Demographic and Health Surveys (KDHS) data over the years since KDHS 1988, 1993,1998,2003, 2008 and KDHS 2014, maternal mortality and morbidity has always been high despite vigorous efforts by the Ministry of Health to disseminate information on maternal care to both healthcare providers and consumers, mainly women, data on early childhood mortality rates from the 2014 KDHS.

Details of the activities under the national and county governments transition through the devolved government Act and Article 187 of the constitution, and the sector intergovernmental agreements between the national and county governments. This policy forms the essential framework for managing the devolution of the public healthcare sector. The policy provides for the development and intensification of the necessary national, county, and intergovernmental machineries and frameworks within which health services will be managed as a devolved function. The national government support towards free maternity services is seen as a move towards making affordability of maternal health services to Kenyans. The county government on the other hand should implement on service provision.

A maternal death is defined as the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and size of pregnancy from any cause related to or aggravated by pregnancy or its management but not from accidental or incidental causes (WHO, 1989). There are direct maternal obstetric deaths resulting from obstetric complications of pregnancy state and indirect obstetric deaths resulting from previous existing diseases worsened by physiological effects of pregnancy.

Antenatal care offers reproductive women a chance for a variety of preventive health services during pregnancy including tetanus toxoid injections, and health educating women about nutrition, safe delivery and postpartum care. It also gives women who face a high-risk pregnancy to be identified, monitored and even referred during pregnancy to ensure a safe delivery. Delivery care is an important aspect of maternal care. Most non-abortion maternal deaths occur around the time of labor and delivery or within a few days after giving birth due various danger signs which are not addressed in time. Access to obstetric services from qualified health professionals is therefore very essential to preventing maternal deaths.

The concern about maternal mortality is mainly because practically all the deaths and sufferings are preventable. The know-how is already available to prevent or effectively manage all potential life threatening complications related to pregnancy and childbirth. Maternal mortality has a particularly devastating effect on the family. In a study of the live children born to mothers that died in rural Bangladesh, it was found that 95%died within one year. (Chen et al, 1974). For every mother that dies, children are left motherless, and their chances of survival, healthy growth and development will be affected. The most common causes

of maternal deaths are ante-partum and post-partum hemorrhage, puerperal infections, malaria, HIV/AIDS related diseases, and hypertensive disorders of pregnancy (Republic of Kenya/UNICEF, 2002). Despite the fact that over 90 percent of the pregnant women attend antenatal clinic, more than 50 percent of deliveries take place at home where proper care and hygiene are not guaranteed (Republic of Kenya/UNICEF, 2002). It is reported also that health care services, particularly the referral systems in Kenya are inadequate for handling obstetric emergencies and thus the high number of maternal deaths during delivery (Republic of Kenya/UNICEF.

Emerging proof reveals that the urban informal settlement population explosion in the region has been accompanied by increasing rates of poverty and poor health outcomes. It has been documented that the urban poor face worse health indicators than their rural counterparts or their counterparts in the urban non-poor settlements. Despite the urban population perception of enjoying easy access to health services (Chepkoech 2003), there are significant maternal mortality intra county variations, especially in Nairobi County with large equality gaps in income and education and high healthcare disparities.

Women living in slum areas experience higher maternal mortality than women living in Peri-urban and suburban households because those living in wealthier homes, having higher education, or living in urban areas, have higher access and use of healthcare services than their poorer, less-educated, or rural counterparts. There are also racial and ethnic disparities in maternal health outcomes which increases maternal mortality in marginalized groups.

Trends in antenatal and delivery care in Kenya Maternal health outcomes are intimately unlinked; hence Nairobi City County is the third leading county in Kenya with high maternal mortality rates (UNFPA 2010)

Nairobi County, the Capital City of Kenya has experienced an exponential population growth in the past 60 years where the current population of 3.5million is almost 29 times higher than the year 1948 population which was 120,000.

This is despite the fact that the area in sq.km has remained the same at 696sq.km and hence the current population density which is quite high and still increasing. As a result of the skyrocketing population in Nairobi, majority of the people live in the east-land side which according to

estimates houses approximately 60% of the Nairobi population and covering only 5% out of the city's residential land, which prompted my study research in Kayole south ward with a population of 37,580 in a sq.km of 1.20 (IEBC).

1.2 Statement of the Problem

According to Kenya Demographic and Health Survey (KDHS 2014) and data over the years, indicate that maternal mortality and morbidity has always been high despite vigorous efforts by the Ministry of Health to put interventions on maternal care to both healthcare providers and clients, mainly women.

According to the World Health Organization, high maternal mortality rates are an indication of poorly functioning health systems, a woman's chance of dying or becoming disabled during pregnancy and childbirth is closely associated to her social and economic status, the norms and values of her culture and beliefs, and the household remoteness in the community. The poorer and more marginalized a woman is, the higher risk of death. Maternal mortality rates reflect disparities between wealthy and poor countries more than any other measure of health (WHO, 2008).

Maternal health care uses in Kenya and Nairobi County has improved but is not adequate specifically the proportion of women who make to four antenatal care visits consistently, those who deliver at health facility and who receive postnatal care with dignity and to the highest standards of quality possible hence impeding the progress toward achieving the vision 2030 maternal mortality target (Machio, 2008).

Through the national government of Kenya, implementation of free maternal care started in June 2013 in order to enhance utilization of maternal healthcare services. Similarly, there have been other initiatives aimed at increasing utilization of maternal health services. However, despite these initiatives, utilization of maternal care services still remains erratic and with compromised quality of care.

Data from (KDHS 2014) shows that the Percentage of women of reproductive age in Nairobi County who deliver in public health facilities is 50.1% compared to those receiving antenatal care (ANC) from skilled providers being 97.6% while women who go for postnatal care (PNC)

within two days after birth is 76.1% and the percentage of births with a postnatal checkup in the first two days after birth is 55%.

From the forgoing, it is clear that there is inconsistency on the transition from those who seek ANC to delivery and then PNC attendance. It was therefore imperative to conduct this population study to analyze the attitude, knowledge and coverage of maternal health services among women of reproductive age in Nairobi County at Kayole south ward.

1.3 Research Questions

i. What are the levels of knowledge on maternal heath among women of reproductive age in Kayole south ward?
ii. How is the attitude of women of reproductive age towards Maternal Health services offered in Kayole south ward?
iii. To what extent is the coverage on maternal health services within Kayole south ward?

1.4 Objectives of the Study

1.4.1 Broad Objective

The overall objective of the study was to analyze the attitude, knowledge and coverage of maternal health services among women of reproductive age (18-49 years) in Kayole south ward, Nairobi County.

1.4.2 Specific Objectives

i. To establish the level of knowledge on maternal health among women of reproductive age in Kayole south ward.
ii. To assess the attitude of women of reproductive age towards Maternal Health services offered in Kayole south ward.
iii. To identify the coverage of maternal health services within Kayole south ward.

1.5 Justification of the Research

For maternal health seeking behavior to be regularized there is need for health providers to use various dignified means to attend to the clients perceptions on the services they receive. At most facilities Kayole south ward, Nairobi County, the quality of service delivery is questionable and where the quality is maintained it comes with a higher cost compared to the free maternal services offered at the public health facilities.

The study will enhance academic research on quality improvement across all levels of health care, despite the ownership of the facility so as to attain the highest standards possible in offering maternal care moreover, the study will add to the pool of available data and literature in the field of medical sociology, and also form a basis for further research for embedding quality in health care service provision.

The policy environment in Kenya at present indicates a shift towards zero out of pocket payment for maternal and children with less than 5 years health care services in health facilities. In this regard, psychosocial, social cultural beliefs and demographic variables can only be the main limiting factor sin the access for maternal health care services. This study aims to learn the attitude, knowledge and coverage of maternal health care services among women of reproductive age 18 to 49 years.

The findings of this study are of paramount importance to both the national and county government politicians and policy makers as they strive to effectively implement provision of free maternal health care services which attain the highest standards possible as per the constitution of Kenya 2010, which outlines health as a basic human right.

In this regard, results obtained from this study will guide policy interventions aimed at increasing quality service provision and uptake of maternal health services in health facilities.

1.6 Scope and Limitations

The study sample focused on women of reproductive age (18-49 years) who have been pregnant within the last three years in Kayole south ward area B, C and D, Nairobi County. The perimeter was on indicators of maternal health care process ranging from antenatal care, child delivery and postnatal care. In comparison with their attitude, knowledge and coverage of the maternal health services for the last three years.

The questionnaire was restricted to the women who consented to respond and live within the area of study while the in-depth interview question guide was administered to health providers from the only public health facility in the ward.

1.7 DEFINITION OF TERMS

Women of Reproductive Age: In this study, this refers to women aged between 18- 49 years of age who have been pregnant or delivered within the last three years.

Maternal health: This will refer to the health of women during pregnancy, childbirth and puerperium (the postpartum period).

Maternal Mortality is the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes (WHO, 2011).

Maternal Morbidity is defined as chronic and persistent ill-health occurring as a consequence of complications of pregnancy and childbirth (Ogunjuyigbe&Liasu)

Antenatal Care Clinics (**ANC**)**:** Antenatal Care Clinics are specialized clinics run specifically for expectant women during their pregnancy.

Postnatal Care (**PNC**) is healthcare provided following childbirth to both mother and infant.

Skilled Birth Attendance is the process by which a woman is provided with adequate care during child labour, delivery and the early postpartum period (Graham et al).

Skilled Birth Attendant is an accredited health professional such as a midwife, doctor or nurse who has been educated and trained to proficiency in the skills needed to manage normal uncomplicated pregnancies, childbirth and the immediate postnatal period, and in the identification, management and referral of complications in women and newborns (WHO, 2004).

CHWs are Community Health workers who are volunteer permanent respected residents chosen by their community and established and trained by the ministry of health community health strategy units, as level one health care workforce. (chs.health.go.ke)

Attitude in this study is conceptualized as the feelings and the perceptions on how women of reproductive age think about maternal health care services they receive.

Knowledge is the information, awareness or familiarity gained by experience or education on maternal health care.

Coverage is the extent to which maternal health care services are offered both in physical facilities and in terms of quality.

CHAPTER TWO: LITERATURE REVIEW

2.1 Review overview

This literature presents three thematic areas of maternal healthcare services. It draws from various behavioral theories and sociological research and journals on the attitude, knowledge and coverage literature reviews by different scholars. This necessitated the researcher to come up with a theoretical frame work and conceptual frame work.

2.2 Attitudes towards maternal heath

The socio-behavioral of Andersen's model groups in logic sequence three clusters or categories of factors) which can influence health behavior (predisposing enabling and need factors) was elaborated by Kroeger (1983). Based on a broad and well-elaborated literature revision, he proposed the following framework; interconnected descriptive variables, all of which are affected by perceived morbidity, An individual's personality or predisposing factors such as age, sex, marital status, status in the household, household size, ethnic group, cultural beliefs, education status, occupation, assets (land, car, income), social network connections, perception towards a disorder manifestation and their outcome: chronic or acute, severe or trivial, disease etiological model, expected benefits or treatment (modern versus traditional), psychosomatic versus somatic disorders.

Characteristics of the service (health service system factors and enabling factors): accessibility, appeal (opinions and attitudes towards traditional and modern healers), acceptability, quality, communication, costs. The interaction of these factors guides the selection of health care resources (Kroeger, 1983).

The literature suggests that the use of Maternal Health Care Services in developing countries can be influenced by factors such as the socio-demographic characteristics of women; culture; and availability and accessibility of the services (Mekonnen & Mekonnen, 2002). Various studies in the literature indicate an association between factors such as income, education, ethnicity, religion, culture, age, parity and decision-making power to utilization of Maternal Health Care Services. Majority of the research publications reviewed were of quantitative studies seeking to identify statistical associations between these factors and MHCS use (Abbas & Walker, 1986) Very few qualitative studies were accessed and were found mainly to assess women's

perceptions and barriers to seeking maternal healthcare services (Lubbock & Stephenson, 2008; Mrisho et al., 2008).

2.3 Maternal heath knowledge

The more educated mothers are the more likely to have better health, which genetically leads to better health for their children (Behrman and Wolfe, 1987a; Wolfe and Behrman, 1987, b) Grossman model portrays allocation of resources by individuals in order to produce health. His model portrays an individual as a producer of health and not just a consumer (Grossman, M. (1972)

Social cognitive theory application in psychology, education, and communication, indicates that sections of an individual's knowledge acquisition can be directly learned through observing others within the context of social interactions, experiences, and outside community influences. The theory is relevant to maternal health access and utilization, the theory deals with social cognitive, emotional and behavioral aspects for understanding behavior change. Therefore, the concepts of the Social Cognitive Theory provide pathways for new behavioral research in maternal health education.

Perspective for other theoretical areas such as psychology is relevant to provide new insights and understanding. The social cognitive theory explains how people obtain and sustain certain behavioral patterns, while also providing the foundation for intervention strategies (Bandura, 1997).

Evaluating behavioral change depends on three factors environment, people and behavior. Social Cognitive Theory provides a framework for conniving, executing and evaluating programs and services. In comparison to Users and gratification theory explains how people use health facilities for their need and satisfaction. The theory explains that people use health facility for their specific health need.

This is a important extension as it puts emphasis on the link of health-seeking behavior with structural levels within a macro-political and economic context. However, the model omits the need factors which are central for understanding health-seeking behavior knowledge.

Most empirical studies on demand for medical services indicate that education is significantly associated with use of health care services (Mwabu et al. 1993; Gertler andVan der Gaag 1990 using Peruvian data; Chakraborty et al. 2003; Muriithi 2013; Mpembeni et al. 2007; Tsegay et al. 2003). However, a finding by Gertler and Van derGaag (1990), using Ivorian data, that there is no association whatsoever between education level and utilization of health care services is surprising. Literature indicates that most studies collect data on education at the time of the survey and not when healthcare was sought which can be misleading especially where a time difference of 5 years is involved.

Mpembeni et al. (2007) found that younger women use health services more than older women, a finding which is consistent with the findings by Yanagisawa et al. (2006) As in the case of education level and marital status, literature indicates that most questionnaire interviews collected data on the age at the time of the interview and not the time when health services were sought which can be misleading. The occupation of the household head has been found to be a significant predictor of health care service demand.

To the best of my knowledge, no study has tried to investigate the attitude, knowledge and coverage of maternal health services among women of reproductive age (18-49 years) in a cosmopolitan, multi-cultural and diversity of ethnicity peri-urban set up like Kayole south ward, Nairobi County in Kenya. Empirical literature review reveals that most variables give inconsistent findings across studies. This called for localization of research findings to probably reflect on the unique urban socio demographics impact on the attitude, knowledge and coverage of maternal health care services.

2.4 Maternal health coverage

According to Owino (2001) in a study of the use of maternal health care services in Nyanza province Kenya found that the most significant factors in predicting service utilization include parity, age of the mother, education level of both the woman and the husband, place of residence, family planning and the number and timing of ANC visits. This finding is shared by other studies like Machio (2008), Chepkoech (2003) and Njaramba (1994) however some variables have revealed a variation in the indication of their influence from one study to the other e.g.

Njaramba (1994) carried out a study on the demand for maternal health services in Thika division of Kiambu District Kenya. In the study a sample of 128 households were randomly selected thereby attaining 128 women respondents. The study established that distance and cost of health services reduced demand for antenatal care. It also indicates that experience as measured by the number of children previously reduces the number of visits a mother makes to the clinic. Insurance and quality services provided during the clinic visits positively influence the number of visits. This study credited the fact that the distance one cover to get to a heath facility which offers maternal health care will determine the heath seeking behavior as this goes in hand with the social economic status of those who live in remote areas have no sufficient social amenities, such as hospitals and if available most of the time the coverage of the quality of services is usually compromised.

The Republic of South Africa declared that all care for children under the age of 6 years and pregnant women would be free (Republic of South Africa, 1994). Unfortunately, there has been no significant decrease in maternal, prenatal and infant mortality. Research was therefore carried out to determine the factors that influence the demand for antenatal services. (Kirigia, et al, 2000)

In this study, it was established that pregnant women who are blue-collar workers and those who are unemployed have a statistically significant lower likelihood of seeking antenatal care than their white-collar counterparts. The findings also indicated that the perceived quality of care is a significant determinant of pregnant women's decision to seek prenatal care. (Mwabu et al) found that underutilization of medical facilities in African countries is caused by consumer disappointment with quality of care.

It was also established that those women who were risk lovers or risk neutral were less likely to consume preventive and promotive healthcare including antenatal care. Quality of services offered in terms of availability of essential medicines and equipment also determines utilization of both antenatal (ANC) and delivery care services. Individual characteristics are significant in determining utilization of pregnancy services and so were Knowledge and orientation. Non-monetary factors such as travel and waiting time have significant influence on the demand for medical services. In the case of free medical services, time cost acts as price in determining demand for medical services.

Previous studies in developing countries including Kenya have concentrated in the rural areas where proximity of the health facilities may be far, hence a negative influence in determining demand for the services. There was therefore need to carry out a study in the urban areas which have unique socio-economic characteristics as compared to the rural areas. (chepkoech 2003) thus the sway to this urban based study on the attitude, knowledge and coverage of maternal health services among women of reproductive age (18-49 years).

2.5 Theoretical framework

This study used two theories that included social cognitive theory and health belief model. This theory applies to a broad range of health behaviors and subject populations by use of maternal health services to gratify their health needs.

2.5.1 Social Cognitive Theory

Social Cognitive Theory is a learning theory of psychology that explains individuals' behaviour patterns by understanding the cognitive aspects, emotional aspects and behavioral aspects for understanding behaviour change. Social cognitive theory is a subset of cognitive theory which focuses on ways in which people learn to model the behaviour of others. The social cognitive theory originated from social learning theory, the work of Albert Bandura (1989).

The theory was developed with an aim of acquiring social behaviours and continues to emphasize that learning occurs in a social context and much of what is learned is gained through observation. It further states that, people can influence their own behaviour in a focused, goal-oriented way (Bandura, 2001). The theory highlights the idea that much human learning occurs in a social environment. By observing others, people acquire knowledge, rules, skills, strategies, beliefs, and attitudes. People also learn the functional value and appropriateness of modeled behaviors by observing their consequences, and they act in accordance with their beliefs concerning the expected outcomes of actions (Bandura, 1989).

Social cognitive theory emphasizes on the gaining of social behaviours in addition to the cognitive thought processes that influence human behavior and processes. It seeks to explain how behaviour standards and norms are learned through an interaction of the individual and his environment, through the observation of others/vicarious learning. In Social Cognitive Theory, learning is largely an activity in which information about the slim line of behaviour and about

environmental events is transformed into symbolic presentations that serve as guides for action (Bandura, 1989). The theory also argues that, people can also through their self-reflection and self-regulatory processes exert pressure over their own outcomes and the environment. It can be referred to as an interpersonal level theory, which sees human behaviour as forming under a triad of behavioural, personal and environment determinants.

Operant conditioning theory also says that people learn by doing, but social cognitive and conditioning theories have different explanations. B.F Skinner (1953) noted that cognitions may accompany behavioural change but they do not influence it. Social cognitive theory contends that behavioral consequences, rather than strengthening behaviors as hypothesized in operant theory serve as sources of information and motivation. Consequences inform people of the likely outcomes of the behavior. If the outcome is failure, they know that they are doing something wrong and they take steps to create success the next time. While learning, people selectively process information; they engage in such activities as attending to instruction and rehearsing information, which they believe will uphold learning. From a motivational perspective, people strive to learn behaviors they value and believe will have desirable consequences (Bandura, 1989). A pregnant woman may attend ANC clinics for instance, if other women in the community attend. She may go ahead and have a hospital delivery if her peers have done hospital deliveries, or had complications and timely skilled attendance and service was provided with good outcomes for both mother and baby.

2.5.2 Health Belief Model (HBM)

The Health Belief Model (HBM) is a psychological model that endeavors to explain and predict health behaviors, practice and coverage. This is done by focusing on the attitudes and beliefs of individuals. The HBM was first developed in the 1950s by social psychologists M. Hochbaum, Irwim M. Rosenstock and Howard Leventhal working in the U.S. Public Health Services. The model was developed in return to the disappointment of a free tuberculosis (TB) health screening program. Since then, the model has been adapted to investigate a number of long- and short-term health behaviors, including sexual risk behaviors and the transmission of HIV/AIDS (Glanz et al, 2002).

Individual perceptions speak directly to the knowledge and beliefs that a person has about his or her attitude, behaviors and the outcomes they could have. Within the context of the HBM, perceived susceptibility examines the individual‘s opinions about how likely the behaviors they partake in are going to lead to a negative health outcome (Burke, 2010).For example, a pregnant woman who does not take iron and folllic acid supplementation (IFAS) medication yet it treats and prevents against low blood levels of iron (e.g. maternal anemia, low birth weight and iron deficiency). If such a woman does not feel that she is at risk of developing any of these diseases and complications, she has no reason in her mind to make a behavior change.

In the HBM, perceived severity addresses how serious the diseases that a person is susceptible to can be (Burke, 2010). In the case of a pregnant woman is not taking her (IFAS) medication some of these illnesses like maternal anemia can cause serious complications during delivery and in case of bleeding, it causes maternal mortality. A pregnant woman may not understand how dangerous it is to have deficiencies and the negative impact it has to the mother and the pregnancy fetal development.

The HBM seeks to increase awareness of how serious the outcomes of behaviors can be in order to increase the quality of one‘s life. While Individual Perceptions are internalized, in the Health Belief Model, modifying factors step outside the body to examine and use outside influences to affect the how threatened a person feels by the outcomes of continuing the same behaviors that put him at risk (Burke, 2010).

Susceptibility as stated before displayed how someone acknowledged that their behavior could lead to a specific morbidity and mortality. Threat takes the idea one step further, by examining just how likely it is that the disease could be developed (Burke, 2010). To use ANC attendance, a mother who does attends, ANC in a health facility by a skilled attendant, may feel threatened by potential risk of diseases because they have not been doing it and if they start; their pregnancy may be out of danger. On the other hand, women whose births are not done by a skilled attendant and consequently develop a danger sign like virginal bleeding or blurred vision/ headache due to infection will feel very threatened by the illness and will attend all her subsequent ANC and have a skilled delivery.

The health belief model suited the study objectives. The perceived susceptibility to maternal mortality and morbidity among other complications influences an individual's attitude towards professional health seeking behavior. However, the attendance of Antenatal care at least 4 times, skilled delivery and postnatal care exclusive, was explored in light of other modifying social factors such as age, ethnicity, occupation, residence, religion and level of education, accessibility and affordability of maternal health services(NUHDSS 2003–2005).

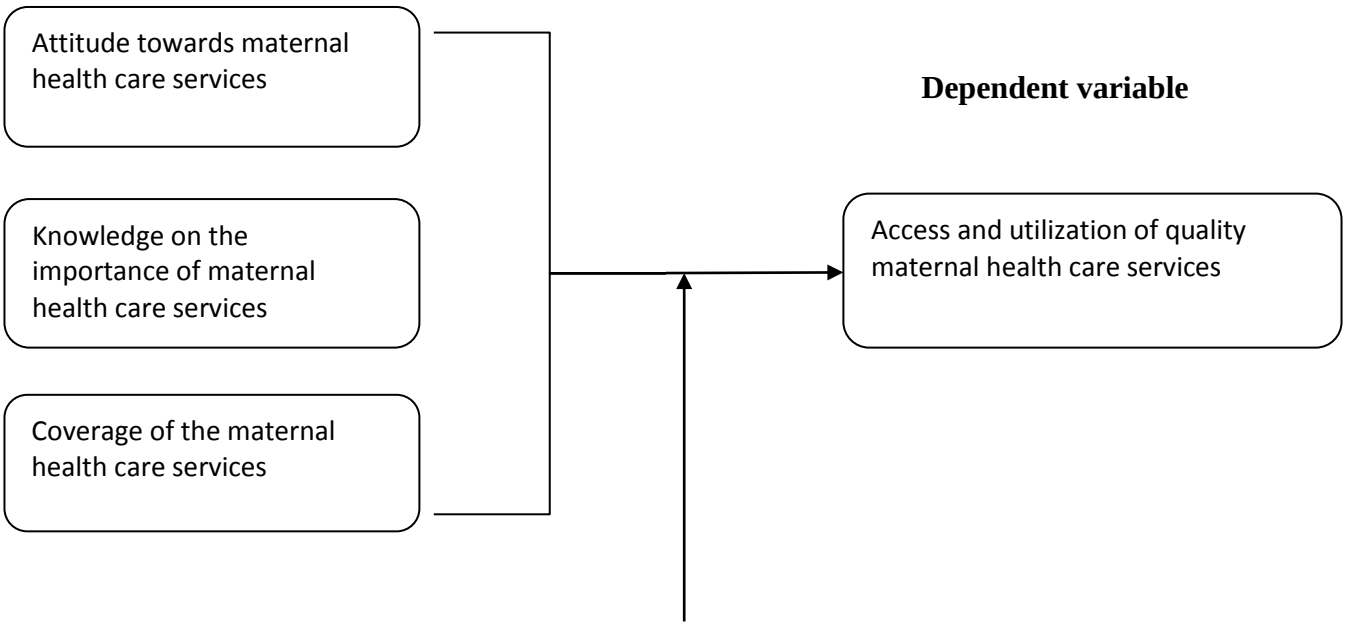
The health seeking and practice (desired behavior to manifest/likelihood of action) will be reflected by the practice of good attitude towards professional health services use as it was ascertained through interview and observation. Therefore, the likelihood of health facility usage depended on one's feelings about the kind of health care quality received; modifying factors, attitude towards the importance of ANC, skilled delivery and PNC towards prevention of maternal mortality, and improved maternal health outcomes.

2.6 Conceptual Framework

In this section, the research problem was analyzed in an abstract way, to provide a conceptual understanding of it before data was collected as necessary for further analysis of the issue. The framework guided data collection procedure and interpretation of research findings.

The independent variables are factors that will influence the dependent variable in this proposed study.

Independent variables



The conceptual framework above, the dependant variable is access and utilization of quality maternal health care services, which rely on the independent variables which are attitude, knowledge and coverage of maternal health care services, with support of intervening variables like education level, social cultural practices, religion, marital status and income to foster achieve desired outcome by the women of reproductive age in the study.

CHAPTER THREE: RESEARCH METHODOLOGY

3.0 Introduction

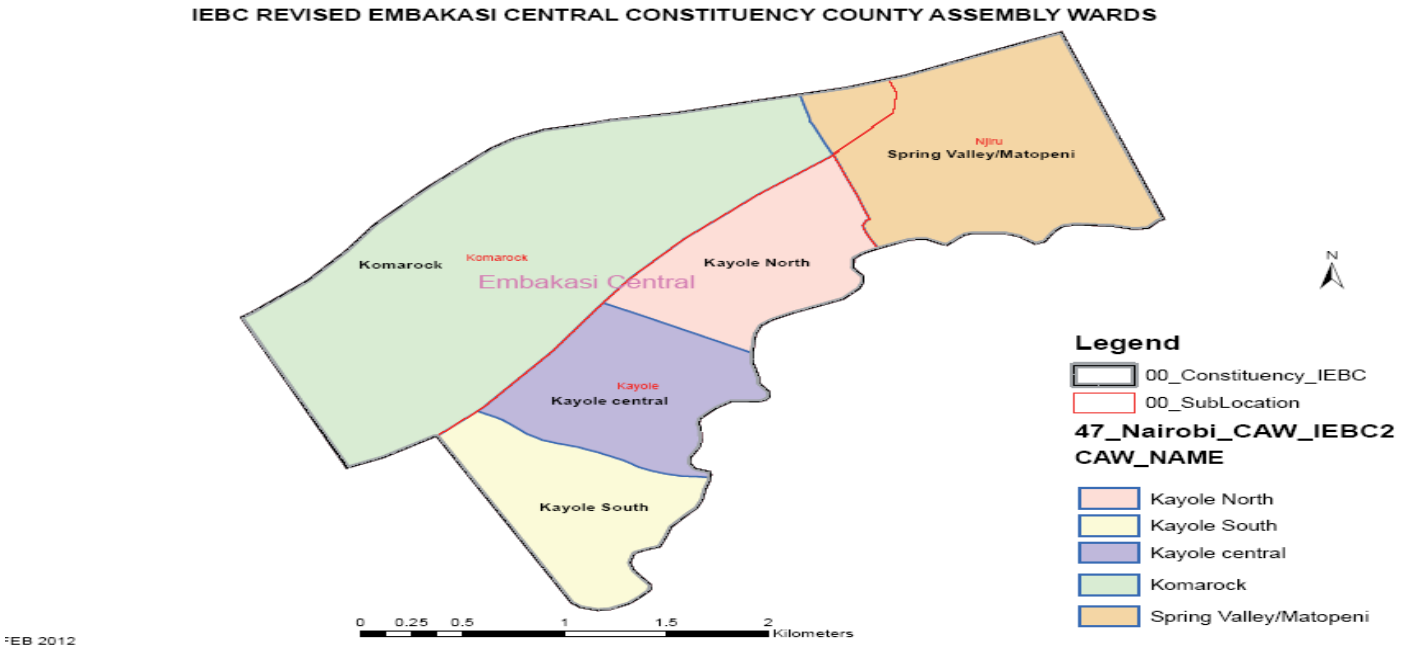
This chapter describes the methods used in this study. It entails the research design, research site, study population, sample size and sampling procedures, data collection instruments and methods, data analysis procedures and presentation, as well as ethical considerations for the research.

3.1 Research Site

The study was conducted in Kayole south ward, Embakasi Central constituency, Nairobi City County, which rests in an area of about 1.20square kilometers and has a population of 37,580, based on 2009 census of which 9,320 are women of reproductive age as per the (MOH) proportions.

In the area, maternal health care services are provided by both private and county health facilities, which include one public and three private health facilities (GOK, MOH 2016)

Kayole south ward being a cosmopolitan and densely populated the social amenities don't meet the population needs, this can been seen in the congested housing structure and poor access roads, Polluted environment especially along the ng'ong river to the south of the ward. Social economically, small and medium enterprise businesses are major within the community.



3.2 Research Design

This study employed mixed-method design, utilizing the strengths of both qualitative and quantitative data (Creswell 1997:2009). This approach ensured validity and reliability of data collected through guided questionnaires which were administered by the researcher and trained research assistants.

Systematic random sampling was used to select the respondents' women of reproductive age18 to 49 years while interviews of key informants were done by the main researcher using a key informant interview guide.

As elaborated by Ndeti (2013), by using mixed-methodology, the researcher was able to better understand the concept being explored and overcame the weaknesses or intrinsic biases and the problems that come from single study method.

3.3 Study Population

Population refers to the entire group of individuals who have a common observable characteristic (Mugenda & Mugenda, 2003).The study targeted women of reproductive age 18 to 49 years who were available in the community at the period of study within Kayole south ward, Nairobi County.

To ensure that the actual target population is captured, the respondents were targeted at the house hold level with the help of local community health workers/volunteers who are experienced residents, we did household mapping and registration with the support of ministry of health community health strategy using their data sampling tools, which have demographics of the area.(GOK, MOH 2007, CHS)

The key informant guide, targeted maternal healthcare service providers, i.e. the healthcare workers that run the clinics. These were mainly a doctor, nurses and the laboratory technicians in their respective area of work as key informants.

3.4 Sample Size and Sampling Procedures

3.4.1 Sample Size

The formula for finite population correction applied is:

$$n' = \frac{NZ^2P(1-p)}{d^2(N-1) + Z^2P(1-P)}$$

Where:

n'= Sample size

N= Study population. This is the average total women of reproductive age accessing maternal health care services in a month (20 working days).

Z= Z statistic for a level of confidence which was put at 95% which gives a value of 1.96

P= expected proportion eligible women for maternal health care services. Since there was no published data proportion of 50% was selected to estimate the highest sample size.

d= Precision with a 95% confidence interval which gives a margin of error of ±0.05.

$$n' = \frac{750 \times 1.96^2 \times 0.5 (1- 0.5)}{(0.05)^2(750-1) + 1.96^2 * 0.5 (1-0.5)}$$

$$n' = \frac{750 \times 3.84 \times 0.25}{0.0025 \times 749 + 3.84 \times 0.25}$$

$$n' = \frac{720}{2.8325}$$

$$n' = 254.19 \approx 254$$

3.4.2 Sampling procedures

The sample size comprised of 250 respondents, who were the eligible women of reproductive age who had received maternal health care services within the last three years, while the other 4 did not participate were either not available or declined to consent to respond to the questionnaire.

Due to the fact that community health workers/volunteers are trained by the ministry of health and working in the mapped community, using house hold registers (GOK MOH 2017,CHS), I selected17 CHWs as research assistants who I trained on the data collection tool, hence each CHW was able to administer 3 questionnaires a day for quality purpose.

I employed systematic random sampling, using the sampling frame household register with eligible women of reproductive age 18 – 49 years, by simply establishing the class interval = k‘. From each scheduled eligible HH visit throughout the five days in a week, a total of 51Women per day were drawn on each alternate day. That was an average number of 255 respondents. Using this procedure, each eligible respondent in the population had a known and equal probability of selection, and it was more efficient.

The sampling started by selecting an element from the list at random and then every k_{th} number in the registry will be selected, where ***k,*** is the sampling interval. This was calculated as:

$$K = \frac{N}{n}$$

Where *n* is the sample size, and *N* is the population size

$$k = \frac{750}{254}$$

$k = 2.953 \approx 3$

Purposive sampling was used to select the 4key informants for qualitative data. These include the nurse offering maternal health care, a lab technician conducting tests, a Community Health committee member, and a doctor in charge of the area health facilities.

3.5 Data Collection Methods

3.5.1 Quantitative Data

The research tool used to collect quantitative data was structured questionnaires. The questionnaires entailed both closed and open-ended questions targeting women on maternal health care visits; it was administered by the research assistants for validity and reliability purpose.

The rationale for this method was informed by the fact that respondents were aware and able to respond to the questions on the basis of their experiences and to also solicit the women‘s views as individuals. With questionnaires, the researcher was able to collect large amounts of information from a large number of people in a short period of time and in a relatively cost effective way.

The data of the questionnaires were then systematically collated, compiled and quantified by the researcher through the use of a statistical package for social sciences (SPSS) software, which enables data processing sequentially case by case through the files.

3.5.2 Qualitative Data

Qualitative data was recorded and documented through a structured Interview guide. Personal interviews were conducted with all the 4 key informants by asking open ended questions on the policy adaptation and implementation on maternal health care services and outcomes.

Each respondent was interviewed separately and given adequate time to give their experience on maternal healthcare services, health providers and the community health committee official also responded on government policy adoption and influence towards women of reproductive age attitude and knowledge for seeking the health services in comparison of the coverage.

The value of this method is that it provided in-depth general and expert views on the subject matter. The interviewer is the one that had control over the interview and kept the interviewee focused and on track to completion. The researcher was also able to capture verbal and non-verbal cues, e.g. enthusiasm and attitude over the subject.

3.5.3 Data analysis Procedures and presentation

In analyzing quantitative data, all questionnaires ware collated, coded and analyzed using basic descriptive statistical methods and techniques. Statistical Package for the Social Sciences (SPSS) was used to aid in the analysis hence data is presented using tables and figures.

Qualitative data was analyzed using five standardized steps: documenting data and the processes of data collection, organizing and categorizing data into concepts, creating connections of data to indicate connections between concepts, corroborating data by evaluating alternative

explanations, and representing the account of collected information (reporting the findings). A narrative report with quotations from key informants is written.

3.6 Ethical Considerations

The researcher through the research assistants explained the implications of the study to the respondents. No respondent was forced to respond or complete the questionnaire or engage in interviews, hence it was only over 18 years that made an informed consent. The researcher did not lead the respondents to a desired outcome of the study objectives. All information that was submitted by the respondents was considered confidential. The respondents' availability and limited time was taken into account by having short and understandable questions to complete in approximately twenty five minutes.

CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.0 Introduction

Results presented ware analyzed in form of tables and charts with Qualitative explanation on the data that was collected from respondents.

Social demographics of respondents are analyzed and reported, including assessment of the maternal health care knowledge; attitude towards maternal health care services and coverage of maternal health care services are outlined.

4.1 Social demographics of the respondents

In social demographic aspects of the respondents, various issues were put into consideration in order to understand the respondents appropriately. Among the issues discussed in this section were education level, marital status, age, Religion, Source of Livelihood, average years of stay in the community, average age of first birth by the women respondents.

4.1.1 Education level of the respondents

Respondents were asked to state their education level. The table below shows the variation in education level of the various respondents.

Table 4.1: Education level of respondents

Level of education	Frequency	Percentage
No formal education	19	7.6
Primary Education	96	38.4
Secondary Education	99	39.6
College/University education	36	14.4
Total	250	100

Most of the respondents had attained and successfully completed a secondary school education as per the data analyzed. This was represented with 39.6 percent. Those who had attained tertiary education and graduated were 14.4 percent. The tertiary education included having undergone a vocational training in a college or university.

The second highest percentage was 38.4 percent who had completed and attained a primary school education; this is according to the respondents' results, while it was 7.6 percent who had not attained any form of education. These shows that an average of 27 percent have attained secondary school qualifications or higher, which much lower as compared to the national statistics, in keeping with these findings, where an average of 41.9 percent of women of reproductive age have attained at least a secondary education or higher (KDHS 2014)

From Kayole II Sub County hospital, the Nursing Officer in-charge was quoted saying:

> *"Majority of the women who visit the ANC clinics have attained a minimum of primary school education. The secondary school drop-outs are very many, more than secondary school level educated pregnant mothers. Poverty is the worst challenge in ensuring that women advance in education. When they complete their schooling, they are married off. Others are not even able to complete their education. They even conceive before reaching the age of 18. This affects the number of women having attained secondary level of education and beyond."*

From the above quoted statement which was recorded by the researcher while using the key informant guide, it shows that from the nurses' experience over the years of her service at the areas of study, she has a perception that most women are school dropouts, but from the research findings, most had completed secondary school but may have not got good KCSE grade hence being small scale traders or house wives where we found them for interview.

4.1.2 Marital status of the respondents

The status of the family within which the women fall, whether she is married, single, divorced/separated or widowed and others that did not respond according.

Table 4.2: Marital status

Marital Status	**Frequency**	**Percent**
Married	190	76.0
Single	31	12.4
Divorce/Separated	16	6.4
Widow	4	1.6
Others	9	3.6
Total	250	100

From the above table, 76.0 percent which was 190 respondents were married according to the research. Those who were single, yet and they had delivered were12.4 percent, according to the study those who had been divorced or separated with their spouses were represented by 6.4 percent while the widowed women were represented by 1.6 percent. However, 9 respondents did not respond to the question representing 3.6 percent.

The dominance of the category of married women was found to have a positive implication towards maternal health care seeking behavior because of the husband involvement, in terms of financial and psychosocial support.

4.1.3. Age of the respondents

The chart below shows the age of various respondents.

Table 4.3: Age of the respondents

Age	Frequency	Percentage
18-24 Years	90	36.0
25-31 Years	106	42.4
32-38 Years	39	15.6
39-45 Years	15	6.0
Total	250	100

From the study, as shown in the table and chart above, the biggest percentage of the respondents fell between the ages of 25-31years, representing 42.4 percent of the study population; the age cohort was relatively higher in percentage as compared to the national reproductive age cohort of between 25–29 years with an average of 19.6 percent (KDHS 2014).

This was attributed to early marriages due to poor social economic conditions which lead to school drop outs and lack school fees to continue with college.

Women aged between ages 18–24 years were second in terms of percentage with 36 percent, the researcher noted that some of the respondents actually got pregnant while under 18 years but gave birth later on, but due to ethical issues only over 18 years where eligible to respond to the questionnaire. Respondents between the age limit of 18–24 years felt they knew very little being their first time pregnancy and the whole experience was not good especially those who got

pregnant out of wedlock were judged harshly by the society and even some health workers reprimanded them.

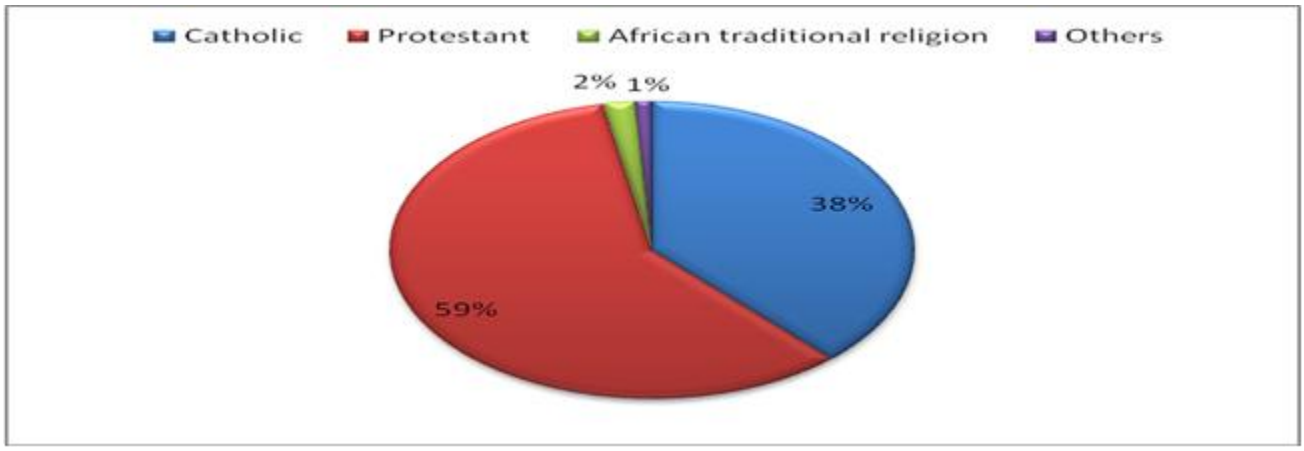
Those aged between 32-38 years were 15.6 percent according to the research most of the respondents with this age group were either sharing their second or third pregnancy experience, while those aged between 39-45years were the least with 6 percent representation, the researcher noted they were experienced in the subject matter due to the several times they have either been pregnant or have given birth, however majority suggested that every maternal health experience comes with its own uniqueness.

4.1.4. Denominations of the respondents

Majority of the respondents in the study, 59 percent belong to the protestant religion, while coming in second are the catholic respondents at 38percent, while the African tradition religion are only 2 percent while on the others are only 1 percent of the respondents.

The area predominantly hosts Christians with presence of several churches and no other religion respondents; this explains the women receptive nature to maternal health services.

Figure 4.1: Denominations of respondents



4.1.5. Main source of livelihood for the household of the respondents

The researcher was interested to know the source of income for the respondent's household hence they were asked and the results are as shown in the table below:

Table 4.4: Occupation of the respondents

Source of Livelihood	Frequency	Percentage
Salaried Employment	68	27.2
Self Employed	122	48.8
Casual Labor	58	23.2
Others	2	0.8
Total	250	100

Most of the households of the respondents depend on self-employment at 48.8 percent, where by most deal with small scale businesses like hawking, and groceries as compared to those who depend on a salaried employment who are 27.2 percent.

Where by most are employed in industries and the informal sector of employment at 23.2 percent are casual laborers who deal with manual works like construction which is not constant as mentioned by some respondents that the work is erratic depending with the duration of the contract and engagement rules.

4.1.6. Average years of residence of the respondents

From all the respondents it was noted that they all had lived in the community and continue staying there, but being an urban cosmopolitan area most are not permanent residents but people who have rented houses hence they have varying experience with the geographical location which is vital in understanding the maternal health services and facilities coverage in the area.

From the research findings most respondents had stayed within the locality for averagely more than ten years while some had moved to the area within less than five years due to affordability of the houses.

Table 4.5: Mean score of years of stay in the community

Number of respondents	Average years of stay
1-50	5
51- 100	12
101-150	4
151- 200	16
201 – 250	13
	10 years

From the above table it shows that average of all respondents who had stayed within the Kayole south ward locality and area of study was 10 years, which is long enough for someone to know the area coverage of social amenities such as health facilities that offer maternal health care services.

It was recognized that one's residence in the area for a longer period enabled them to know and understand the dynamics of the community thus helped in decision making towards seeking affordable accessible and quality health services.

4.2. Maternal health care knowledge

This section was set to find out the knowledge of the respondents on maternal health care services which include ANC, skilled delivery and PNC.

4.2.1. Awareness on seeking ANC services

The respondents were asked if they seek out any services during their pregnancy, where they attended, who provided the services and if it was necessary to them. The table below shows how they responded.

Table 4.6: Response on seeking ANC services

Awareness on ANC services	RESPONSE	FREQUECY	TOTAL	PERCENTAGE
Ever attended antenatal care	Yes	244	250	97.6
	No	6	250	2.4
4 ANC Visits from a skilled personnel	Yes	174	250	69.6
Among those who attended the ANC, where did they receive it?	Health Facility	243	244	99.6%
	Home	1	244	0.4%

On the response of seeking ANC services 97.6 percent of the respondents have seen someone for ANC unlike only 2.4 percent who didn't attend an ANC Clinic; this is almost at par with the 96 percent of women who received antenatal care from a skilled provider (KDHS 2014).

Awareness on the importance of visiting an ANC services, although its 69.6 percent who were able to finish the recommended 4 ANC visits and due to the fact that a majority of them 99.6 percent attended the ANC services from the health facility those who were not able to finish.

This was attributed to lack of money to pay for laboratory tests at the health facility hence they opted to stay at home and wait for delivery.

Charges in private facilities deterred them from accessing the much needed services by the expectant women. This was in comparison with what the healthcare workers and the Sub county hospital had to say on the issue of ANC services. The medical laboratory technicians' view on this was;

"As a public hospital the policy states that maternal health services should be free of charge to our clients, therefore we depend on the county government to supply us with pharmaceuticals and non-pharmaceutical reagents and supplies to utilize in attending our clients, this notwithstanding we usually do our level best by ensuring the expectant mothers are examined, tested and provided with medications which are available at one given time. On the other hand I have to acknowledge that we do experience erratic supply of commodities hence stock outs during the course of our work because we do serve more than the budgeted clientele, such that some may miss out to receive some of the essential tests. As a result we do advise the expectant women the importance of having the tests done. We also go out of our way to refer them to other credible hospitals nearby or other government hospitals of their choice to receive the same medical services in line with the ANC profile.

But to our surprise, and this is the sad part some of them decide to just decide to revolt to their homes and default from the ANC clinic until when they are about to deliver and some even come with complications due to e.g. iron deficiency, this may be attributed to poverty levels, ignorance and misconceptions when they think that we have refused to attend to them or think that we have misappropriated what is meant for their utilization, but how I wish they could understand the environment we work under."

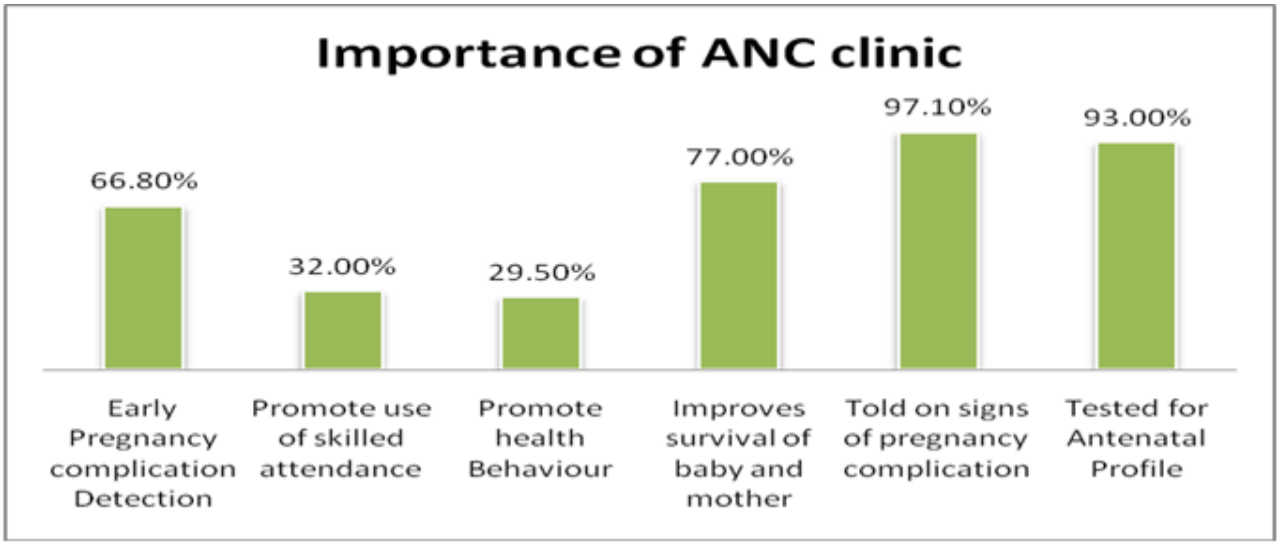
From the quotation above it shows that most respondents are aware of seeking antenatal clinic health services, which the service providers endeavor to provide, but due to systemic failure in terms of hospital supplies from the county to public health facilities, it contributes to ANC defaulters who can't afford out of pocket pay for the services at private facilities or end up going to substandard clinics where the quality of service provision is questionable.

4.2.2. Awareness on importance of ANC clinic

99.2 percent of the respondents knew the importance of attending the 4 ANC visits including, examination by the nursing officer and supplementation with iron and folic tablets, also they underscored the importance of having the ANC profile Laboratory tests, owing to the fact that 99.2 percent of the respondents claimed to know the importance of attending an ANC clinic the I

asked them what are some of the importance of ANC visits, and the chart below shows how they responded.

Figure 4.2: Importance of ANC clinic



Data analyzed showed that out of the 99.2 percent of respondents who are aware on the importance of visiting an ANC clinic, 66.8 percent know that ANC help in Early Pregnancy complication Detection, while only 32 percent think ANC clinic promote use of skilled attendant services especially during delivery and this is attributed to lack of emphasize of the nurses,

hence only 29.5 percent believe it promotes a health behavior because most of the respondents they may constrained e.g. when asked to eat foods with iron like liver and dark green vegetables like (managu) most may not be able to afford because they come with an expensive cost especially in the urban set up like for the respondents. However 77 percent believe that ANC clinic improves survival of the baby and mother because the nurse are able to check on the baby position in the womb and give medical advice to the expectant woman accordingly.

A majority of 97.1 percent agreed that being educated on signs of pregnancy complication was very important such that most of them could mention at least five danger signs which included; Virginal bleeding, severe abdominal pain, convulsions, foul smelling discharge from the virgina and when the baby stops moving.

93percent of the respondents underscored the importance of being tested for the ANC profile in the medical laboratory saying that it was vital for them to know their hemoglobin blood levels,

their HIV status, urinalysis and other sexually transmitted infections such as syphilis which can affect the unborn baby hence it was very important as per the respondents response on the issues of safe maternal health care.

4.2.3. Awareness on maternal child birth

The researcher was interested to know after attending the ANC clinic where do they prefer to give birth from and if they know who attended to them while in the delivery rooms, and below is a table on their responses;

Table 4.7: Response on access to delivery

Aspects of delivery	Response	frequency	Total
Where did you Deliver?	Health Facility	239	
	Home	11	250
How did you deliver?	Normal	217	
	Caesarean section	33	250
Presence of a skilled attendant?	Yes	205	
	No	45	250

From the table above most women of reproductive age (18 – 49 years) responded to have delivered at a health facility being 239 women against 11 women who said they delivered at home and they attributed delivering at home to various social aspects such as Insecurity, where 4 of the respondents said, especially those who experienced labor pain at night were scared to go out to the health facility and most affected were those who are single, separated or widowed.

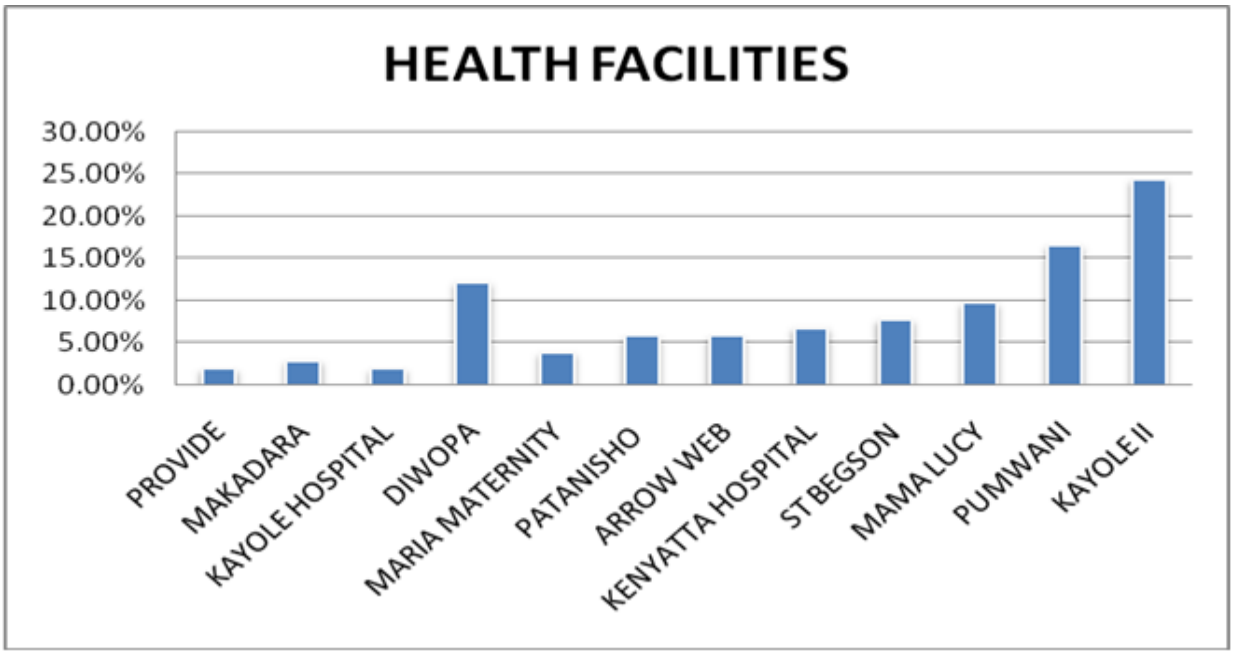
Similarly high cost of delivery especially in private health facilities and those who were turned back in the free public facilities for various reasons restricted 3 women who wished to deliver there and were forced to deliver at home by unskilled attendants.

While 1 of the respondent were dissatisfied with the quality of care offered in the maternity labor wards, another respondent was of the opinion that their previous delivery was safe at home and therefore saw no need to go to hospital, while 1of the respondent had other reasons top of the list being distance and poor inaccessible roads in the informal parts of Kayole south ward.

Majority of those who delivered, was through the normal way of birth, being 217 0f the women and 33 of them was through the caesarean section operation and among all the respondents it came out that 205 women represented by 82 percent were assisted to deliver by a skilled attendant that is either a qualified nurse or doctor which is higher than the 62 percent who were assisted by a skilled provider (KDHS2014) while those who were attended by unskilled attendants such as traditional birth attendants, community health workers and relatives were 45 women a representative of 18 percent according to the respondents.

The researcher went a step to know the specific health facilities that the expectant mothers visited for skilled delivery services and the chart below illustrates the findings.

Figure 4.3: Health facilities offering skilled delivery services



From the above graph presentation it shows that most of the respondents preferred and received skilled delivery services from public facilities has compared to faith based and private health facilities, top on the list is Kayole II sub county hospital which offers free maternal health care at 24.39 percent and due to the fact that it's the only public facility in the ward, Pumwani maternity followed in second being the biggest maternity and referral point, third in the group was Diwopa health centre which is Catholic owned and like most private hospitals provide and Kayole hospital were the least sort out for the services and this can be linked to their high cost of pay.

4.2.4. Respondents awareness on individual birth plan

This question sought to find out how the respondents planed themselves towards child birth and below is a table analyzing the responds;

Table 4.8: Response on individual birth plan.

Awareness on birth plan	Response	frequency	Total	Percentage
Have Birth Plan	Yes	226		90.4
	No	24	250	9.6
Transport	Yes	174	226	77.
Birth Preparedness	Yes	185	226	81.9
Emergency Money	Yes	139	226	61.5
Birth Companion	Yes	102	226	45.1
Emergency Kit	Yes	64	226	28.3
Others	Yes	17	226	7.5

From the findings majority of the respondents had an individual birth plan which constituted 226 respondents equivalent to 90.4 percent of which 77 percent had a plan on how their transport to the health facility of choice was catered for, 81.9 percent of the respondents had an elaborate birth preparedness plan on where the expectant woman will deliver, including the expectation of the health facility of choice.

A representation of 61.5 percent had in place emergency money in case of need be e.g. referral for more specialized care due to unprecedented complications. It was also noted that 45.1 percent of the respondents mentioned to have a birth companion as part of their birth plan, and it came to the researchers attention that most preferred their spouses and close relatives. On issues to deal with maternal emergencies only 28.3 percent had planned on an emergency kit which the respondents said included items like a new razor blade, a clean piece of cloth (Leso) and sterile gloves. However some 7.5 percent of the respondents included other Items in their individual birth plan, this included things like mother and child booklet and infant clothing.

Table 4.9: Respondents birth experience

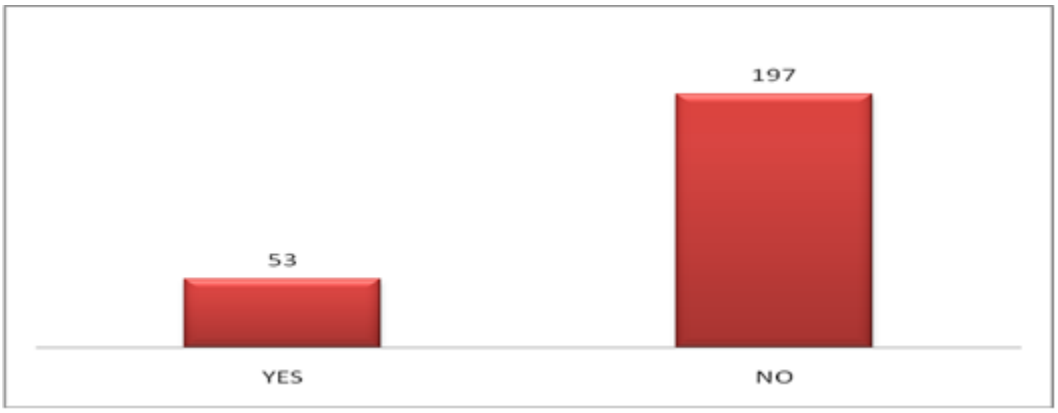
Birth Experience	Good	182	250	72.8%
	Fair	49	250	19.6%
	Bad	18	250	7.2%
	Don't Know	1	250	0.4%

From the above break down, the researcher sought to find out the overall experience of both those who had an individual birth plan and those who didn't have one. But it actualized that 72.8 percent of the respondents had a good birth experience and when probed further it came out that most of them had a comprehensive Individual birth plan, while 19.6 percent had a fair birth experience followed by 7.2 percent who had a bad experience and 0.4 percent who dint know how to explain the kind experience they had.

4.2.5. Respondents Knowledge on postnatal care.

The respondents were asked to state whether they were aware about at least two post-partum danger signs after child birth. Below is a chart showing how they responded.

Figure 4.4: Number of respondents with knowledge on at least 3 post-partum danger signs



From the figure above 197 the women respondents knew at least three post-partum danger signs which can cause maternal morbidity and mortality, most mothers were able to state danger signs like excessive virginal bleeding, severe abdominal pain and severe headache / blurred vision. While on the other hand 53 of the mothers could not remember at least three danger signs but most would easily remember one and the most common was excessive virginal bleeding.

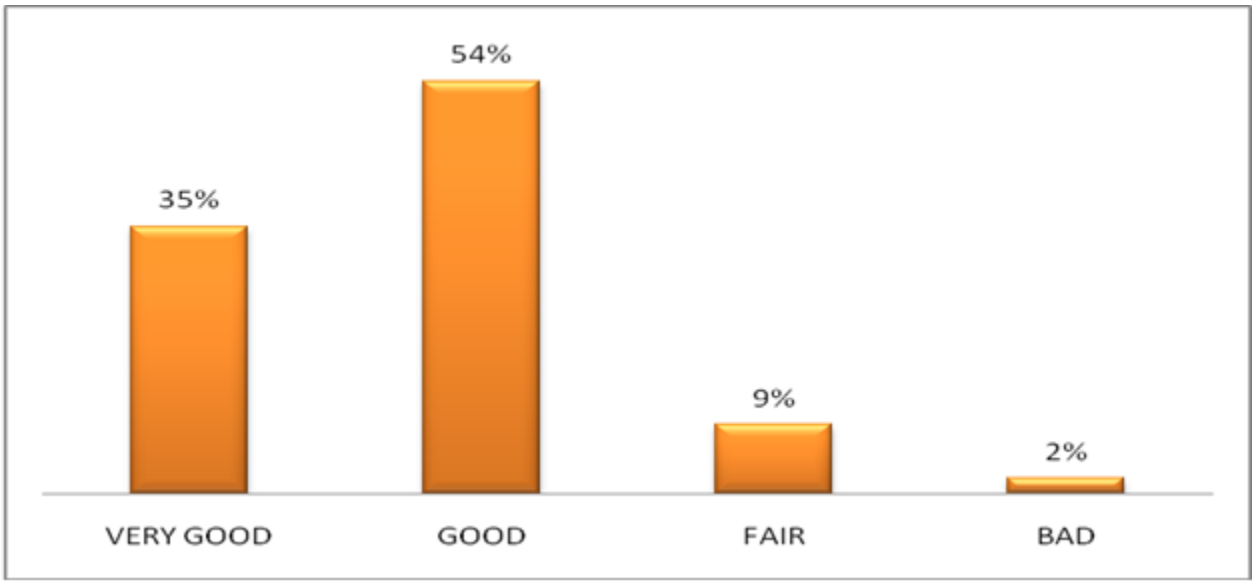
4.3. Attitude towards maternal health care services

The researcher in this section was seeking to know the perceptions of the women of reproductive age towards maternal health care services, from the reception in to the clinics, up to the point when she gives birth and allowed to leave the health facility until when she comes back for post natal clinic.

4.3.1 Attitude of respondents towards the first ANC reception

The respondents' attitude towards the ANC was put to test, where they were asked how they felt when they first visited the ANC clinic for maternal care and the chart 4.7 below illustrates the findings

Figure 4.5: The attitude respondents had towards their first ANC reception



The women who attended the ANC clinic for the first time a majority thought the reception was good at 54percent, followed by 35percent who said the reception was very good the third group of respondents believed it was fair represented by 9 percent of the respondents while 2 percent found the first visit ANC reception to be bad.

The first visit has a lasting impression on the client seeking services as a result of many havinf had a good reception their attitude towards their subsequent visits is enhanced. There fore promoting access and uilization of the maternal health care services efficiently.

4.3.2 Attitude of respondents towards the health workers in the health facilities

The respondents were asked how they felt about the health workers who were mandated to attend to them in terms of the approach they took in maternal health services.

Table 4.10: Response concerning health workers in the attended health facility

Attitude of women	Response	frequency	percentage
Health Workers in the facility attended	Very Good	71	29.2
	Good	131	54.0
	Fair	37	15.2
	Bad	2	o.8
	Very Bad	2	o.8
	Total	243	100

From the above table women of reproductive age (18 – 49 years) who attended the maternal health facilities found most of the health workers which include the doctors, nurses, nutritionists, HIV testing counselors and the medical laboratory technicians to be Good in the services they were offering by 54percent that is slightly above the average of the total respondents. While those health workers who were found to be very good by the respondents were only 29.2 percent and on the other hand 15.2 percent were offering fair services according to the respondents for the rest of the health workers who were categorized as either bad or very bad tied at 0.8 percent each.

The researcher on following up on this issue at the one of the most attended health facility the doctor in charge of the sub county hospital had this to say;

> *"When I look at the attitude of women towards us the health workers in respect to maternal health services, I have to say that most of us try our level best to be in the best mindset whatsoever so that we may be objective and accurate on the health services we offer, because as you know we are dealing with lives here, and it's not one life they may be two or more. But that notwithstanding every client we attend to is very different and has a right to have feelings towards each and every* one *of us but also with some sense of responsibility"*

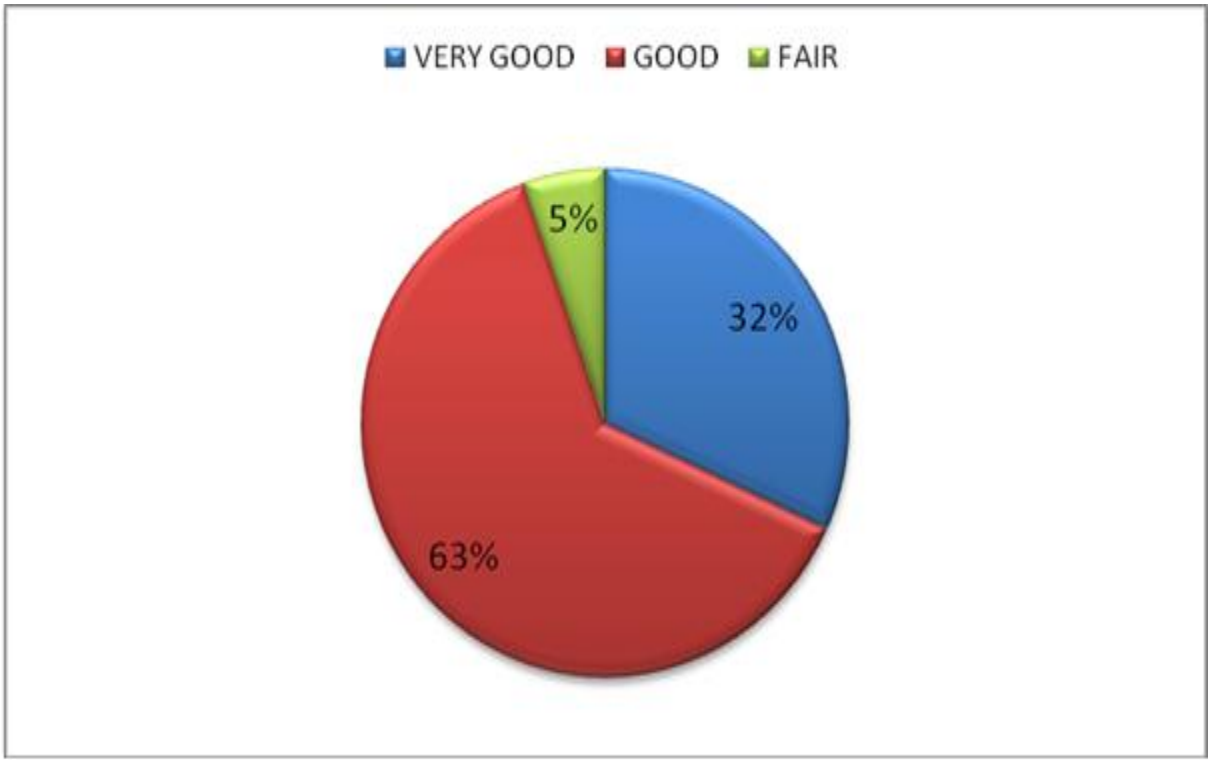
From the doctor's response on the clients' attitude towards health workers, it comes out that clients have a right to have an attitude towards the health provider but in a restricted manner not to hinder provider responsibility to offer services, but it requires understanding and professional support to implement set standards and quality of care.

4.3.3 Attitude of respondents towards nutrition treatment and counseling

When asked on their reaction towards the nutrition treatment and counseling on during their pregnancy period a majority of 150 respondents equivalent to 63 percent felt that service was good, while 76 respondents that is 32 percent of the respondents felt it was very good bearing in mind that nutrition is one of the key aspects for an expectant woman in addition with psychotherapy through counseling.

13 of the respondents which is 5 percent of the respondents' attitude towards the services felt it was fair for various reasons such as ignorance or long queues which some of the respondents said they could not withstand for a long given time.

Figure 4.6: Showing the response on the treatment and counseling on nutrition during pregnancy



When the researcher sought out to ask the nurse offering nutrition treatment and counseling this is what she had to say;

> *"As much as nutrition treatment and counseling is important some pregnant women become impatient while there are those who wait because this service is usually done after processing hemoglobin medical laboratory results according to the standard operating procedure which takes some time.*
>
> *Being one among many medical laboratory tests and the fact that not all women may need treatment on the same because others just need to be health educated or counseled on proper nutrition during the pregnancy period but because of high work load especially in public hospitals compared to the limited number of staff, hence the varying attitude from the clients we serve"*

From the above comment the researcher found out that as much as most clients would like to have the nutrition treatment and counseling during pregnancy, due to staff shortage in most facilities clients have to wait for too long, where by some opt out hence missing the vital nutrition counseling and health talk.

Those who don't get early Iron and folic tablets treatment, end up having to a more weakened immunity hence complications during child birth due to e.g. insufficient blood.

4.3.4 Respondents view towards laboratory tests done

Laboratory tests towards maternal antenatal profile where respondents blood grouping and other tests are done, the researcher asked what the respondents felt about the services and the results were as below.

Table 4.11: Response towards laboratory test done

	Very good	Good	Fair	Bad	Very bad	Total
Frequency	89	127	19	8	2	245
Percentage	36.3	51.8	7.8	3.3	0.8	100

Among the respondents 127 felt the laboratory services were good because they were accessible and affordable, 89 of them felt the services were very good as per the laboratory technician he attributed this feeling to the fact that they respondents would be asked to bring their own samples such as urine for urinalysis testing and they would also be tested blood samples for various diseases like blood sugar for diabetes, syphilis and HIV which clients partake with a lot of seriousness.

While other 19 felt the services were fairly done, according to the laboratory technicians this is due to lack of standard operating procedures in most laboratories, hence some 8 respondent felt that the lab tests done were bad due to compromised quality.

Also 2 of the respondents found the laboratory tests done to be very bad, because of lack of laboratory reagents, lack of machines to do the tests and bad staff attitude who, case in point of one public facility who referred the respondent to private facility for a test which was done half way the process as a result high cost was incurred by the respondent.

However 5 of the respondents had no experience with laboratory services due to some having no money to pay out of pocket, or either ignore the importance of having the lab tests done to them. This may adverse effects in terms of disease transmission and cross infection to the sexual partners before delivery which may also be affected due to lack of treatment of the undetected diseases.

4.3.5 Respondents attitude towards skilled delivery by service providers

Here the researcher was interested to know how the women perceived the treatment of the attendant who assisted in the delivery;

Table 4.12: Respondents attitude towards the treatment during delivery

Attitude of respondents	Response	frequency	Percentage
Treatment of the attendant during the delivery	Very Good	76	31.4
	Good	139	57.4
	Fair	20	8.3
	Bad	7	2.9
	Total	242	100

From table 4.12 above the respondents that felt that they were treated very well during child birth delivery were 31.4 percent and those whose response was good in terms of the services they received from their attendants when delivering were the majority with 57.4percent.

While 8.3percent found the services to be fair according to their experience and for those who found the services to be bad were 2.9 percent and it also came to the attention of the researcher that most of those who responded delivered through the normal way because those who were unconscious or had complications were taken for caesarean section delivery and their response was not applicable.

The researcher also sought out the views of the nurse midwife of the most attended facility for deliveries in Kayole southward and this is what she had to say;

> "*Being a qualified skilled attendant who loves my job having attended a nursing school I believe in doing the right thing all the time and mostly to our clients who depend on us. By saying so I mean we have no business being in this profession if we cannot attend to the expectant women with respect and dignity, gone are the days people could work with impunity because we are in a new constitutional dispensation where Kenyan citizens have rights and more so right to health care of the highest quality and for that matter we always strive to offer the best to the women of come to us for maternity services.*
>
> *I also have to agree that while we do our best, we also face challenges such as under staffing and poor working conditions such that at times we are forced to tell our clients to buy things like cotton wool, chlorine and gloves to attend to them and when some of them cannot meet such requirements they may feel offended and the attitude of the service provider may be compromised because he or she has nothing else to do to meet the expectations of the deserving client at the expense of* putting *their own health at risk or go against the profession ethics."*

As much as service providers know what is expected of them professionally, the working environment contributes so much on the kind of treatment they offer, as elaborated by the nurse midwife, they try their best but due to challenges beyond their control especially in public

hospitals it contributes to compromise in the quality of care, hence leaving clients not satisfied and others have a bad experience which negatively affects health seeking behavior.

4.3.6. Opinion of respondents on postnatal care

After delivery as part of maternal care services women need to receive essential post-partum services to enhance reduction of some of the leading causes of maternal deaths such as post-partum hemorrhage.

Table 4.13: Respondents opinion on post natal care services received

Respondents opinion on PNC	Response	frequency	Percentage
Respondents opinion on postnatal care services received	Very Good	87	35.5
	Good	135	55.1
	Fair	23	9.4
	Total	245	100

Post natal care services being vital for both the mother and child, 135 of the respondents found the services to be good as the mother checkups done at six weeks after birth to ensure no post-partum hemorrhage which is one of the leading causes of maternal deaths.

For the 87 respondents who found the services to be very good due to the fact both the child and mother are given comprehensive health services ranging from health talk, immunization for the infant, cord care, which if not well taken care of is one of the source of infections and neonatal sepsis which is a leading cause for infant mortality, moreover the respondents liked the aspect of male involvement by being given first priority if they come to the clinic as a couple.

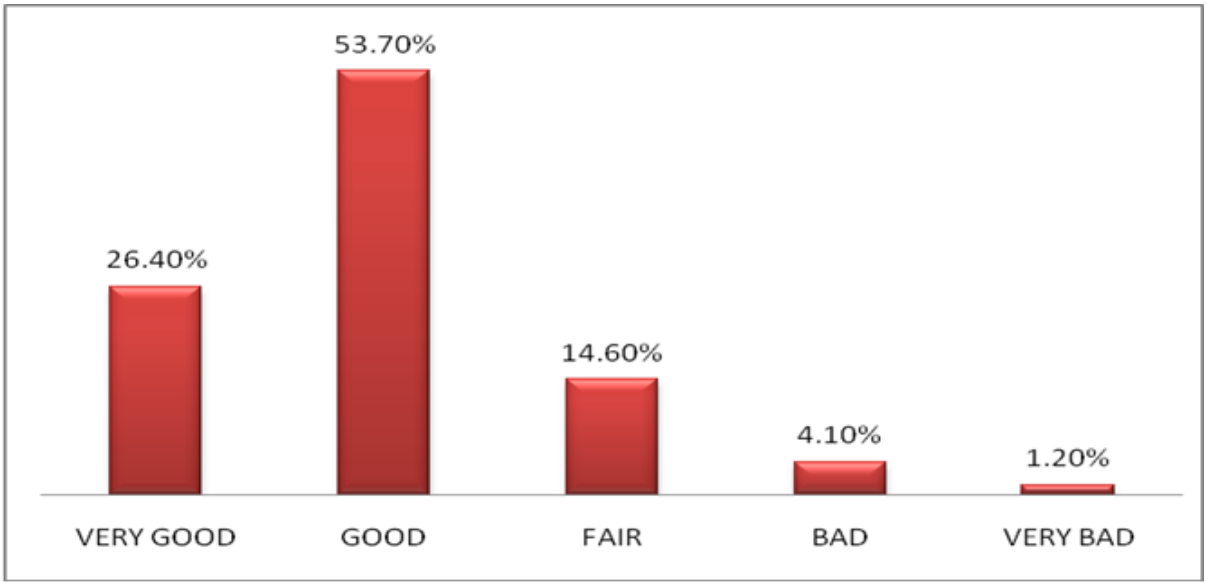
The 23 respondents who found the PNC services to be fair attributed it to the long stay in the hospital due to many clients, who come to the nearest facilities near the community irrespective of either delivering elsewhere or at home, especially in public facilities hence compromised quality due to congestion vis-à-vis few staff.

On the other hand 5 of the respondents had nothing to comment on the PNC services they received for various reasons they were not willing to say hence it was not applicable to them.

4.3.7. Respondents entire experience of maternal health care

To sum it up the researcher asked the question about the attitude towards whole experience and the figure 4.7 below gives the findings from the respondents

Figure 4.7: Response on the attitude towards the whole maternal care experience



From figure 4.7 above shows that most of the women of reproductive age who responded found the whole experience of maternal health care to be good were 53.7 percent, factoring all services.

Also 26.4 percent found the entire experience very good based on the kind of reception they first received and the health workers who attended to the at the ANC, treatment and counseling on nutrition during the pregnancy, how they found the laboratory test services to be effective until when they gave birth and later received comprehensive post natal care.

However14.6 percent felt the experience was fair while 4.1 percent found it to be bad and 1.2 percent very bad and on the other hand some chose not to respond the their whole experience because to them it was better left un mentioned.

On probing further, the respondent who felt the whole experience was good, she was quoted saying

"*I was worried when* I *got pregnant with my first born but as months went by I was advised to visit the clinic by my CHW, who referred me where I received ANC services and I was health educated and encouraged to have a birth plan and also involve my husband.*

This helped me in saving towards my medical expenses such as laboratory tests and my transport in case of emergency delivery, and also for buying baby items because I don't have health insurance. being a first time mother I am very grateful to the health workers for if it was not for their support and dedicated service, I was not sure if I would have delivered my baby who is growing well due to immunizations *and checkups for my child and I received".*

The research shows that presence of community health volunteers who can identify pregnant women at an early stage and refer them for ANC services, helps a lot in preparation towards having a fulfilling experience of pregnancy and its related birth plan including male involvement. Who support their women both financially and psychosocially as recommended by health providers hence good maternal health outcome.

4.4. Coverage of maternal health care services

The researcher in this section was seeking to know the extent to which the maternal health services are available and offered in the area of study

4.4.1. Response on known community maternal health facility coverage

To know the physical coverage of available maternal health facilities, the respondents were asked of the facilities within their community which offer maternal health care services.

Table 4.14: Facilities within the community offering maternal health care services

Coverage of health facilities	Response	Frequency	percentage
Known facilities within the community that offer Maternal Health care services.	11 and above	22	9.0
	Between 6 and 10	119	48.6
	Less than 5	104	42.4
	Total	245	100.0

From table 4.14 above most of the women of reproductive age knew between 6 to 1o health facilities which offer maternal health services which was a representation of 48.6 percent.

Those who knew less than five facilities were 42.4 percent of the respondents, those who knew more than 11 facilities were 9.0 percent of the total respondents and on the other hand those who did not know any facility offering maternal health care services were 5 respondents.

In this case the researcher categorized without discrimination of either public, private, faith based or community based health facilities.

Some of the facilities mentioned and attended by respondents for maternal health care services include, Diwopa H/C, Kayole II SCH, st Patrick hospital, fikiria jamii, arrow web clinic, maria maternity, st Begson, Kayole 1 H/C, Patanisho nursing home, mamalucy kibaki hospital, edarp komarock, provide hospital, kayole hospital, pumwani maternity hospital and Kenyatta national hospital.

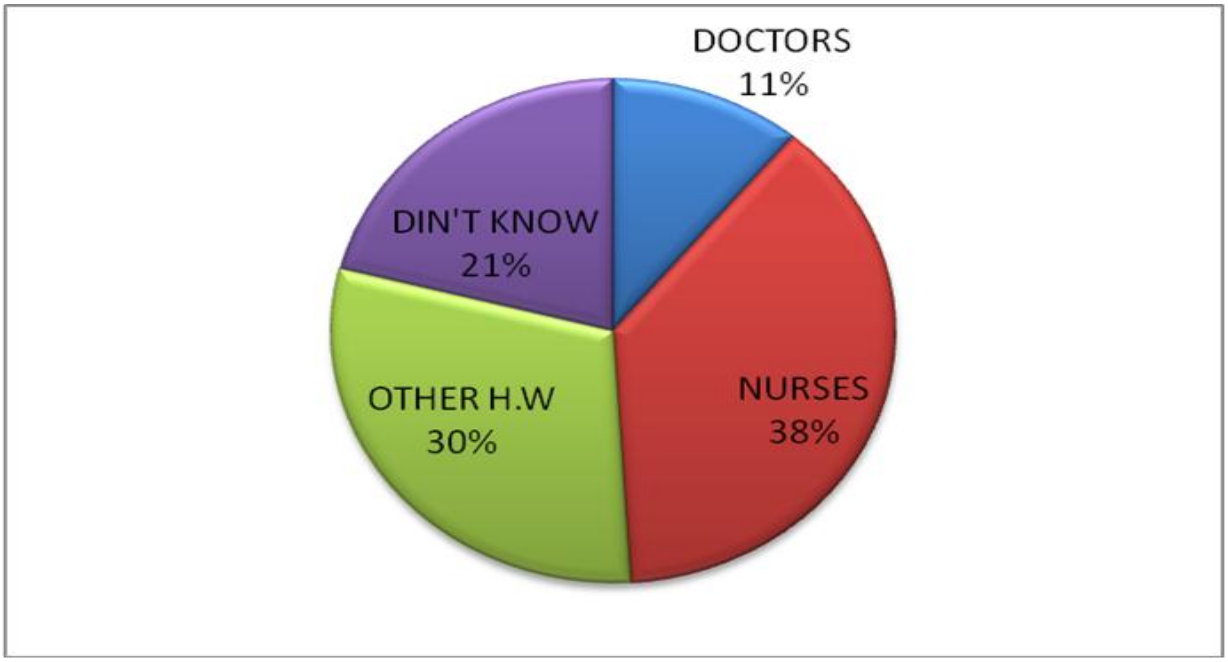
4.4.2. Respondents inquiry of health providers serving them

Among the respondents who inquired, or were told of health facilities service providers they attended, it was noted that 38 percent were nurses offering maternal health care services while the other health workers professionals who were involved on the same were 30 percent .e.g. the laboratory technicians are involved in various laboratory tests to ascertain the women health status before and after delivery.

Doctors involved in maternal health care services as per the respondents are 11 percent and this is attributed to the fact that most cases can be comfortably be handled by nurses and other health workers like clinical officers, but doctors come in case of complications which need specialized attention e.g. gynecological or caesarian section operations.

However 21 percent of the respondents never inquired hence could not distinguish the difference of the various health providers who offered the maternal health care services to them

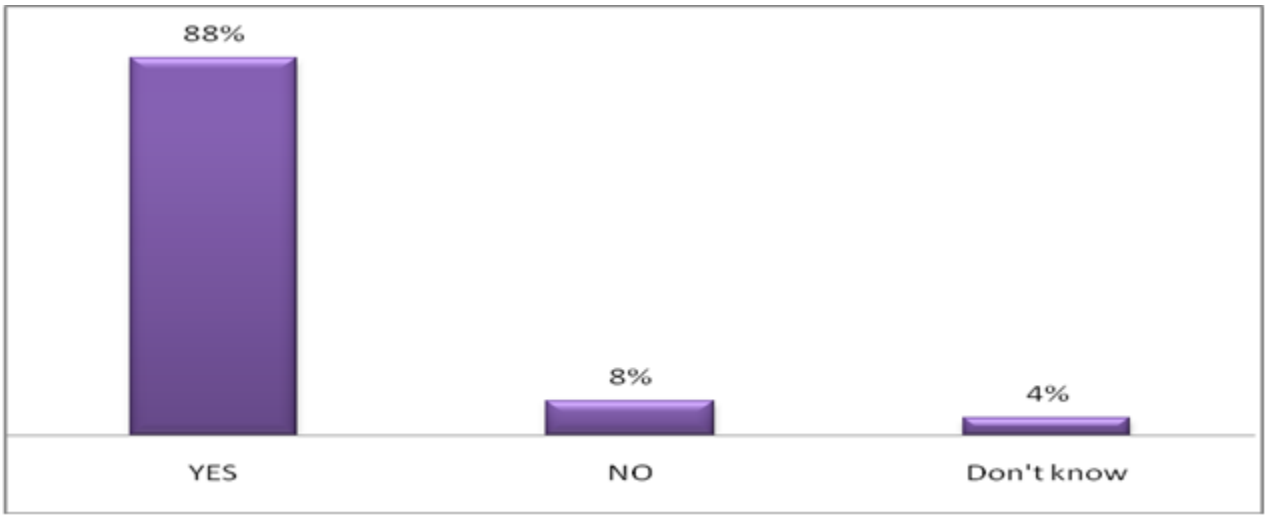
Figure 4.8: Respondents who knew the cadre of service providers



4.4.3. Perception of respondents on the skills of the service providers

Most of the respondents believed the facilities they attended for maternal health care services 88 percent had skilled attendants who served them while 8 percent thought they had no skilled personnel and 4 percent did not know if the staff were skilled.

Figure 4.9: Opinion of respondents on health workers skills



4.4.4: The time it takes respondents to get to the nearest health facility

From the table 5.6 above majority of the respondents it took them within 10 to 30 minutes to get to their respective health facilities for maternal health services this was represented by 79.8 percent of the respondents hence demonstrating that most of the facilities are not a long way from most of the clients.

Also 17.4 percent said they took between 1 to 2 hours to get to the health facility especially for ANC maternal services for those who preferred hospitals like Kenyatta national hospital, which is a distant from the area of study and considering traffic jam.

While other respondents took seconds to get in to the health facility were 2.8 percent especially for those who live in residential houses which have private clinics within the same plot or building. On the other hand 3 women had no response on the issue. Some of them included the women who never attended hospital due to religious and cultural beliefs which are against hospital maternal services hence some just stayed at home through the whole period of pregnancy, preferring to be attended from home by e.g. relatives like a mother in law or a (mkung'a) unskilled birth attendant.

It was also noted that during delivery especially at night some women just deliver at home according to the respondents its due to the nature of some pregnancies which are too quick hence cannot allow a n expectant woman to travel especially if she is alone without a birth companion or she is disabled e.g. visually impaired.

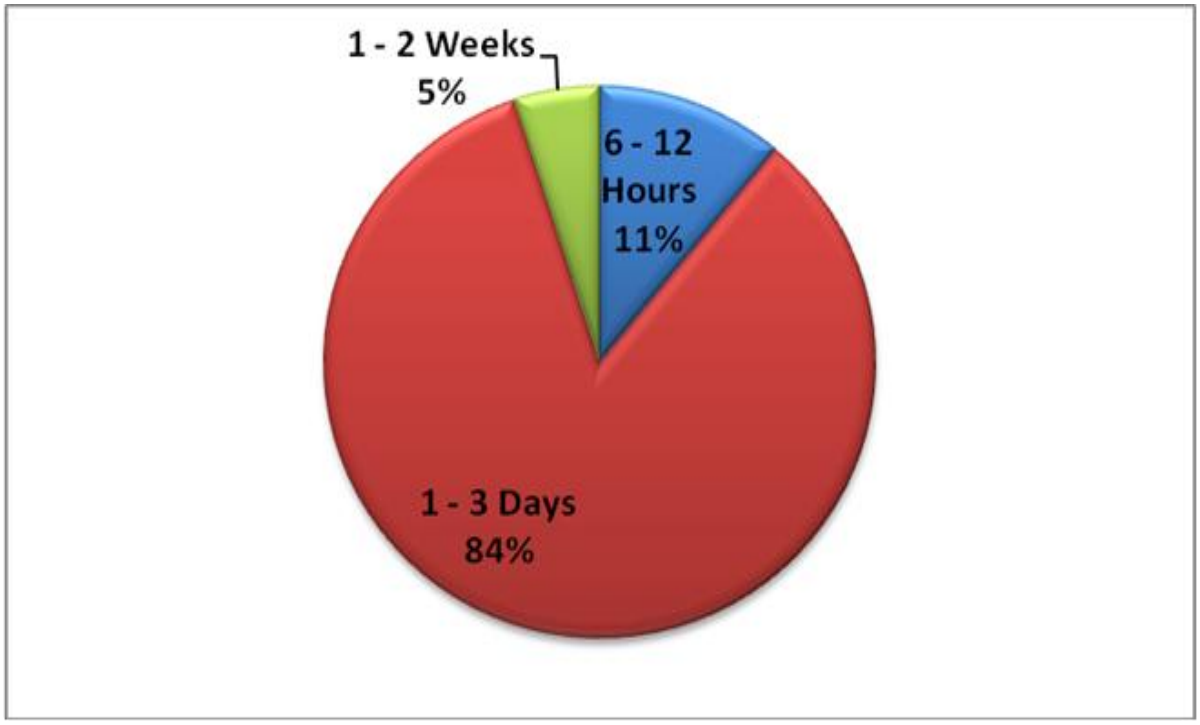
Table 4.15: Time covered by respondents to get to the nearsest health facility

Time covered	Response	Frequency	Percentage
How long it takes to get to the health facility	< 60 Seconds	7	2.8
	>1 <60 Minutes	197	79.8
	>1 Hour	43	17.4
	Total	247	100.0

4.4.5 How long it took to be discharged after delivery from the health facility

The question sought to know if the required coverage of PNC services were done within the stipulated time and the chart below shows the findings;

Figure 4.10: How long the respondents took to be discharged from the health facility



As above 84 percent took between 1 to 3 days after giving birth to receive post-partum care and to check if their health and that of the baby was in a good condition of which is within the standard operating procedure policy of maternal care services so as to prevent things like post-partum hemorrhage which one of the leading cause of maternal mortality and morbidity.

The second highest percentage of 11 percent are women who most probably delivered normally without any complications and especially either in private hospitals which charge per day the respondents opt to be discharged to avoid high bills or in public facilities due to congestion of clients against the bed capacity depending on the attendant assessment some clients are discharged within that period or in other instances those who have still births they are checked, counseled and discharged accordingly.

While 5 percent of the respondents said they stayed in the facility between 1 to 2 weeks and this may be attributed to their medical condition or of that of the child hence require more time for

close monitoring and medication or in other instances clients are detained in hospitals to offset their bills before being discharged, on the other hand some dint respond to the question terming it not applicable because she never delivered in hospital.

4.4.6: Geographical coverage of free maternal health care services

Respondents understanding on maternal health care services coverage in the area of study, where they were asked if the geographical coverage was adequate and 41.1 percent being the highest number of respondents felt it was sufficient serving the population, 28.9 percent felt the geographical coverage was very sufficient to the people of Kayole south ward.

Part of the respondents felt it was insufficient coverage hence 25 percent suggested there is need to improve the coverage of the maternal services. Another 5 percent felt it was very insufficient coverage and owing to the fact that this is an urban set up which should have the best social amenities like adequate government facilities offering quality healthcare. While some of the respondents didn't know what to say as far as the geographical coverage is concerned.

On inquiring more on the geographical coverage from one of the community health committee official, who has been serving in the area for the last 7 years , this is what he had to say about maternal health coverage;

> *"From the initial planning of this area of study the coverage of health facilities vis-à-vis the population projection according to me it was very much sufficient, but I have to say that due to uncontrolled constructions there has been a influx of high rise buildings which has led to increase in population of the residents and as a result over stretching of the already constrained resources in this area as far as government health facilities are concerned.*
>
> *As a result of high demand of the health services this has led to increase in private clinics and both community based and faith based health facilities and hospitals which have been given an approval to operate by the government officials from the ministry of health, although some have questionable staffing and quality of maternal healthcare"*

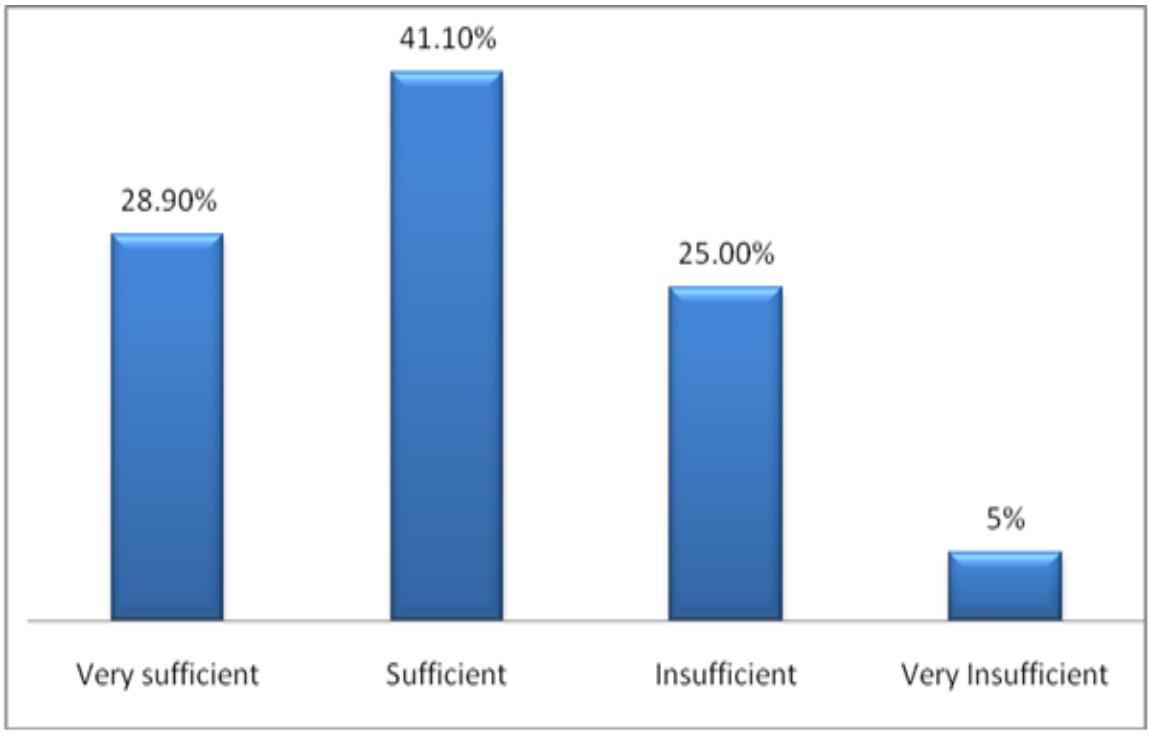
Coverage of quality maternal health services in the area of study is not up to standard as much as there is sufficient both public and private facilities offering the services, the coverage of quality

services offered with respect and dignity with qualified sufficient staff compared to the population needs complete review.

The existing public health facility with a qualified medical doctor needs to be expanded and built a theatre where women with complication can be attended, unlike the current situation where a mother who may need operation has to be referred to other public facilities which are also ill equipped to handle a high number of referral cases.

While in private facilities within the area of study have low capacity to handle a high number of maternal health care clients especially during delivery with the quality recommended, those that have the capacity to do caesarian section operation charge exorbitant fees which majority of the residents of the area of study cannot afford out of pocket because not many of them have insurance medical cover like e.g. N.H.I.F

Figure 4.11: Response about the coverage of free maternal health care



4.4.7 Respondents general reaction on maternal health care services coverage

As indicated in table 4.16 below, a majority of 90 respondents represented by 37.3 percent were satisfied with quality coverage while 30.3 percent a representative of 73 respondents were very

satisfied with the maternal health care quality services coverage and contrary to that those who were fairly satisfied were 29.9 percent being 72 respondents.

On the other hand there are those women of reproductive age who felt the quality coverage was poorly done and they were 2.5 percent of the respondents, which was a representation of 6 women but form the analysis above it reflects satisfaction levels which are encouraging hence the high accesses and utilization of the maternal health care services.

Table 4.16: Respondents general feeling of the coverage of maternal healthcare services

Response	**Frequency**	**Percentage**
Very satisfactory	73	30.3
Satisfactory	90	37.3
Fairly Satisfactory	72	29.9
Poorly Done	6	2.5
Total	**241**	**100**

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of key findings

From the presiding chapter four, after close analysis and presentation of the data collected on the attitude, Knowledge and coverage of maternal health services among women of reproductive age (18-49 years) in Kayole south ward, Nairobi County. Below is the summary of data presented.

5.1.1 Maternal health care knowledge

From the data analysis most women of reproductive age education levels notwithstanding, showed a sense of understanding matters to do with maternal health care services. A majority of the respondents to up to 97.6 percent confirmed to know the importance of attending an antenatal clinic and out of which 69.6 percent having attended the four recommended ANC visits as per the World Health Organization.

This demonstrates that most women under the study are willing to receive skilled health care, and for those who didn't meet the policy obligation as it was noted is due to other reasons which seemed to be beyond their means such as social economic hence individual poverty or lack of the required services from the health facility of choice.

Knowledge among the respondents was mostly gained from health education received from the ANC clinics, mother to child booklet which is given for free at the health facility and for those who had challenges with reading and understanding, they learned from their friends and experience, while some benefited from the community health workers house hold visits.

To ascertain the maternal knowledge respondents were questioned and were able to mention some of the danger signs, ranging from virginal bleeding, blurred vision, severe headache, fever and convulsions. This was also necessitated by the fact that most acknowledged the importance of medical laboratory ANC profile testing, where those found with detectable medical conditions like urinary tract infections, sexually transmitted infections and low blood count were counseled and given medications accordingly.

To emphasize the women awareness level those who had other complications said they were at liberty to visit the service provider for more medical interventions as per the doctors' instructions thus the doctor patient relationship. Their success or otherwise depends not only on the doctors'

clinical knowledge and technical skills, but also on the nature of the social relationship that exists between doctor and patient (Talcott Parsons 1951)

Individual birth plan knowledge also resonated well with most of the women as they were attending clinic, they were also anticipating to give birth thus they had budgeted for things to do with birth preparedness such the transport cost to the health facility, a birth companion to escort during the labor pains, and an emergency kit which comprised of a piece of cloth wrapping and sterilized razor blade to cut the umbilical code of the baby on the eventuality that the woman may deliver before getting to the health facility for skilled attendance.

Having a prier contemplation of the delivery facility of choice is also a vital component which pregnant women stated to be of great importance as part of the maternal knowledge because it goes a long way to know and meet the obligations as per the health facility of choice in terms of the admission criteria because it differs from the respondents understanding due to the nature of pregnancies manifestation and the health facility capacity to handle the clients.

Although most women seemed to be comfortable with their birth experience which most said to be good according to them especially notably was due to the fact that they gave birth to a live baby but it was also noted that this was due to ignorance to their reproductive rights.

Most women never put to consideration the quality of care they received in the maternity units; a few have knowledge on the component of poor quality in terms of disrespect and abusive behavior of the health providers because it is regarded as normal to facility based child birth, things like pinching, slapping, no explanation of medical procedure and failure to examine clients according to national guidelines even when resources are available.

As far as postnatal knowledge is concerned most women knew the importance of having a skilled attendant check on their health after birth and they had knowledge on danger signs of the born child than themselves because the attention shifts to the new born it came out that most mothers just know of excessive virginal bleeding as a danger sign followed by severe abdominal pain and severe headache / blurred vision as the three most known dangers signs by the respondents which is fair enough because although its preventable, post-partum hemorrhage is the leading cause of maternal deaths in Sub Saharan Africa according to WHO.

5.1.2 Attitude towards maternal health care

women of reproductive age who responded to have attended the ANC first visit, the perception they had was good at 52.8 percent across all health facilities where some of the respondents said that they liked going to the public facilities because they believed the staff were skilled and they offered the mother and child booklet for free and did not exaggerate the required tests and medication like some private facilities although they complained of the long queues and poor time management by the staff as compared to faith based or private clinics where staff come in time and attend to the clients within a shorter duration.

The respondents were in agreement to the fact that 52.4 percent of the health workers who attended to them were good despite of some facilities having a high work load, the staff are polite and did not discriminate anyone, but in some cases of preferential treatment was reported, especially in facilities where the maternal health services are free the clients known or related to the staff are preferred over the other women who may have come first hence contravening the first come first serve policy.

In the treatment and counseling services especially on HIV testing and nutrition counseling a majority of 60 percent felt the services were good and 31.2 percent felt they were very good especially in listening to the patients problems, respecting the patients privacy by attending to one client at a time and keeping confidentiality of information shared between the client and service provider.

laboratory tests in line with maternal health were perceived to be good despite the laboratory reagents stock outs and lack of all tests in one facility but due to the apparent explained benefit, it led to attitude change among the women who were being referred to other facilities with more sophisticated laboratory diagnostic equipment to be tested and bring back the results to the clinic they attended, as noted in this study, where 60 percent felt the services they received were good while 35.6 percent felt they were very good as compared to only 4.4 percent who thought they were fair to their health benefit.

One of the goals of the Health Belief Model is to change perceptions of susceptibility in order to move towards behavioral change (Burke, 2010), as is evidenced in this study the laboratory technicians took time to explain the importance of having the tests done to the expectant women

hence emphasizing the need for them to even pay out of pocket to the crucial tests which were not available especially in the government facilities

From the study the respondents found the conduct of the attendants during delivery to be good among majority of them 55.6 percent which is slightly above the average treated them with respect and dignity while some found 30.4 percent to be very good skilled attendants whose midwife skills, explanation of medical procedures, ensuring the woman's right to privacy and confidentiality is respected.

It also came out that the women respondent ranked male midwives to be better than the female coworkers even under similar working conditions such as when they gave birth in a very good clean environment with provision of meals after birth.

While on the other hand a few of the attendants represented by 10.8 according to the respondents were either fair or offered bad treatment to the women during delivery with some disrespecting and abusing the women at the delivery wards, with cases of slapping being reported by some of the respondents, usage of vulgar language and conducting medical procedures without any explanation and freedom of choice resulting to harm and ill treatment.

Noticeable, with continued awareness creation on the universal rights of childbearing, women championed by the white ribbon alliance for safe motherhood, the respectful maternal area has improved as a result of change of attitude by both mothers and caregivers. Although at times home deliveries are reported due to various barriers that may be non-financial and financial.

During the immediate postnatal care some clients experienced neglect and abandonment explaining the reason why postpartum hemorrhage is one of the leading causes of maternal deaths according to (WHO) while some respondents who attended private hospitals reported cases of detention despite being unlawful.

The pain of delivery notwithstanding, most mothers felt good with themselves after they delivered, because the attention shifts to the new born and the postnatal care immunization services which are important to the delicate newborn, although it is difficult to separate a mother and her baby most mothers felt as long has their children were fine and alive then their health was fine too.

However for those who experienced complications or loss of the child said they needed both physical and psychological postnatal care to ease the pain.

In general most women found the whole experience during pregnancy, childbirth and after birth to be good at 52.8 percent with only 26 percent who found it to be very good, while 21.2 percent found the whole experience below average raging from being fair to being very bad while some didn't have anything worth remembering during the maternal period according to the respondents, hence despite the improvement in attitude some issues need to be addressed too.

5.1.3 Coverage of maternal health care services

With the average years of stay in the area of study being approximately 10 years among the respondents, it came out that majority of the respondents are aware of between 5 to 10 health facilities that offer maternal health care services, followed closely by those who knew less than 5 facilities within the community of Kayole south ward offering similar services. Among the health facilities mentioned one facility is government owned by the Nairobi city county and the rest are either privately owned or faith based facilities and who also charge for the services at varying cost of payments.

On inquiring about who are the health providers in charge of health facilities, the nursing officers were the most followed by clinical officers/doctors who respondents perceived as doctors because it is difficult to discern between the two health's cadres.

On the question of qualification of the skilled attendants who provided services to the respondents, they felt that 79 percent of those who gave the medical attention were qualified based on purely the kind of treatment they got and not verification of the qualification certificates. On the other hand 10 percent felt on the kind of services they got the attendant was not qualified mostly because of not following the standard operating procedures while 11 percent could not tell if the service provider was qualified or not.

Coverage in terms of the distance it takes to get to the health facility majority of the respondents take between 1 minute to 60 minutes and this is contributed due to in accessible roads within the informal settlements of the study area and also cases of insecurity affect mothers especially at night in accessing the health facilities.

After expectant mothers have had their newborn either through normal vaginal delivery or via a caesarean section as a matter of procedure they are expected to stay in the hospital for some time for postnatal review of the mother and child, from the respondents view most stayed for the recommended one to two days for normal delivery while those who had a caesarean section delivery stayed longer up to three days.

On the other hand, those who had complications stayed for up to between one to two weeks on medical recommendation although at some facilities respondents reported to been detained due to lack of, or enough maternity fee and others were released less than 24 hours after delivery which is actually against the national policy on emergency obstetric and newborn care. (WHO, 2013)

The government initiative of free maternal health care coverage and adequacy is sufficient according to 38.8 percent of the respondents while 27.2 percent felt they were very sufficient to their needs and on the other hand those who felt they were insufficient or very insufficient said that although the services were claimed to be free especially in public hospitals there was a massive shortage of pharmaceuticals and non-pharmaceutical products which forced the clients to buy and the shortage of water and staff hindered the coverage of quality services rendered.

Hence the general feeling about the coverage quality of maternal health care services was offered satisfactory as per most of the respondents because they believed much needs to be done to ensure the services are client centered and uphold high standards of physical and mental health. So as to ensure a right based approach to reproductive and maternal health care this is dignified.

5.2 Conclusion

The health of women during, pregnancy, child birth, and postpartum period should ensure the mother hood concept, so as to actualize the prevention and management of complications which cause maternal deaths, of which most are avoidable. From conception it should be a positive and fulfilling experience therefore the attitude, knowledge and coverage awareness of maternal health care services among women of reproductive age should be enhanced.

The attitude of most women has improved over the period towards health seeking behavior as a result the knowledge and coverage awareness level has increased leading to the utilization of the ANC services especially the first two visits although the number of those attending the clinics

reduce towards the third and fourth visits as mentioned by the nursing in charge in the study, this has been found to affect women especially those who have complications when almost giving birth, lack of adequate resources and equipment affect most women who have to pay more money out of pocket for medicine like iron and folic tablets and laboratory tests done which are costly yet vital for the women reproductive health.

Staff shortage and poor working condition in public hospitals affect their attitude towards the clients leading to instances of disrespect and abuse to the extent that the quality of services offered is compromised making the knowledgeable clients to question the service providers qualifications.

Coverage of maternal health services is sufficient according to the respondents, but they have poor capacity to deal with emergency obstetric care because most are headed by nurses who depend on few doctors for specialized gynecological operations, and their being few facilities with medical officers and without a theatre hence women are referred to more equipped public facilities which are far or to private hospitals which charge expensive for such specialized maternal health care services.

Once admitted for delivery, in most facilities it was found out that recommended stay time is observed but there are cases of detention especially in private hospitals for those who cannot afford delivery payments while in some facilities especially the small clinic in the community they discharge mother and newborn before the recommended period of at least 24 hours for a normal delivery.

Finally, the government initiative of free maternal health care has sufficient coverage geographically within the study area but being in an urban area the demand of the services is quit high hence the general feeling of quality coverage is satisfactory hence need improvement.

5.3 Recommendations

5.3.1 Recommendations for Policy

1. The ministry of health should create awareness on respectful maternal care policy both at the national and county level to ensure implementation of the same at the various health facilities so as to sustain the required standard operating procedures of maternal health care services across both public and private health facilities.
2. County health department to enforce the W.H.O recommended health provider, patient standard ratio so as to enhance quality service provision and good coverage.
3. Government of Kenya to ensure equitable allocation of adequate budget for health services and maternity refund fee to hospitals, so as to reduce disparities in maternal health status and service delivery.
4. Nairobi county health management team to create an enabling environment for increased private sector and community involvement in maternal health services provision and financing.

5.3.2 Recommendations for further research

1) To research on how the decentralization of the Ministry of Health function to the counties and sub counties has effect on maternal health care services.
2) A research on the Impact of health workers strikes towards provision of quality health services and achieving the sustainable development goal of maternal health by 2030.
3) Research on Kenya's capacity to attain the right to the highest standard of healthcare, including reproductive health and the right to emergency treatment within Kenya's system of devolved government.

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APPENDIX I

UNIVERSITY OF NAIROBI

Identification	
Household Number	

Interview date	___ / __ /_**2016**_ day/month/year
Name of Interviewer	

INFORMED CONSENT

Hello. Am Mr. SUNDA VINCENT.O, a student at the UNIVERSITY OF NAIROBI. Conducting a research on attitude, knowledge and coverage of maternal health care services among women of reproductive age and would appreciate your participation. This information will be used strictly for my MA. Medical Sociology study project and for policy makers to assess whether they are meeting the goals to improve maternal health care in this community. The interview will take 20 minutes to complete. Whatever information you provide will be kept strictly confidential.

Participation in this interview is voluntary and you can choose not to answer any individual question or all of the questions. You can stop the researcher at any time. You will not be penalized in any way for refusing to participate; however, I hope that you will participate in this survey since your views are important.

Will you participate in this research? YES☐ NO☐ If YES proceed with interview, if NO terminate interview and thank the participant

At this time, do you want to ask me anything about the Research?

Signature of interviewer: _____

Date: _____

NB: *THIS QUESTIONNAIRE IS TO BE FILLED **ONLY** FOR HOUSEHOLDS WITH **women of reproductive age and have been pregnant, within 3yrs from now.***

SECTION 1: social demographics

No.	Questions and Filters	Coding Categories	Skip
101.	What is your highest level of education? (*The highest certificate which you hold – if still in school/college, record the latest highest education level attained*)	NO FORMAL EDUCATION……..…...1 PRIMARY EDUCATION……..2 SECONDARY EDUCATION……...3 COLLEGE/UNIVERSITY EDUCATION...4	
102.	What is your marital status?	MARRIED .....….1 SINGLE .....….2 DIVORCED/SEPARATED.....….3 WIDOW .....….4 OTHER (specify)……..5	
103.	What is your age? AGE in completed years	AGE (Yrs.)……..…… ☐☐ REFUSED.....97 DON'T KNOW.....98	
104.	What is your denomination?	CATHOLIC .....…1 PROTESTANT .....…2 AFRICAN TRADITION RELIGION.....…3 MUSLIM.....…4 HINDU……...5 OTHERS(specify).....…6	
105.	What is the total number of household members? *(Household members living under the same roof and share the same dish)*	☐☐ Members	
106.	Number of children under 2 years? (From among the total)	☐☐ Under 2's	
107.	What is the **MAIN** source of livelihood for this household Only?	SALARIED EMPLOYMENT .....…1 SELF EMPLOYED .....…2 CASUAL LABOUR .....…3 OTHERS (specify).....….4	

No.	Questions and Filters	Coding Categories	Skip
108.	For how long have you lived in this community? *Record in terms of years, if less than 1 year, record 00?*	☐☐ Years Don't Know……98	
109.	How old were you when you gave birth to your **first** child?	AGE (Yrs.)……..…… ☐☐ DON'T KNOW……98 REFUSED……97	

SECTION 2: Maternal health care knowledge

No.	Questions and Filters	Coding Categories	Skip
201a	During your pregnancy, did you see anyone for antenatal care?	YES……1 NO……..2	➔202a
201b	IF YES: Whom did you see? Anyone else? PROBE FOR THE TYPE OF PERSON AND RECORD ALL PERSONS SEEN.	DOCTOR/CLINICAL OFFICER..... ...1 NURSE ....2 OTHER HEALTH WOKERS ....3 OTHER (Specify)…… ...4 NO ONE……...99	
201c	During your pregnancy (Name), where did you receive antenatal care? ***Please indicate the place. Write all that is mentioned***	HEALTH FACILITY ***(Specify the Name of Health Facility)***_____ 1 Home _____ 2 OTHER (SPECIFY) 3	
201d	During your pregnancy with (Name), how many times did you receive antenatal care?	TIMES ☐☐ DON'T KNOW 98	
201e	Do you know of any importance of ANC Visits?	YES..... 1 NO ..... 2 DON'T KNOW 98	➔002a

No.	Questions and Filters	Coding Categories	Skip
201f	If YES, what are some of the importance of ANC visits ***Please write all that is mentioned***	Early Pregnancy Complication Detection ..... Promote Use Of Skilled Attendance..... 2 Promote Health Behaviour ..... 3 Improves Survival Of Baby And Mother 4	
202a	During (any of) your antenatal care visits, were you told about the signs of pregnancy complications?	YES..... 1 NO ..... 2 DON'T KNOW 98	 ➔ 203 ➔ 203
202b	Were you told where to go if you had any of these complications?	YES..... 1 NO ..... 2 DON'T KNOW 98	
203	During pregnancy, a woman may encounter severe problems or illnesses and should go or be taken immediately to a health facility. What types of symptoms would cause you to seek immediate care at a health facility (right away)? ASK: Anything else? DO NOT READ RESPONSES. RECORD ALL THAT ARE MENTIONED.	VAGINAL BLEEDING ..... 1 FAST/DIFFICULT BREATHING..... 2 FEVER..... 3 SEVERE ABDOMINAL PAIN ..... 4 HEADACHE/BLURRED VISION..... 5 CONVULSIONS ..... 6 FOUL SMELLING DISCHARGE/FLUID FROM VAGINA ..... .7 BABY STOPS MOVING..... .8 LEAKING BROWNISH/GREENISH FLUID FROM THE VAGINA……....9 OTHER (SPECIFY)……...10 DON'T KNOW 98	
204	During your pregnancy with (Name), were you tested for all Antenatal clinic profile	YES……1 NO ..... .2 DON'T KNOW 98	 ➔ 206 ➔ 206

No.	Questions and Filters	Coding Categories	Skip
005	What do you think of the laboratory tests while attending ANC clinic	ARE IMPORTANT……1 ARE NOT OF IMPORTANCE……..2 DON'T KNOW…….98	
206	Where did you give birth to (Name)?	HEALTH FACILITY ***(Specify the Name of Health Facility)***_____ 1 Home _____ 2 OTHER (SPECIFY) ..... ….3	→ 208 → 207 → 207
207	Why did you choose **NOT** to deliver at a health facility? PROBE AND RECORD ALL MENTIONED REASONS	INSECURITY ..... 1 COST ..... 2 DISSATISFACTION WITH QUALITY OF CARE..... 3 PREVIOUS DELIVERY WAS SAFE ... 4 OTHER (SPECIFY) _____ 5	
208	How did you deliver (Name)?	Normal delivery……1 Caesarean section…….2	→ 209
209	Do you know who assisted you with the delivery of (Name)? Anyone else? PROBE FOR THE TYPE(S) OF PERSON(S) AND RECORD ALL MENTIONED. ASK IF AN ADULT WAS NEAR WHEN NO ONE IS THE RESPONCE	DOCTOR..... 1 NURSE ..... 2 TRADITIONAL BIRTH ATTENDAN . 3 COMMUNITY HEALTH WORKER.... 4 RELATIVE/FRIEND/NEIGHBOUR .... 5 NO ONE 6	

No.	Questions and Filters	Coding Categories	Skip
210	Did you have an individual birth plan?	YES..... 1 NO ..... 2 DON'T KNOW……98	 ➔212 ➔212
211	What was in your birth plan list?	TRANSPORT……1 BIRTH PREPAREDNESS……2 EMERGENCY MONEY……3 BIRTH COMPANION……...4 EMERGENCY KIT……...5 OTHER (specify) ——————— 6	
212	How was your childbirth experience	GOOD……1 FAIR……2 BAD……3 DON'T KNOW……..98	
213	Did a health care provider check ON YOUR HEALTH after the delivery of (Name), either at a health facility, at home, or other location?	YES ..... 1 NO 2	

No.	Questions and Filters	Coding Categories	Skip
214	Sometimes mothers six weeks after delivery have severe illnesses and should be taken immediately to a health facility. What types of symptoms would cause you to go to a health facility right away? ASK: Anything else? (DO NOT READ RESPONSES. RECORD ALL THAT ARE MENTIONED.)	EXCESSIVE VAGINAL BLEEDING .. 1 FAST/DIFFICULT BREATHING..... 2 HIGH FEVER..... 3 SEVERE ABDOMINAL PAIN ..... 4 SEVERE HEADACHE/BLURRED VISION..... 5 CONVULSIONS/LOSS OF CONSCIOUSNESS..... 6 FOUL-SMELLING DISCHARGE FROM THE VAGINA..... 7 PAIN IN CALF ..... 8 VERBALIZATION/BEHAVIOR THAT INDICATES SHE MAY HURT HERSELF OR THE BABY..... 9 OTHER (SPECIFY)…….10	

No.	Questions and Filters	Coding Categories	Skip

SECTION 3; Attitude towards maternal health care services

No.	Question	Very good	Good	Fair	Bad	Very bad	Not applicable
301	How was your first visit reception of ANC clinic						
302	How are the health workers in the health facility you attended?						
303	How was your treatment and counseling on nutrition during pregnancy?						
304	What is your feeling on laboratory tests done for pregnant women?						
305	How was the treatment of the attendant during the delivery?						
306	What do you think of post natal care for the mother?						
307	How was your whole experience during pregnancy, childbirth and after birth?						

No.	Questions and Filters	Coding Categories	Skip
	SECTION 4 : Coverage of maternal health care services		
401	How many facilities within your community do you know that offer maternal health care services?	11 and above ..... ☐☐ Between 6 and 10 ..... ☐☐ less than 5 ..... ☐☐ DON'T KNOW 98	
402	Who is in charge of those facilities? Anyone else? PROBE FOR THE MOST QUALIFIED PERSON AND RECORD ALL MENTIONED.	DOCTOR/CLINICAL OFFICER..... ….1 NURSE ..... ….2 TRADITIONAL BIRTH ATTENDANT…3 COMMUNITY HEALTH WORKER.... ….4 RELATIVE/FRIEND ..... ….5 OTHERS……..……..6 DON'T KNOW……7	
403	Do you think the health facilities offering maternal health care have skilled attendants?	YES ……1 NO ……2 DON'T KNOW ……..……98	
018	How long does it take you to get to the health facility	SECONDS ..... ☐☐ MINUTES ..... ☐☐ HOURS..... ☐☐ NOT APPLICABLE _____ 99	

No.	Questions and Filters	Coding Categories	Skip
019	After how long were your discharged from the health facility after delivering (Name)?	HOURS..... ☐☐ DAYS ..... ☐☐ .... WEEKS ..... ☐☐ NOT APPLICABLE..... 99	
020	Do you think the government initiative of free maternal health care has adequate coverage geographically?	VERY SUFFICIENT…….1 SUFFICIENT……..2 INSUFFICIENT……3 VERY INSUFFICIENT……4 DON'T KNOW……5	
021	What is your general feeling about coverage quality of maternal health care services offered?	VERY SATISFACTORY…….1 SATISFACTORY……..... 2 FAIRLY SATISFACTORY……..3 POORLY DONE…….……..….4 DON'T KNOW……...5	

END OF INTERVIEW

Kindly thank the mother/caregiver for participating in the research

APPENDIX II

INDEPTH INTERVIEW QUESTION GUIDE

PART ONE: ATTITUDE OF WOMEN OF REPRODUCTIVE AGE TOWARDS MATERNAL HEALTH SERVICES OFFERED IN KAYOLE SOUTH WARD

1. What is the nature of attitude towards women of reproductive age towards maternal health care services in this facility?

2. Do women of reproductive age attitude affect service delivery and health seeking behavior? Please explain how

PART TWO: KNOWLEDGE LEVEL ON MATERNAL HEATH AMONG WOMEN OF REPRODUCTIVE AGE IN KAYOLE SOUTH WARD

3. What is the education level among the majority of women of reproductive age that attend clinics in this region?

4. Do women of reproductive age know about maternal healthcare? Please Explain.

PART THREE: COVERAGE OF MATERNAL HEALTH SERVICES WITHIN KAYOLE SOUTH WARD

5. What do you think about coverage on maternal health services within this area?

6. How does the coverage of maternal health care services affect its outcomes?