

**FACTORS INFLUENCING THE UTILIZATION OF ANTENATAL CARE SERVICES
AMONG REPRODUCTIVE WOMEN: A CASE OF KIBERA, NAIROBI COUNTY,
KENYA**

BY

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DECLARATION

This research project is my original work and has not been presented for any examination in any other institution.

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The research project has been submitted for examination with my approval as the university Supervisor

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DEDICATION

This Research Project is dedicated to my mother Mrs. Dorcas Mbai and my brother Domiano Nyika for their support and encouragement throughout the course.

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ABBREVIATIONS AND ACRONYMS

| | |
|-------|---|
| ANC | Ante Natal Care |
| IEBC | Independent Electoral and Boundaries Commission |
| KDHS | Kenya Demographic and Health Survey |
| MDG's | Millennium Development Goals |
| MOH | Ministry of Health |
| NHIS | National Health Insurance Scheme |
| PNC | Post Natal Care |
| SPSS | Statistical Package in Social Science |
| TBA | Traditional Birth Attendant |
| WHO | World Health Organization |

ABSTRACT

The purpose of the study was to investigate factors influencing the utilization of Antenatal Care Services among women of the reproductive age group in Kibera Constituency in Nairobi County, Kenya. This study was guided by the following objectives: To establish the extent to which socio-demographic factors influences utilization of Antenatal care services, determining the influence of the knowledge and awareness women have about antenatal care services on the utilization of Antenatal care services, Also to determine the influence of accessibility of the ANC services on utilization of Antenatal Care services by women of reproductive age in Kibera and lastly to examine the influence of the perception of quality of care services rendered on the utilization of Antenatal care services among women of reproductive age in Kibera. The study intended to investigate three wards in Kibera slum to establish the possible factors that influence the utilization of ANC services. A mixed method research design was adopted for the study. The sample size was 382 respondents from a population of 66,290 women who make up the target population. The study used questionnaires and interview guides to collect information through simple random sampling. The completed questionnaires were edited for completeness and consistency, checked for errors and omissions. If the instrument contained a representative sample of the universe, the content validity was good. Its determination is primarily judgmental and intuitive. The test – retest method was employed to ensure reliability of the questionnaire. Quantitative data was analyzed using descriptive statistics where responses from questionnaire was tallied and analyzed using frequency distributions. The results of the study revealed that some of the factors that influence utilization of Antenatal care services were: Socio-demographic factors (such as Age, Education, Marital status, Income level), Knowledge and awareness about ANC services, Perception of the quality of services rendered and accessibility of ANC services. The following are therefore recommended based on the findings: The Ministry of Health should review and strengthen reproductive health programs and ensure that they are friendly and are need focused, Adequate supervision and monitoring at all levels of health care should be ensured by the MOH, Continuous disseminating of information by the MOH on antenatal care, delivery and postnatal care services to enhance accessibility by every pregnant woman. The study findings will be helpful in policy making and in designing appropriate programs and services for the urban population of Nairobi.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

A study by Kenya Demographic Health Survey, 2013 indicates that 88 percent of women in Kenya receive antenatal care from a medical professional, either from doctors (18 percent) or nurses or midwives (70 percent). A small fraction (2 percent) receives antenatal care from traditional birth attendants, while 10 percent do not receive any antenatal care. The benefits of antenatal care (ANC) cannot be over-emphasized especially when we talk of reduction in maternal and prenatal morbidity and mortality. Maternal morbidity refers to any health condition attributed to and or aggravated by pregnancy and childbirth that has a negative impact on the woman's wellbeing as quoted by WHO, 2013. They further state that Antenatal care is a key strategy for reducing maternal mortality, but millions of women in developing countries do not receive it. A pregnant woman is said to have been booked or have appropriate ANC if she attended at least four ANC visits and received among other things tetanus immunization. Data on early childhood mortality rates, from the 2014 Kenya Demographic and Health Survey show that the level of under-five mortality is 52 deaths per 1,000 births during the five-year period before the survey, implying that at least 1 in every 19 children born in Kenya during this period died before reaching their fifth birthday. The infant mortality rate is 39 deaths per 1,000 live births.

Independent Electoral and Boundaries Commission, 2013 states that there are approximately 2.5 million slum dwellers in about 200 settlements in Nairobi representing 60% of the Nairobi population and occupying just 6% of the land. Kibera houses about 250,000 of these people and the maternal mortality is unacceptably high. About 800 women die from pregnancy- or childbirth-related complications around the world every day. In 2013, 289 000

women died during and following pregnancy and childbirth. Almost all of these deaths occurred in low-resource settings, and most could have been prevented. Kibera is the biggest slum in Africa and one of the biggest in the world, meaning they have low resources.

Improving maternal health is one of the World Health Organization (WHO) Millennium Development Goals (MDGs) and professional health care during child birth is one of the process indicators in assessing progress towards these goals. WHO has recommended four strategic interventions or four pillars for safe motherhood. These include; Family planning, Antenatal care (ANC), Clean/ safe delivery and Emergency obstetric care. Some of the interventions that have been shown to be effective in detecting, treating or preventing conditions in pregnant women that might otherwise give rise to serious morbidity and mortality are: Detection and investigation of anaemia, Pregnancy induced hypertension, Treatment of severe pre-eclampsia, Screening and Prevention of infection and Diagnosis of obstructed labour.

For all the benefits that have been attributable to ANC, the effectiveness of antenatal care in actually reducing maternal and fatal morbidity and mortality, has never been scientifically proven and because of ethical considerations may never be proven. Utilization of ANC services has been identified in a number of studies as an important factor determining maternal and infant mortality. However, the use of health services is a complex behavioural phenomenon. It is affected by socio-demographic factors (such as age, occupation, education, marital status, religion and income level.), Accessibility of the health facility, Knowledge about antenatal care services and the Quality of care services provided at the health facility.

In a study on the determinants of maternal health services in the rural India, it was found that, there is a correlation between household income and utilization of maternal health services (Sharif and Singh, 2002). It was evident that as a result of lack of productive resources for

women, income earned by women had negative impact on utilization of Ante Natal Care (ANC) and Post Natal Care (PNC).

In Kibera, even though basic ANC services by policy are free, its implementation has shown evidence that cost of ANC Services affects utilization especially among poor women. A study comparing utilization of health services in Urban and Rural Kenya revealed that cost of health facilities deprives the poor of access to health facilities. The study also established that income is exceeded only by distance as the most important factor influencing the utilization of health services in slums, Ikaman(2004).

Lack of knowledge about the ANC services could be a major barrier to women's utilization of ANC services. Due to lack of knowledge pregnant women are likely to have limited knowledge and experiences in seeking health care. Matua (2004) and Jewkes (1998) cited lack of adequate knowledge and information about pregnancy, laboratory tests results and dangers of late bookings or not attending ANC at all, as contributors to the poor utilization of ANC services. Lack of knowledge about the dangers of not seeking health care in pregnancy and delivery were major barriers to seeking health care among pregnant women in Uganda (Matua 2004).

It is evident from previous researches that, the knowledge about the antenatal care services, availability and accessibility of the services, the distance to the facility, the efficiency and skills of the staff/ workers hence quality of the services, costs incurred, that is the screening charges, transport costs, and the treatment costs, continuity and comprehensiveness of services, all play a part in influencing the utilization of antenatal care services. This however did not tell us to what extents these factors influence the utilization of ANC services. Furthermore, it is also affected by cultural beliefs, as well as personal characteristics of the

user of these services. Sometimes the government policy too may affect ANC utilization. Therefore this study was conducted to assess the utilization patterns of antenatal care and to establish the extent which socio-demographic factors, accessibility, knowledge and quality of care services provided, influence the utilization of antenatal care among married women of reproductive age in Kibera, an urban squatter settlement of Nairobi.

1.2 Statement of the problem

A study done by Mason, Ouma, Were, Dellicour and Desai (2015), suggests that women in western Kenya are amenable to ANC and would be willing and even prefer to deliver in a healthcare facility, if it were affordable and accessible to them. However for this to happen there needs to be investment in health promotion, and transport, as well as reducing or removing all fees associated with antenatal and delivery care. Yet creating demand for service will need to go alongside investment in antenatal services at organizational, staffing and facility level in order to meet both current and future increase in demand.

Obago (2013) found out that interventions should not only encourage women to make more ANC visits but also ensure that during these visits women receive all the services required for good maternal health. Interventions should target both the supply and demand sides by ensuring that pregnant women know about the ANC services to ask for and that health facilities are sufficiently available and equipped to provide these services. The fact that the rate of skilled delivery use in Kenya is less than 50% indicates that the country still has a need to step up information and services for better maternal health care.

There was need to understand why the ANC services are not being fully utilized after being fully aware of the benefits it has to the mother and the unborn child. It is observed that maternal mortality can be significantly reduced in low-income settings by increasing access

to skilled attendants which has close link to ANC, emergency obstetric care and family planning services. In spite of this clear importance of maternity care which includes ANC, poor access to and low utilization of such services continue to be important determinants of maternal mortality and morbidity throughout the world.

As previous documentation has shown, there is a correlation between the utilization of ANC services and accessibility, socio demographic factors, knowledge and quality of the care services rendered, but still the extent to which each of these factors influence the utilization of ANC has not been done. Therefore, this called for effort to investigate these critical factors influencing uptake of ANC and other maternal health services. In this regard, this study aimed to explore the factors influencing the utilization of antenatal care services in an urban squatter settlement, Kibera in Nairobi.

1.3 Purpose of the Study

The purpose of this study was to determine the factors influencing utilization of Antenatal Care services among reproductive women in Kibera, Kenya.

1.4 Objectives of the Study

1. To establish the extent to which socio-demographic factors influences utilization of Antenatal care services among women of reproductive age in Kibera.
2. To determine the influence of the knowledge and awareness women have about antenatal care services on the utilization of Antenatal care services by women of reproductive age in Kibera.
3. To determine the influence of accessibility of the ANC services on utilization of Antenatal Care services by women of reproductive age in Kibera.

4. To examine the influence of the perception of quality of care services rendered on the utilization of Antenatal care services among women of reproductive age in Kibera.

1.5 Research questions

1. How do socio-demographic factors influence utilization of antenatal care services among women of reproductive age in Kibera?
2. To what extent does knowledge and awareness on Antenatal care services influence the utilization of antenatal care services among women of reproductive age in Kibera?
3. How does the accessibility of antenatal care services provided affect the utilization of antenatal care services among women of reproductive age in Kibera?
4. How does the perception of quality of the care services provided affect the utilization of antenatal care services among women of reproductive age in Kibera?

1.6 Significance of the study

The findings will be helpful in policy making and in designing appropriate programs and services for the urban population of Nairobi. The reduction of maternal mortality requires early detection of high risk pregnancies through appropriate antenatal care and the existence of a mechanism to ensure timely access to referral facilities. This requires that women should have adequate knowledge about pregnancy related care and should be able to recognize the importance of antenatal care and its utilization. A number of maternal deaths and serious morbidity have been reported in Kibera in the past (Urban Health Project AKU). There is a related need to know factors, which influence the use of antenatal care so that these may be more emphasized in planning.

If these results are successfully generated, policy makers on health matters will see how imperative it is that they intervene and the suggestions made will help direct the implementation of the primary health care programme especially utilization of antenatal care facilities so that good health care will be provided for both mother and child in Kibera and Kenya as a nation.

1.7 Delimitations of the study

The study was carried out in Nairobi County. It was delimited to Kibera which is a division of Nairobi Area, and neighborhood of the city of Nairobi, 5 kilometers (3.1 mi) from the city centre. Kibera is the largest slum in Nairobi and the largest urban slum in Africa. The 2009 Kenya Population and Housing Census reports Kibera's population as 170,070, contrary to previous estimates of one or two million people. Other sources suggest the total Kibera population may be 500,000 to well over 1,000,000 depending on which slums are included in defining Kibera. The neighborhood is divided into a number of wards, including Lindi, LainiSaiba, Sarang'ombe, Makina and Woodley. It comprised of married women of reproductive age between 15 and 49 years.

1.8 Limitations of the study

Confidentiality and Cooperation: Some respondents shied away from giving critical information for fear of being exposed or being victimized. To deal with this, the researcher assured respondents that the information collected will only be used for the purpose of the study and that their identity will be confidential.

Also, some respondents in this study were reluctant in providing the required information. The researcher explained to the respondents the importance of the study and assured them of confidentiality.

1.9 Assumptions of the study

The study was based on the following assumptions;

1. That the respondents will be honest in their responses
2. That antenatal care services already exists in the urban squatter settlements and that there are factors affecting its utilization

1.10 Definition of Significant terms

Operational definitions of key terms used are:

Accessibility refers to the quality of being available when needed.

Antenatal care services is the care you receive from healthcare professionals during your pregnancy. The purpose of antenatal care is to monitor your health, your baby's health and support you to make plans which are right for you.

Cultural beliefs is the totality of socially transmitted behaviour patterns, arts, beliefs, institutions, and all other products of human work and thought. Culture is learned and shared within social groups and is transmitted by nongenetic means.

Education is the process of facilitating learning. Knowledge, skills, values, beliefs, and habits of a group of people are transferred to other people, through storytelling, discussion, teaching, training, or research.

Income level here refers to the amount of money derived from paid employment and comprising mainly of wages and salary.

Knowledge is a familiarity, awareness or understanding of someone or something, such as facts, information, descriptions, or skills, which is acquired through experience or education by perceiving, discovering, or learning. In other words, it is awareness or familiarity gained by experience of a fact or situation.

Marital status is the state of being single, married, separated, divorced, or widowed.

Quality is the standard of something as measured against other things of a similar kind; the degree of excellence of something.

Religion is the belief in and worship of a superhuman controlling power, especially a personal God or gods. It is a particular system of faith and worship.

Socio-demographic factors are age, ethnicity, sex, marital status and family size of the women in the reproductive age.

Urban Squatter settlements are any collection of buildings where the people have no legal rights to the land they are built upon. The people are living there illegally and do not own the land. They provide housing for many of the world's poorest people and offer basic shelter. The key characteristic that delineates a squatter settlement is its lack of ownership of the land parcel on which they have built their house. These could be vacant government or public land, or marginal land parcels like railway setbacks or "undesirable" marshy land.

Utilization means to put to use, especially to make profitable or effective use of something. In this case, it is the effective use of the antenatal care services.

Women of the Reproductive age group are the ones in the reproductive age span, assumed for statistical purposes to be 15-49 years of age.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews various studies done related to variables under investigation. It will focus on the factors affecting utilization of antenatal care services in urban squatter settlements which are: Socio-demographic factors, Knowledge on antenatal care services, accessibility of the antenatal care services and the perception of the quality of services rendered. It also presents the conceptual framework which the research will be based on.

2.2 An overview on Antenatal Care

The World Health Organization estimates that 515,000 women die each year from pregnancy related causes and almost all of these deaths occur in developing countries. Less than one percent of these deaths occur in developed countries indicating that the deaths could be avoided if resources and services were available (WHO, 1994)

Antenatal care which is known as care during pregnancy is essential for diagnosing and treating complications that could endanger the lives of mother and child. Most life threatening obstetric complications can be prevented through antenatal care. Moreover, there is sufficient evidence that care during pregnancy is an important opportunity to deliver interventions that will improve maternal health and survival during the period immediately preceding birth and after birth. Furthermore, if the antenatal period is used to inform women and families about danger signs and symptoms and about the risks of labour and delivery, it may ensure that pregnant women deliver with the assistance of a skilled health care provider.

Antenatal care is a potentially important way to link a woman with the health system which if

functioning well, will be critical for saving her life in the event of a complication (UNICEF 2004).The antenatal period also offers opportunities for delivering health information and services that can significantly enhance the well-being of women and their infants, but this potential is yet to be realized. Antenatal visits offer entry points for a range of other programmes including information on nutrition and the prevention of malaria, HIV infection, tetanus and tuberculosis, as well as obstetric care (UNICEF, 2004).

While antenatal care can be an important tool in diagnosing and preventing risks during pregnancy, many women in developing countries do not use this service. Using a three level linear regression model, data from the 1993 Kenya Demographic and Health Survey were analysed to determine the frequency and timing of use of antenatal care services. The result showed that the median number of antenatal care visit was four and the first visits occur in the fifth month of the pregnancy on average (Magadi, Thembi and Thansjo, 2000). Use of antenatal care is started later and is less frequent for unwanted and mistimed pregnancies. Even women who appear to use antenatal care frequently are less likely to use the services for a mistimed pregnancy. Long distance to the nearest antenatal care facility is an obstacle to antenatal care (Magadi et al, 2000).

Tandu-Umba, Mbangama, Kamongola, Kamgang, Kivuidi, Munene, Meke, Kapuku, Kondoli, Kikuni, and Kasikila (2014) found out in their study that pregnancy adverse outcomes are strongly influenced by either non-pathologic or pathologic pre-pregnancy risk factors at first antenatal visit booking. The recurrence potential of complications is one reason to establish the predictability and preventability of morbidity such that the most appropriate referrals and best options throughout the pregnancy can be determined.

The factors that prevent women in developing countries from getting the lifesaving health care needs include: cost (direct fees as well as the cost of transportation, drugs and supplies); multiple demands on women's time; women's lack of decision-making power within the family. The poor quality of services, including poor treatment by health providers, also makes some women reluctant to use the services (WHO, 1997).

Rani, Bonu and Harvey (2008) state that ANC is central to the continuum of medical care that is necessary before and during pregnancy, at childbirth, and postpartum. ANC is important in reducing maternal mortality, low birth weight, and perinatal morbidity and mortality. It is also an opportunity for mothers to access skilled care at delivery, usually at a health facility. In many developing countries, however, maternal mortality rates continue to be high, with many deaths the result of complications related to pregnancy and childbirth (Ronsmans and Graham 2006). Further, many women are prone to injuries associated with pregnancy and delivery, which may result in adverse consequences for both themselves and their families (Abouzar and Wardlaw 2001, Fotso 2008).

Increasing utilization of antenatal services however has not led to the expected commensurate reduction in maternal mortality rate (MCHFP, 1993). This is an indication that there is an improper or inappropriate utilization of these services. People may attend antenatal clinics alright but may delay till complications of pregnancy have set in or when they are about to deliver. In developing countries, most attendance at antenatal clinics takes place in the 7th and 8th months and women usually averaged only one visit per pregnancy (Williams0., 1972). Patients may also report to antenatal clinics only when they are ill (Ledward, 1982).

McCaw-Binns, Mullings and Holder (2008) in Jamaica, observed that commencement of antenatal care in the first trimester appeared to reduce the risk of all prenatal death and for interpartum asphyxia in particular. Tucker, Florey, Howie, McIlwaine and Hall (1994) found

the number, timing, location and supervision of antenatal visit as the main pregnancy outcome measures in a retrospective cohort study of case record of antenatal care. In New Zealand, Essek et al (1992) also observed that late antenatal care attendance was associated with single marital status, grand multiparity and young age as well as low socio-economic status, and low education level.

The purpose of this study is to investigate the factors that influence utilization of antenatal care services in urban squatter settlement. The factors that influence the utilization of antenatal care services are: Socio-demographic factors, Knowledge on antenatal care services, Accessibility and Perception of Quality of services rendered.

2.3 Socio- Demographic factors and utilization of antenatal care services

The levels of antenatal care utilization were found to be high among women with higher economic status, better education, few children, married women and employed women. In another related research conducted in Nicaragua by Lubbak and Stephenson, (2008) on the utilization of antenatal care services, the age of participants range from 18 – 40 with a mean age of 26 years. The mean number of children per woman was 3.3. The overwhelming majority of women interviewed sought antenatal care. The study also reveals the shared cultural belief that a woman's role is to be the caretaker of her children. Women's acceptance of this prescribed gender role as the passive caretaker of the family heightens the perceived opportunity costs of seeking antenatal care. For women, prenatal care is considered necessary primarily to ensure the health of a child rather than to protect one's own health. There is a disconnection in how women view antenatal care in relation to the health and security of their child, which may result in the difference in their utilization of antenatal care services.

Older women are possibly more confident and influential in household decision-making than younger women and, than adolescents in particular. Furthermore, older women may be told

by health workers to deliver in a facility since older age is a biological risk factor. On the other hand, older women may belong to more traditional cohorts and thus be less likely to use modern facilities than young women. (Gabrysch and Campbell, 2009)

There are a number of published and unpublished works that explore women's experiences, views, and beliefs in relation to delivery in Bangladesh. These studies have found a wide range of factors that may contribute to low levels of use of professional services to delays in the decision to seek care, or to refusal of referrals for service. It was found that women from low-income families were less likely to seek prenatal care, visit the town health centre or local private clinic; whereas women from high-income families used country hospitals or higher medical institutes which provided better quality care. These findings led to the recommendation that low income should be taken as "high-risk factor" for poor maternal health (World Bank, 1993)

World Bank, (1993), states that there has been no significant decline in poverty rates throughout most of the developing world over the past decade. It is indicated that in developing countries the individual family is likely to be impoverished with no resources for emergencies. When daily survival of the family is at risk, mothers will use fewer resources for their own health. Moreover, most developing countries spend less on health and welfare than they do on servicing their debts.

Millions of women cannot afford to use maternal health services. Even when formal fees are low or non-existent women often face hidden fees and expenses for transport, drugs, and food. In Zaria, Nigeria a study found that from free to fee-based services for obstetric care reduced admission overall, but significantly increased emergency cases. The number of maternal death rose correspondingly (Harrison, 1997). The poorer the women are the more likely fees are to affect their use of health services.

Hadi,Rahman, Khuram, Ahmed and Alam, (2007), in their research on “the inaccessibility and utilization of antenatal health care services in Balkh Province of Afghanistan”, the utilization of Antenatal care (ANC) services was differentiated by the participation of women in activities. The use of each of the ANC services was significantly lower among women who were involved in economic activities than among those not economically active. This indicates that involvement in such activities might have created extra burden on them and reduced the time they had available for receiving such services. Again they said that age of the women appeared to be negatively associated with the use of ANC.

According to Matua (2004), as cited by Chaibva S.N (2008), pregnant adolescents might shun ANC services for fear of being labelled “promiscuous”. On the other hand, older adolescent who have had uneventful pregnancies and deliveries with previous pregnancies might see no reason to attend ANC. In 19 out of 26 developing countries, women who were 19 years or younger were reportedly less likely than older women to seek ANC from health professionals (Reynold et al 2006).

Illiteracy rates may be almost 50% higher for women than men UNESCO (1992) and women without formal education have a greater risk of maternal mortality than educated women (Harrison 1990 and Briggs 1993). Also, Franke and Chasin, (1992) state that although education and social welfare are not aimed at only improving maternal health, increased spending in these areas leads to sustained reduction in maternal mortality and morbidity. The client’s level of education could also influence pregnant women’s utilization of the health facilities as well as the understanding of the importance of seeking health care promptly. Low educational status has been identified as a major barrier to the utilization of health care services especially ANC. These women could easily be persuaded by their grandmothers or TBA’s not to attend ANC and to deliver their babies at home. (Mottew 1997, cited by Mathole et al 2005). Lack of education can also negatively affect the women’s

comprehension of important information and the ability to make informed decisions including the awareness of their own rights (Matua 2004; Irinoye et al 2001) These findings imply that pregnant adolescents who may have attained only low level education may not value utilizing ANC services. High educational levels of both husband and wife have been observed to promote positive health seeking behaviours according to Mulholland, Alibarnho, Brew-Graves and Monreal-Pinland (1999) as well as Matha (2004).

In Kausani, Kano State, Nigeria, according to Adamu and Salihu (2002), most women deliver at home and a few receive ANC. The three most common reasons given for non-use of ANC were limited financial resources, God's will and husband demand. In order to improve utilization of ANC services, efforts to relieve poverty, and empower women economically are needed. Any programme must take into consideration this socio cultural context of the population.

Cultural practices and traditional beliefs could be a negative factor contributing to ANC services utilization. In Sudd, Southern Sudan, traditional practices in pregnancy and child birth have been deeply rooted in the lives of the people that it conflicts with the acceptance of modern antenatal care (Boudier, 1984). In Cameroun, one reason why women continue to seek care from traditional midwives in spite of sufficient number of government maternity units is to guarantee appropriate disposal of placenta, which plays a vital role in their culture (Coma, 1960).

Leslie and Gupta (1988) and Pelto (1987) in their studies revealed that cultural background of women serves as an important factor in the utilization of maternal health services. The cultural prospect on the use of maternal health services suggests medical need is determined

not only by the presence of physical disease, but also by cultural perception of illness (Addai 2000).

In many parts of Africa, women's decision making power is extremely limited particularly in matters of reproduction and sexuality. Decision making with regard to maternal care is often made by husband or other family members (WHO 1998). In a study conducted in Nigeria, it was found that in almost all cases, a husband's permission is required for a woman to seek health services, including lifesaving care. Men play a determining role in decision over when to seek treatment, be it traditional or orthodox in many cultural contexts (Oxaal and Baden, 1996).

Marital Status could influence health care seeking behaviours. According to WHO (2003) cited by Chaibva C.N (2008), unmarried pregnant women are less likely to seek ANC services due to a lack of economic and social support from parents, guardians and spouses. Married pregnant adolescents may also lack social independent and decision making powers to seek ANC. There may be pressure or oppression from the spouse or influential members of the extended family forcing pregnant women to accept the decision made on their behalf (WHO 2003).

2.4 Knowledge about Antenatal Care Services and Utilization of ANC services

Knowledge is a major structural variable that could influence the decision on whether to utilize ANC services. Women need information about pregnancy and ANC services during their pre conception period so that they can make informed decisions when pregnant. In Dundee, Scotland, Florey and Taylor (1994) observed that the earlier in pregnancy the first antenatal visit is made, the greater the infant birth weight. This relationship was independent of gestational age of birth, mothers' age and height, social class and the child's sex.

Health education programmes during ANC services should inform the women about reproductive health, knowledge related to sexuality, pregnancy, nutrition, family planning, malaria, S.T.I's, HIV/AIDS etc. (Barnet et al 2003; Lesser et al 2003). Information should indicate where these services are offered, including the requirements for attending ANC. Specific knowledge about the risks of childbirth and the benefits of skilled attendance should increase preventive care-seeking, while recognition of danger signs and knowledge about available beneficial interventions should increase care-seeking for complications.

Inadequate knowledge about ANC and its benefits to the mother's and the infant's health may also negatively influence the utilization of ANC services. Sometimes, pregnant women may not be aware of the health problems related to poor or no utilization of ANC services (Dennit et al 1995). Behaviour is expected to change if pregnant women are aware of the implications of not attending ANC and if they are convinced of the benefits of practicing preventive care.

Perceived benefits of utilizing ANC services provide a platform for interacting with the pregnant women, identifying needs or problems and jointly arriving at possible solutions to these needs. The pregnant women need to know the benefits of attending ANC as well as the implications of not attending ANC. Pregnant women might value the importance of ANC if they were aware of its benefits to their health and that of their babies. Adequate ANC utilization implies that the initial ANC should take place before 16 weeks of gestation during the first trimester of pregnancy with a minimum of four ANC visits during the pregnancy.

The second ANC visit should occur between 16 and 23 weeks gestation. The third ANC visit takes place between 24 and 28 weeks gestation. The fourth ANC visit takes place between 32 and 34 weeks of gestation. The fifth ANC visit is conducted between 36 and 37 weeks, while the sixth visit between 38 and 42 weeks respectively. However the ANC visits may be more frequent when there are potential health risks. The ANC attendance register for 2004 and

2005 revealed that the majority of Zimbabwe's pregnant women had an average of one ANC visit before delivery and an initial ANC visit was made during the second or third trimester (Singh and Khare 2001).

2.5 Accessibility of ANC services and Utilization of ANC services

Access to ANC is important in helping to modify women's risk behaviours and promote positive health practices for adolescents of risk of future unplanned pregnancies and STI. Slap (1995). Antenatal care services should be accessible to all pregnant women irrespective of social status, age, race or level of education and HIV status, and should provide an environment of trust and confidentiality. (Kluge, 2006)

According to Kathryn (1997) and Llongo (2004), the following factors contribute to perceived inaccessibility of ANC services: Stigma and beliefs about social rejection, Lack of confidentiality, Cultural beliefs and perceptions about ANC, Expensive health care services and previous health care experiences.

The most important variable associated with utilization of MCH services is the physical accessibility of these services (Abbas and Walker, 1986). Several other studies also found that physical proximity of health care services, especially in the developing countries, plays an important role in utilization of these services (Stock, 1983; Airey, 1989; Paul, 1991)

The majority of maternal deaths occur during labor, delivery, and the immediate postpartum period (Wanjira, Mwangi, Mathenge, Mbugua and Ng'ang'a 2011). Because most maternal deaths occur due to preventable obstetric complications, most could be prevented if women had access to high-quality maternal health care, including antenatal care, skilled assistance at delivery, and postnatal care (Chou, Inoue, Mathers, Oestergaard, Say, Mills, Suzuki, and Wilmoth 2010)

The majority of pregnant women might not be able to afford the maternity fees that are

charged because most of them have financial limitations. In Zimbabwe, the government tries to assist those pregnant women who genuinely cannot afford to pay by referring them to social welfare. However the process of obtaining state assistance by pregnant women who genuinely cannot afford to pay is long and frustrating causing mothers to shun social welfare. The perceived high fees might influence some pregnant women to resort to the services of traditional birth attendants (TBAs) which are cheaper and can be paid in kind (Ikamari 2004). Reynolds in (2006) cited socio-economic factors contributing to poor ANC attendance and thus also to poor maternal and neonatal outcomes.

In Ghana before 2006, pregnant women were charged maternity fees which differ with each health institution. From 2006, with the advent of National Health Insurance Scheme (NHIS), any pregnant woman who has registered with the scheme is exempted from paying. However, on 1st July, 2008, the government of Ghana in order to reduce the maternal mortality which was high made antenatal and delivery free of charge.

Pregnant women would be motivated to use the ANC services if they are acceptable and need focused without restrictions. Pregnant women expect care that is acceptable and focuses on their individual needs. ANC services should be available to pregnant women without any restrictions. In Ghana, ANC is provided at every health centre/hospital and it is clear that its availability is acceptable to pregnant women.

The effectiveness of ANC has provoked much debate about its usefulness because little is known about its effectiveness in the reduction of maternal and infant mortality and morbidity (Carrole et al 2001). Despite all these reservations, ANC in developing countries is important especially to pregnant women. Efficacy of ANC should also ensure dissemination of information on maintaining good health of pregnancy, danger signs and when and where to

go for help should these appear (Yuster 1995). The goal-oriented ANC guidelines using need-focused care have been designed to address aspect of quality, adequacy and effectiveness.

2.6 Perceived Quality of services rendered and Utilization of ANC services

Quality Care in ANC should ultimately do what is right, acceptable to, and good for the pregnant adolescents and should adhere to professional ethics. Quality ANC has to be imbued with the concept of caring including the humanistic attributes of competence, confidence, commitment, compassion and conscience and should be based on knowledge, skills and values (Van der Wal 2002).

Use of skilled health providers in antenatal care also has been increasing in most developing countries since the 1990s (Wang, Alva and Fort. 2011). While doctors are the main providers in Latin America and the Caribbean, in sub-Saharan Africa women rely primarily on nurses or midwives for antenatal care. Rarely are TBAs and health care providers other than nurses, midwives, or doctors reported as providers of antenatal care. There appears to be a strong association between a woman receiving antenatal care from a skilled health care provider and residence in an urban area rather than a rural area, having a higher education level, and coming from a wealthier household (Ochako, Fotso, Ikamari, and Khasakhala. 2011, Wanjira et al. 2011, Wang et al. 2011).

While the number of women with access to at least one antenatal care visit is easily and regularly monitored, little has been done to monitor and measure the content and quality of this care (Rani et al. 2008,). Studies suggest that full access to antenatal care often may not be enough, because many women who seek ANC do not deliver in a health facility (Bloom, Lyppeveld and Wypiz. 1999, McDonagh 1996). Because the quality of ANC might have a significant role to play, there have been recommendations that it should be considered when

assessing the relationship between use of ANC and maternal health (Bloom et al. 1999, McDonagh 1996, Rani et al. 2008).

Gabrysch and Campbell (2009) in their work stated that perceived quality of care, which only partly overlaps with medical quality of care, is thought to be an important influence on health care-seeking. Assessment of quality of services "largely depends on [people's] own experiences with the health system and those of people they know". Although some elements such as waiting times can be measured objectively, the perception of whether these are a problem and affect quality is more subjective. Elements of satisfaction cover satisfaction with the outcome, the interventions and with the service received – including staff friendliness, availability of supplies and waiting times. In many cases, the medical 'culture' may clash with the woman's, for example, when family members are not allowed to be present, supine birthing position is imposed or privacy not respected; this may lead to perceptions of poor quality. Some studies mention that women report better quality of care in private facilities, but that cost deters them from using those.

Perceived interpersonal quality of care overlaps to some extent with traditional beliefs and possibly sometimes with ethnic discrimination. Concerns about quality interact with other barriers, for example with distance or cost. Objective measures of quality of care such as facility infrastructure, equipment and staffing are associated with physical accessibility, access to information and other aspects of remoteness such as poverty and traditional values.

Quality of antenatal care can be examined from various aspects such as structure, process and outcome. It can also be assessed by looking at clinical quality or interpersonal quality (Rani et al. 2008). Tests and services by a skilled health care provider such as measuring weight and height, taking blood pressure, testing urine and blood, abdomen examination, providing iron and folic acid supplementation, and conducting tetanus toxoid examinations all

constitute measurement of clinical quality. In addition, information on nutrition, danger signs of pregnancy, delivery care, newborn care, and family planning helps to measure quality of care (Chou et al. 2010, Rani et al. 2008, WHO 2001).

Pregnant women have reported negative attitudes of health care providers (Matua 2004). Women including adolescents are sometimes reluctant to use maternity care services because health care providers are perceived to be rude, insensitive and threatening to these young mothers. Pregnant women can also base their behaviour on previous negative experiences and perceptions of care received (Matua 2004; Starrs 1997; Ziyani et al 2004). This is an area of concern to midwifery practice, as it has serious implications for the accessibility of ANC services. At the same time, Women who delivered with a skilled attendant previously become more familiar with this setting, which may make them more likely to use it again. Qualitative studies indicate that women tend to deliver with the same provider if a previous delivery went well and tend to change when they are dissatisfied, Gabrysch and Campbell (2009).

2.7 Conceptual Framework

The conceptual framework in figure 1 shows the relationship between the dependant and the independent variables. It provides abstract basis for thinking about what we do and about what it means, it is influenced by the ideas and research of others. In this regard, it forms an overview of ideas and practices that shape the way this study will be done.

In this framework four major factors were presented as the main factors that contribute to utilization and satisfaction with Antenatal Care Services (ANC).

These were: Socio-economic and demographic factors, Knowledge on Antenatal Care Services, Accessibility of the ANC and Quality of the services rendered.

All these four factors were interrelated in a way and determined whether a woman could utilize and be satisfied with Antenatal Care Services.

The dependant variable in this study will be the utilization of antenatal care services. Utilization of antenatal care services is influenced by several factors that constitute the independent variables. Based on the literature review, the factors that influence the utilization of ANC services includes Socio-demographic factors, Knowledge about ANC services, Accessibility and Quality of Services rendered.

The moderating variables, which according to Kothari (2004) are independent variables that are not related to the purpose of the study but can have an effect on the dependent variable, in this study will be the government policy while the intervening variable which is a variable that explains a relation or provides a causal link between other variables, will be the cultural beliefs.

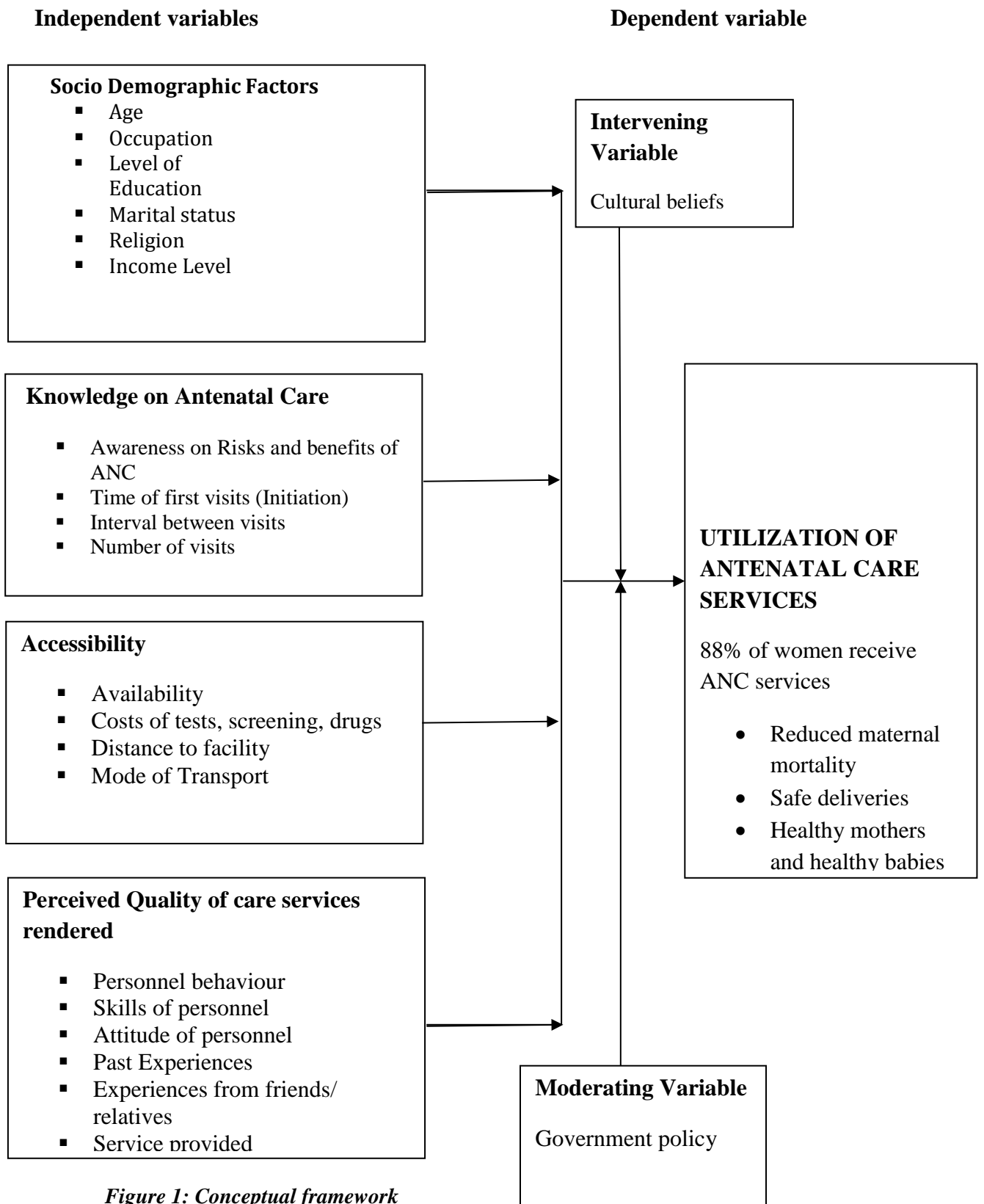


Figure 1: Conceptual framework

2.8 Knowledge Gap

The literature review looked at the literature on the various factors that influence utilization of antenatal care services in urban squatter settlements which included; Socio-demographic factors, Knowledge about ANC services, Accessibility of the ANC and the Quality of services rendered at the ANC. A study done by Ejik, Bles, Odhiambo, Ayisi, Blokland and Rossen (2006), in Asembo and Gem, they found out that the usage of the ANC was high, but this opportunity to deliver important health services was not fully utilized. Use of professional delivery services was low, and almost 1 out of 5 women delivered unassisted. They further suggested that there is an urgent need to improve this dangerous situation.

From it, it is evident that various studies have made attempts to address a myriad of factors that influence the utilization of antenatal care services in different countries. In trying to do so, we can see that the said factors are correlated but we do not clearly see the extent to which these factors influence the utilization of Antenatal Care services; therefore this study tried to address this void.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter will contain the research design, target populations and sampling techniques used in the study. It also focuses on description of the research instruments, administration of research and the methods of data analysis and ethical issues.

3.2 Research Design

The study employed the mixed method research design. The mixed method permits the collection of both qualitative and quantitative data in the same study and allows the researcher to determine the extent to which one is used over the other, which is highly dependent highly on the purpose of the study. Creswell, (2005). This interpretation provided both quantitative information about magnitude and frequency as well as qualitative information from individual perspectives from participants and the context in which they were commenting on the research problem. The approach also included triangulation, development, initiation and expansion and allows the researcher match the design strategies with relation to their goals in attempting to understand a specific phenomenon (Green, 1989). The benefit of this approach was that the study contains information from data that is merged hence the results produced will help the researcher understand better the factors that influence utilization of ANC services.

3.3 Target Population

Borg and Gall (1989) define the target population as all the members of a real hypothetical set of people, events or objects to which we wish to generalize the results of our research.

The target population consists of women who are in the reproductive age 15-49 years. The total population of women in the reproductive age in Kibera slum is 66, 629 according to a Keyobs, IFRA (2013).

3.4 Sample Size and Sampling Procedures

Oso and Onen (2005) describe a sample as a part of the accessible target population that has been procedurally selected to represent the greater population. In statistics, a simple random sample is a group of subjects chosen from a larger group (a population). Each subject from the population is chosen randomly and entirely by chance, such that each subject has the same probability or chance of being selected at any stage during the sampling process. The researcher used simple random sampling procedure to select the sample population from the target population. Simple random sampling is the most basic form of probability sampling. With this method, the elements are drawn from the population at random and all the elements have the same chance of selection. Reiss and Judd (2010). A total sample size of 382 women was selected using the Krejcie and Morgan table.

3.5 Data Collection Instruments

The technique used in the study was questionnaires which were both close and open ended. It made it possible for the researcher to reach a large number of respondents. Questionnaires were used for data collection because they offer considerable advantages in the administration: questionnaires present an even stimulus potentially to large numbers of people simultaneously and provide the investigation with an easy accumulation of data. They give respondents freedom to express their views or opinion and also to make suggestions.

The questionnaires were divided into four parts. The first part of the questionnaire was the introduction and it explained the purpose of the questionnaire stating clearly that data obtained was for pure academic purpose. It also explained the instructions on how to answer the questions. The other parts were covering questions regarding the independent variables which are socio-demographic factors, knowledge about ANC services, accessibility and the quality of ANC services rendered.

The researcher also used an interview guide which lists a set of questions to guide the researcher in interviewing the selected sample population on factors that influence the utilization of antenatal care services in Kibera Constituency. It was useful for the respondents who were illiterate. It was divided into four parts that cover questions regarding the independent variables.

3.5.1 Piloting of the Instruments

The study instrument (questionnaire) was pre-tested in one of the study communities on people other than those interviewed for the study. Kibera has five wards which are LainiSaba, Lindi, Makina, Woodley and Sarang'ombe. The piloting was done in Sarang'ombe ward and 15 women in the reproductive age were selected randomly. The study itself was carried out in LainiSaba, Lindi and Woodley wards. Sarang'ombe has the same characteristics as the rest of the Kibera population.

After the pre-testing, problems such as ambiguity associated with the questionnaire were modified.

3.5.2 Validity of the Instrument

Mugenda and Mugenda (2000), defines validity as the accuracy and meaningfulness of

inferences, which are based on research results. Validity establishes the relationship between data and the variables of interest. Kothari (2004) explains that content validity is the extent to which a measuring instrument provides adequate coverage of the topic of the study. Content validity is the extent to which a measuring instrument provides adequate coverage of the topic under study. If the instrument contains a representative sample of the universe, the content validity is good. Its determination is primarily judgmental and intuitive.

Borg and Gall (1985) points out that validity of an instrument is improved through expert judgment. To ensure content validity, the researcher prepared the document in close consultation with two experts, an expert from the ministry of health and the project supervisor, who gave an expert judgment.

3.5.4 Reliability of the Instruments

Mugenda and Mugenda (1999) define reliability as a measure of the degree to which a research instrument yields consistent results or data after repeated trials. Berg (1998) explains that the use of consistent and systematic line of questions for even unanticipated areas is particularly important for reliability and for possible replication of a study. The test – retest method was employed to ensure reliability of the questionnaire.

According to Gregory (1992) the technique involves administering the same instrument twice to the same group of subjects. The questionnaire was administered to the 15 respondents in Sarang’ombe ward selected for the pilot study within an interval of one week and Pearson Product Moment Correlation Coefficient (r) was calculated for each questionnaire. Scores obtained from both tests were correlated to get the coefficient of reliability which was 0.7. Mugenda and Mugenda (1999) notes that acceptable reliability coefficient ranges from 0.6 in social sciences.

3.6 Data Analysis Techniques

The research used both qualitative and quantitative methods of data analysis. The researcher coded the answers from the questionnaire for qualitative analysis and grouped them under broad themes and converted them into frequency counts.

Data analysis was conducted using SPSS statistical software. Exploratory data techniques were used at the initial stage of analysis to uncover the structure of data and identify outliers or unusually entered values. Quantitative data was coded and processed using SPSS version 22.0. Descriptive statistics such as frequencies were used to summarize, organize and simplify the data that was collected. Quantitative data was presented using frequency tables. The qualitative data generated from interview and observation guide was categorized in themes in accordance with research objectives and was reported in narrative form along with quantitative presentation and was used to reinforce the quantitative data.

3.7 Operational definition of Variables

Kothari (2004) defines measurement as a process of assigning numbers to objects or observations with the level of measurement being a function of the rules under which the numbers are assigned. The rules of measurement depend on the scale to be used, that is whether nominal, ordinal, interval or ratio scale.

The table below provides an operationalized relationship between the various variables of the study. The table illustrates the study objectives, variables applied, indicators, measurement measuring scale and data analysis tools.

Table 3.1 Operational Definition of Variables

| Objective | Variable | Indicator(s) | Measurement | Scale | Data Analysis |
|---|---|---|--|-------------------------------|---|
| To establish the extent to which socio-demographic factors influences utilization of Antenatal care services among women of reproductive age in Kibera | Independent Socio-demographic factors | Age Education Income level | Age group Level of education Amount of income | Ordinal Ordinal Ordinal | Descriptive statistical analysis by computing the percentages and frequencies |
| To determine the influence of the knowledge women have about antenatal care services on the utilization of Antenatal care services by women of reproductive age in Kibera | Independent Knowledge on ANC services | Awareness on Risks and benefits Time of first visit Interval visits Number of visits | Knowledge of the risks and benefits of ANC services Number of visits, expressed in numbers | Nominal Discrete | Descriptive statistical analysis by computing the percentages and frequencies |
| To determine the influence of accessibility on utilization of Antenatal Care services by women of reproductive age in Kibera. | Independent Accessibility | Availability Costs of tests Distance to facility Mode of transport | Accessibility to the nearest health facility offering ANC services Distance in Kms | Ordinal Continuous | Descriptive statistical analysis by computing the percentages and frequencies |
| To examine the influence of the quality of care services rendered on the utilization of Antenatal care services among women of reproductive age in Kibera | Independent Quality of ANC services rendered | Personnel behavior Skills of Personnel Attitude of personnel Past experience Experiences of friends/relatives Services provided Where services are sought | Perception of personnel behavior, attitude and friendliness Perception of behavior Satisfaction of services provided | Nominal Nominal Nominal | Descriptive statistical analysis by computing the percentages and frequencies |

3.8 Ethical issues

The researcher ensured the research ethics are observed. The respondents were informed that participation in this study was voluntary and they were requested to sign a voluntary consent before being presented the questionnaire. Confidentiality and privacy were also observed. This was done by not revealing the identities of the respondents. The researcher also respected the respondents' decisions on what information to give in.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION OF FINDINGS

4.1 Introduction

The chapter presents the data analysis, presentation and interpretation of the findings on the factors that influence the utilization of antenatal care services in Kibera constituency. The data collected was collated and reports produced in form of descriptive tables.

4.2 Questionnaire Return Rate

Out of the three hundred and eighty two (382) questionnaires administered, three hundred and twelve (312) constituting 81.3% response rates were collected. 121 constituting 31.5% were collected from Woodley, 109 constituting 28.4% were collected from Lindi ward and 82 constituting 21.4% were collected from Laini Saba ward.

Table 4.1 Response Rate

| Response rate | Frequency | Percentage |
|----------------------|------------------|-------------------|
| Response | 312 | 81 |
| Non-response | 72 | 19 |
| TOTAL | 384 | 100 |

The 81.3% which is a high response rate from a random sample of 384 is considered good and representative as it conforms to Mugenda and Mugenda (1999) stipulation that a response rate of 50% is good and a response rate of 70% and over is excellent.

4.3 Socio-Demographic Factors influence on Utilization of ANC

This section gives an analysis, presentation and interpretation of the respondents' age, occupation, income level, marital status, level of education, monthly income and religion and their influence on the utilization of ANC services.

4.3.1 Age demographics

The respondents were asked to indicate the category in which their ages fell. Table 4.2 shows the distribution of the women according to their age.

Table 4.2: Distribution of Age of Respondents

| Age | Frequency | Percentage |
|--------------|------------|------------|
| 15-25 | 48 | 15 |
| 26-35 | 156 | 50 |
| 36-49 | 72 | 23 |
| Above 50 | 36 | 12 |
| TOTAL | 312 | 100 |

The highest percentage of respondents 50% was between ages 26 – 35 while the lowest was 50 and above years and stood at 12%. This is an indication that women in the middle age are more than the younger and the elderly in Kibera.

4.3.2 Occupation

The study also sought to find out the occupation of the respondents. Table 4.3 shows the distribution of the occupation of the women.

Table 4.3 Distribution of Occupation

| Occupation | Frequency | Percentage |
|-----------------------------|------------------|-------------------|
| Housewife(Stay at home mom) | 144 | 46 |
| Runs a small business | 138 | 44 |
| Formal employment | 30 | 10 |
| Total | 312 | 100 |

The table 4.3 indicates that most of the women, which are 46% of the respondents, are stay-at-home moms/housewives. The minority of the group is 10% who are women in formal employment and 44% run small businesses. This indicates that almost half of the women in the reproductive age in Kibera are dependent of their husbands.

4.3.3 Level of Income

One of the aspects used by the researcher to establish the influence of socio-demographic factors in utilization of ANC services was the level of income. The table 4.4 shows the distribution of Income among the women in Kibera.

Table 4.4 Distribution of Income

| Income Level | Frequency | Percentage |
|---------------------|------------------|-------------------|
| Nothing | 126 | 40 |
| Less than 3,000 | 60 | 19 |
| 3,001-10,000 | 96 | 31 |
| 10,001 – 30,000 | 30 | 10 |
| TOTAL | 312 | 100 |

From the table 4.4, it is evident that majority of the women, 40% earn nothing, therefore they are dependent on their husbands. The least group who are 10% earns more than 10,000 shillings a month while 31% earn between 3,000 and 10,000 shillings. 19% earn less than 3,000 shillings.

4.3.4 Education

The respondents were also required to state their highest level of educational qualification. Table 4.5 shows the level of education of the respondents.

Table 4.5: Distribution of level of education of respondents

| Level of Education | Frequency | Percentage |
|---------------------------|------------------|-------------------|
| Primary | 144 | 46 |
| Secondary | 108 | 35 |
| Tertiary | 48 | 15 |
| None | 12 | 4 |
| TOTAL | 312 | 100 |

Table 4.5 presents the level of education of the women in Kibera. 46% have attained Primary education and they are the majority. 35% have managed to get Secondary education, 15% have reached Tertiary level and the least group is 4% who have not had any formal education. This is an indication that the school dropout rate in Kibera is high. Half the women do not get to finish secondary school.

4.3.5 Religion

The religion of the respondent may influence the decision on whether to attend ANC or not. The researcher sought to find out the religion of the respondents. The table 4.6 shows the distribution of religion among women in Kibera.

Table 4.6: Distribution of Religion

| Religion | Frequency | Percentage |
|-----------------|------------------|-------------------|
| Christian | 270 | 87 |
| Islam | 42 | 13 |
| TOTAL | 312 | 100 |

From table 4.6, it can be seen that the majority of women in Kibera are Christians. They are 87% whereas the Muslims are 13%.

4.3.6 Marital status

Marital status is a demographic characteristic that is likely to have influence on the utilization of ANC services since unmarried women tend to shy away from attending clinics for fear of being judged. The table 4.7 shows the distribution of the women's marital status.

Table 4.7: Distribution of Marital status

| Marital Status | Frequency | Percentage |
|-----------------------|------------------|-------------------|
| Single | 54 | 18 |
| Married | 216 | 69 |
| Divorced | 6 | 2 |
| Widowed | 4 | 1 |
| Separated | 32 | 10 |
| Total | 312 | 100 |

The findings indicate that 69% of the respondents are married women. 18% are single women, 2% divorced, 1 % widowed while 10% are separated. This indicates that most women get married at an early age.

4.3.7 Number of Children

The study also investigated the number of children each of the respondents had. Table 4.8 shows the distribution of number of children.

Table 4.8: Distribution of number of children

| Number of Children | Frequency | Percentage |
|---------------------------|------------------|-------------------|
| None | 54 | 17 |
| 1-2 | 66 | 21 |
| 3-5 | 180 | 58 |
| Above 5 | 12 | 4 |
| TOTAL | 312 | 100 |

Table 4.8 shows that 58% of the women have between 3-5 children. Only 17% of the women do not have any children and 21% have between one and two children. This indication could be caused by the fact that it is a slum dwelling and most women can't afford contraceptives.

4.4 Influence Knowledge about ANC on utilization of ANC

This section gives an analysis, presentation and interpretation of the respondents' knowledge about Antenatal care services and how it influences the utilization of the ANC services.

4.4.1 Awareness

The researcher sought to establish from the women how they had known of ANC services that are offered. Therefore asked them to state where they learnt of ANC services first. The table 4.9 shows the distribution of awareness of the availability of ANC services.

Table 4.9: Table showing the distribution of awareness mode

| Mode | Frequency | Percentage |
|--|------------------|-------------------|
| Through friends and relatives | 72 | 23 |
| Visit to a health institution | 114 | 37 |
| Through Media (Tv, Radio, Social Media) | 102 | 32 |
| Others (Chama, Baraza, CHW, Social meetings) | 24 | 8 |
| TOTAL | 312 | 100 |

The findings show that 37% of the women learn about ANC services when they visit a health institution, 32% learn of it through the media and 23% know about it through friends and relatives. The least group, 8% learn of ANC through social meetings, the Community Health Worker or through barazas organized by the Chief. This is an indication that the women are at least all aware of the ANC services provided.

4.4.2 First visit for the ANC clinic

Another element that was used to establish the why the ANC services are underutilized was the timing for the first visit. Table 4.10 shows when the respondents believe that the first visit to the ANC clinic should be made.

Table 4.10: Table showing the distribution of perception on when first visit to the ANC clinic is made

| Trimester | Frequency | Percentage |
|------------------|------------------|-------------------|
| First | 60 | 19 |
| Second | 234 | 75 |
| Third | 12 | 4 |
| Never | 6 | 2 |
| TOTAL | 312 | 100 |

The table indicates that 75% of the respondents believe that pregnant women should make the first visit for the ANC clinic in the second trimester which is between 3-6months. 19% feel that the visit should be made in the first trimester. 4% are of the opinion that it should be in the third trimester whereas 2% feel one shouldn't attend the ANC clinic. This indicates that majority do not visit the ANC clinics immediately in the first trimester.

4.4.3 Perceived number of visits

Table 4.11 shows the distribution of number of visits that respondents feel should be done made for the ANC clinic.

Table 4.11: Distribution of number of visits

| Preferred number of visits | Frequency | Percentage |
|-----------------------------------|------------------|-------------------|
| Once | 6 | 2 |
| Twice | 12 | 4 |
| Thrice | 90 | 19 |
| Four times | 192 | 62 |
| More than four times | 42 | 13 |
| TOTAL | 312 | 100 |

We can conclude from the table that the least number that believe ANC clinics should be attended once is 2% while the highest number, 62% believe that it should be attended four times. 4% believe it should be twice, while 19% feel it should be thrice and 13% feel it should be more than four times. This indicates that women in Kibera do not seek ANC services throughout their pregnancies.

4.4.4 Perceived benefits

The researcher asked what the women think is the benefit of ANC services. The answers were compiled as the table 4.12 shows.

Table 4.12: Distribution of knowledge of benefits of ANC

| Benefit | Frequency | Percentage |
|---------------------------------|------------------|-------------------|
| Know Fetal position | 48 | 15 |
| Blood screening/ Blood pressure | 24 | 8 |
| Taught how to bathe babies | 6 | 2 |
| To know HIV status | 192 | 62 |
| Don't know | 42 | 13 |
| TOTAL | 312 | 100 |

The study findings indicate that 62% of the respondents think that the main benefit of ANC services is to know your HIV status in order to protect the unborn child. This could be their main worry as HIV is mostly prevalent in the slums. 15% believe that it is done in order to know the fetal position in order to avoid caesarian section during child birth. 8% feel it is good to get your blood screened and also know your blood pressure during pregnancy. 2% attend ANC in order to be taught how to bathe the babies and 13% don't know any benefit.

4.5 Perception of the Quality of Services rendered and its influence on the utilization of ANC services

This section gives an analysis, presentation and interpretation of the respondents' perception of the quality of services rendered at the ANC clinics.

4.5.1 ANC attendance for all pregnancies

In order to establish if the respondents attend ANC for all their pregnancies, the researcher asked if the women always attended ANC clinic for all their pregnancies. Table 4.12 shows the distribution of ANC clinics attendance.

Table 4.13: Distribution of ANC attendance for all pregnancies

| Attend ANC always | Frequency | Percentage |
|--------------------------|------------------|-------------------|
| Yes | 294 | 94 |
| No | 18 | 6 |
| TOTAL | 312 | 100 |

From the table 4.13, we can see that 94% of the women in Kibera always attend the ANC clinics for all their pregnancies while only 6% do not. This indicates that they attend ANC clinics for all their pregnancies.

4.5.2 Choice of hospital

The researcher sought to know the places where the respondents sought ANC services. Table 4.14 shows the distribution of the places where women in Kibera seek the ANC services.

Table 4.14: Distribution of choice of hospital

| Where they attend ANC clinics | Frequency | Percentage |
|--------------------------------------|------------------|-------------------|
| Government Hospital | 246 | 79 |
| Private Hospital | 48 | 15 |
| Traditional Birth Attendants | 18 | 6 |
| TOTAL | 312 | 100 |

It is evident as seen on table 4.14 that 79% of the women prefer to attend the government hospital for the ANC services. 15% attend ANC clinics at private hospitals, while 6% prefer to use the Traditional Birth Attendant. This indicates that the majority of the women in Kibera depend on the government to provide the ANC services.

4.5.3 Choice for place to receive ANC services

To answer the question on the reason for their choice on place for ANC services, the respondents were asked to list their reasons that included proximity, Attitude of the staff, quality of services and others such as no delays and safe deliveries.

Table 4.15: Distribution of Choice for place of ANC service

| Reason for Choice of place for ANC | Frequency | Percentage |
|---|------------------|-------------------|
| Proximity | 216 | 69 |
| Good staff attitude | 48 | 15 |
| Free services | 30 | 10 |
| Quality of services | 12 | 4 |
| Others (Safe delivery, No delays) | 6 | 2 |
| TOTAL | 312 | 100 |

The reasons for the choice of place for antenatal care services included proximity 69 %, good staff attitude 15% and free services 10%. The others were quality of services 4%, safe delivery and no delays 2%. Only less than one percent (0.4%) each indicated that they made those choices without any reason and because there was no alternative. It is a clear indication that women in access the ANC services because it is near to them while at the same time free.

4.5.4 Number of attendants

Table 4.16 shows the number of people who attend to women when they attend the ANC clinic.

Table 4.16: Distribution of number of attendants

| Number of attendants at ANC clinic | Frequency | Percentage |
|---|------------------|-------------------|
| 1 | 222 | 71 |
| 2 | 23 | 23 |
| 3 | 6 | 6 |
| TOTAL | 312 | 100 |

As seen on the table, 71% of the women are attended to, by one person for every ANC clinic they attend. 23% is attended to by 2 people while the rest, 6% is attended to by three people. This is an indication that the government hospitals could be understaffed hence the reason only one person attends to a patient.

4.5.5 Attitude of service providers

To establish the attitude of the staff who provide ANC services, the researcher asked the respondents to rate their attitude. Table 4.17 shows the distribution of the perceived attitude of the attendants at ANC clinics.

Table 4.17: Distribution of attitude of service providers

| Attitude of service providers | Frequency | Percentage |
|--------------------------------------|------------------|-------------------|
| Poor | 18 | 5 |
| Average | 24 | 8 |
| Good | 270 | 87 |
| TOTAL | 312 | 100 |

It is evident that 87% of the service providers at the ANC clinics have a good attitude. 8% are average while 5% have a bad attitude. This indicates that the personnel at the health facilities are friendly.

4.5.6 Referrals

The researcher asked to know if the hospitals the respondents give them referrals in case there is any health problem. Table 4.18 shows the distribution of the referrals given in case of any health problem.

Table 4.18: Distribution of referrals

| Referred in case of any problem | Frequency | Percentage |
|--|------------------|-------------------|
| Yes | 300 | 96 |
| No | 12 | 4 |
| TOTAL | 312 | 100 |

From the table 4.18, 96% of the hospitals that provide ANC services give referrals to pregnant women in case of any health problem while 4% do not offer referrals. It is evident that the facilities do not take care of all types of problems but they refer the respondents elsewhere where they can be well taken care of.

4.5.7 Waiting time

Expectant women tend to get uncomfortable quickly when seated in one position. If the waiting time is too much, they may fail to attend ANC altogether. The researcher sought to find out the amount of time used while waiting to be served. The table 4.19 shows the distribution of the period taken while waiting to be served.

Table 4.19: Distribution of waiting time

| How long it takes to be served | Frequency | Percentage |
|---------------------------------------|------------------|-------------------|
| 1-20 minutes | 12 | 4 |
| 20-40 minutes | 84 | 27 |
| 40-60 minutes | 216 | 69 |
| TOTAL | 312 | 100 |

It takes between 40-60 minutes for 69% of the women to be served while it takes between 20-40 minutes for 27% to be served. The remaining 4% take between 1-20 minutes while waiting. It is evident that it takes a lot of time to be attended to. This indicates that the health facilities may be understaffed as it takes women a lot of time to wait to be served.

4.5.8 Rating of the services rendered

When one is not satisfied with services received at a health centre, we can assume that they will probably not go back to the same facility. The researcher sought to find out the satisfaction levels of the respondents. Table 4.20 shows the distribution of the ratings according to satisfactory levels of the women.

Table 4.20: Distribution of satisfaction levels

| Satisfaction with services rendered | Frequency | Percentage |
|--|------------------|-------------------|
| Poor | 18 | 6 |
| Average | 236 | 79 |
| Good | 48 | 15 |
| TOTAL | 312 | 100 |

From the table 4.20, it is clear that 15% of the women feel that they are quite satisfied with the services that they receive at the ANC clinics. 79% rate it as average while 6% feel that the services are poor. This indicates that the services need to be improved for the women in Kibera to rate them as good.

4.6 Influence of accessibility to the ANC clinic on utilization of ANC services

This section gives an analysis, presentation and interpretation of the respondents' accessibility of the ANC services.

4.6.1 Accessibility

For the researcher to understand if the ANC services were available, they asked the respondent if they feel the services are accessible. Table 4.21 shows the distribution of accessibility to the ANC services.

Table 4.21: Distribution of Perception of Accessibility

| Are the ANC services accessible | Frequency | Percentage |
|--|------------------|-------------------|
| Yes | 294 | 94 |
| No | 18 | 6 |
| TOTAL | 312 | 100 |

It is evident that 94% of the women feel that the ANC services are accessible while 6% feel that the services are not accessible. This indicates that the ANC services are not far away from the respondents.

4.6.2 Means of transport

The researcher wanted to understand how the respondents got to the ANC clinics. Table 4.22 shows the distribution of the mode of transport to the ANC services.

Table 4.22: Distribution of mode of transport

| Mode of Transport | Frequency | Percentage |
|--------------------------|------------------|-------------------|
| Walking | 222 | 71 |
| Public means | 90 | 29 |
| TOTAL | 312 | 100 |

Majority of the women, 71% walk to the ANC service providers, while 29% use public transport. This indicates that the health facilities are not located far away from the respondents.

4.6.3 Transport Cost

In order to assess how transport costs may influence the utilization of ANC services, the researcher asked the respondents the amount of money they used for transport. The table 4.23 shows the distribution of the amount of money used for transport in order to access the ANC services.

Table 4.23: Distribution of the amount of money used for transport

| Amount of money used for transport | Frequency | Percentage |
|---|------------------|-------------------|
| Nothing | 222 | 71 |
| 1-100 | 59 | 19 |
| Over 100 | 31 | 10 |
| TOTAL | 312 | 100 |

The majority of the women, 71% walk to the clinic, therefore they use no money for transport. As indicated on the table, we also have 19% who use between 1 and 100 shillings and 10% who use over 100 shillings to get to the ANC service providers. It is evident that ANC services have been made available in Kibera.

4.6.4 Service Cost

The government of Kenya currently offers free maternity services. The researcher sought to find out if the respondents paid for the ANC services. Table 4.24 indicates the distribution of service costs.

Table 4.24: Distribution of service charges

| Do you pay for ANC services | Frequency | Percentage |
|------------------------------------|------------------|-------------------|
| Yes | 66 | 21 |
| No | 246 | 79 |
| TOTAL | 312 | 100 |

It is seen from the table 4.24 that 21% of the women pay for the ANC services while the majority, 79% do not pay for the services. This indicates that the government of Kenya has ensured every woman can afford to be served at the ANC clinic.

4.6.5 Amount paid for ANC services

The researcher sought to find out the amount that the respondents pay, if any, for the ANC services. Table 4.25 shows the distribution of the amount of money paid for the ANC services.

Table 4.25: Distribution of amount paid for ANC services

| Amount paid for ANC services | Frequency | Percentage |
|-------------------------------------|------------------|-------------------|
| Nothing | 246 | 79 |
| 1-200 | 18 | 6 |
| Over 200 | 48 | 15 |
| TOTAL | 312 | 100 |

It is evident that majority of the women, 79% do not pay anything for the ANC services while 15% pay between over 200 shillings and the least group, 6% pays between 1 and 200 shillings.

This is an indication that there is no reason for a woman in the reproductive age in Kibera not to attend the Antenatal Care services since it is free.

CHAPTER FIVE

SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents summary of the findings, discussions, conclusions reached and recommendations following the objectives of the study. The summary of the analysis of each research indicator is featured and from this study analysis, associated recommendations for improvement of utilization of ANC services were made.

5.2 Summary of the Findings

The analysis of the findings of this research indicated that the average age of respondents was between 26-35 years. This confirms the findings of Lubbock and Stephenson (2008) which was conducted in Nicaragua that the age of women utilizing ANC was 26 years. On the occupation, the findings in this research indicated that the majority of respondents (46%) were housewives, followed closely by women who run small businesses at 44%. In a study on the determinants of maternal health services in the rural India, by Sharif and Singh (2002), it was found that, there is a correlation between household income and utilization of maternal health services. In the said research, it was evident that as a result of lack of productive resources for women, income earned had negative impact on utilization of antenatal care. However, contrary to this research in India, income by women in Kibera had positive impact on Antenatal Care utilization. Another research conducted in Afghanistan by Hadi et al 2007 found out that the use of each of the antenatal care

services was significantly lower among women who were involved in economic activities than among those not economically active.

On education, 96% of the respondents had formal education. This correlates to the work of Harrison (1990) and Briggs (1993), which stated that women without formal education have a greater risk of maternal mortality than educated women. Franke and Chasin (1992) also stated that education of women not only improved maternal health but helped to reduce maternal mortality and morbidity. Low educational status has been identified as a major barrier to the utilization of antenatal care services. According to MOHEW (1997) as cited by Mathole, Lindmark and Ahlberg (2005), women with low educational status could easily be persuaded by their grandmothers or traditional birth attendants not to attend antenatal care and to deliver their babies at home. Again Matua (2004); Irinoye, Adeyemo and Ellujoba (2001), said that lack of education can negatively affect the women's comprehension of important information and the ability to make informed decisions. The findings implied that pregnant women who may have attained only low level education may not value utilizing antenatal care services.

This research found that the majority of women (69%) were married. According to MacDonald, Peacock and Anderson (1992), unmarried women were less likely to have planned pregnancy and to attend antenatal care, but there was no significant effect on marital status on pregnancy outcome. Essex et al (1992) observed that late antenatal care attendance was associated with single marital status. According to WHO (2003), as cited by Chaibva(2008), unmarried pregnant women are less likely to seek antenatal care services due to a lack of economic social support from parents, guardians or spouses.

On religion the majority of respondents were Christians (87%) and Muslims formed 13%. On parity, the majority of respondents (58%) had between 3 and 5 children.

5.3 Knowledge about antenatal care

All respondents in this study had heard about antenatal care services. In some studies knowledge was identified as a major structural variable that could influence the decision on whether to utilize antenatal care services or not. Lack of knowledge about the antenatal care services could be a major barrier to women's utilization of antenatal care. Matua (2004) and Jewkes, Matorah and Jordan (1998), cited lack of adequate knowledge and information about pregnancy, laboratory tests results and dangers of late bookings or not attending antenatal care at all, as contributors to the poor utilization of antenatal care services.

As to the source of information on antenatal care services the majority of respondents (37%) heard it from health workers /institution, relatives and friends 23%, media 32% and from other sources 8%.

Seventy five percent (75%) of respondents knew that antenatal care services should be visited in the 2nd trimester whilst 19% and 4% knew it was supposed to be attended in the 1st trimester and 3rd trimester respectively. 2% felt one should never visit at all. This however did not confirm the literature review by Kenya Demographic Health Survey (2009) which stated that the first antenatal care services should take place during the first trimester of pregnancy. Health professionals and providers recommend that the first antenatal visit should occur within the first trimester of pregnancy and continue on a monthly basis through the 28th week of pregnancy and fortnightly up to the 36th week or until birth. This implies that 12-13 visits should be made

during the entire pregnancy. Antenatal care can be more effective in preventing adverse pregnancy outcomes when it is sought early in pregnancy and continues through to delivery.

The respondents' knowledge on the frequency of visit showed that on the average, a pregnant woman should use the service four times. Sixty two percent (62%) knew that pregnant women should visit antenatal care 4 times or more while the rest 25% thought that it should be less than 4 times. This is in contrast to the study conducted by Singh and Khare (2001) which stated that majority of Zimbabwe's pregnant women had an average of one visit before delivery and an initial antenatal care visit was made during the second and third trimester.

Knowledge about the benefits of the antenatal care services as listed by the respondents included the following: knowing baby's condition, safe delivering, food education, prevention of diseases, and detection of infections, obtaining drugs, and counseling. However, lack of knowledge about ANC and delivery were major barriers to seeking health care among pregnant women in Uganda. (Matua, 2004).

5.4 Perception of Quality of Services

Almost all the respondents (94%) attended antenatal care services. Six percent of the respondents did not attend antenatal care services. As to the places of attendance, the majority of antenatal care services attended Public health facilities 79%, private health facilities 15% and Traditional Birth Attendant 6%. The reasons for the choice of place for antenatal care services included proximity (69 %), good staff attitude 15% and free services 10%. The others were quality of services 4%, safe delivery and no delays 2%. Only less than one percent (0.4 %), indicated that they made those choices without any reason and because there was no alternative. Seventy

onepercent (71%) of the respondents indicated one staff attended to them during the antenatal care session.

The attitude of the health providers was good as claimed by most of the respondents (87%). However, only 5% said otherwise. Matua, in 2004 reported that pregnant women have reported negative attitudes of health care providers. He said that women are sometimes reluctant to use maternity care services because health care providers are perceived to be rude, insensitive and threatening to the young mothers.

As to the waiting time, sixty nine percent (69%) of the respondents waited for about 60 minutes before services were rendered while 27% waited for less than 40 minutes. Whereas 6% of respondents were not satisfied, 69% indicated that on average they were satisfied with the services provided at the antenatal care they attended. This however is in contrast to what Chaibva, (2008), wrote in her thesis “Factors Influencing adolescents’ utilization of Antenatal care services in Bulawayo.” She claimed that pregnant adolescents were not satisfied with services rendered hence poor or non-utilization.

5.5 Access to the antenatal care

Ninety six percent (96%) of the respondents who used antenatal care anytime they were pregnant thought that the services were accessible. Kluge (2006) cited that antenatal care services should be accessible to all pregnant women irrespective of social status, age, race or level of education and should provide an environment of trust and confidentiality. The means of transport to the antenatal care services points, according to this research, were walking (71%), and using public means (29%). Among those who used public transport, 18% spent less than one hundred

shillings. Antenatal care services were paid for by 21% of the respondent whilst the rest 79% of the respondent did not pay.

According to Magadi et al (2000), long distance to the antenatal care facility is an obstacle to the antenatal care. They cited some of the factors that prevent women in developing countries from getting the antenatal services as: cost (direct fee, as well as the cost of transportation, drugs and supplies); poor quality of services; multiple demands on women's time and women's lack of decision making power within the family.

In the study at Kibera, it can be understood if some respondents claimed they paid for the antenatal care services since there are very few Government health facilities in Kibera hence they have to visit the private hospitals.

5.6 Conclusions of the Study

The study was educative and challenging with regards to the findings and the discussions. It is therefore concluded that women in the reproductive age in Kibera utilized the antenatal care services and the factors that contributed to the utilization were: The youthful age of the majority of respondents, The engagement in productive employment by almost half of the respondents, The high level of education of the majority of the respondents making them able to comprehend what was taught at antenatal care, improving maternal health and hence likely to reduce maternal mortality and morbidity. Marital status of the respondents making them attend antenatal care regularly and probably with support from parents, guardians and or spouses. The respondents' adequate knowledge on the benefits of the antenatal care services, Adequate information on antenatal care services, and Respondents reasons for attending antenatal care which included

proximity, free services, good interpersonal relationship between health personnel and clients, good quality of care, no delays, safe delivery and satisfaction of service.

Most maternal and many neonatal deaths could be prevented if adequate antenatal care and effective obstetric services were provided. However, if pregnant women did not utilize antenatal care services, many obstetric problems could become life threatening crises for both mother and baby by the time these were diagnosed. Utilizing antenatal care services is particularly important to the pregnant women who are most likely to be prone to developing obstetric complications. The death of a mother is a tragic occurrence and ... “one of the most terrible ways to die... an event that could have been avoided and should never have been allowed to happen” (Starrs 1997)

5.7 Recommendations of the study

The study findings unveiled a number of factors in the provision of antenatal care services leading to utilization. The following are therefore recommended based on the findings.

1. The Ministry of Health should review and strengthen reproductive health programs and ensure that they are friendly and are need focused.
2. Adequate supervision and monitoring at all levels of health care should be ensured by the MOH.
3. Continuous disseminating of information by the MOH on antenatal care, delivery and postnatal care services to enhance accessibility by every pregnant woman.
4. Spouses of pregnant women should be encouraged by their partners to support them to access the ANC services.

5.8 Suggestions for Further Study

Further studies should apply different research instruments like focused group discussions to involve respondents in discussions in order to generate detailed information which would help improve delivery of ANC services.

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APPENDICES

APPENDIX 1: Letter of Introduction

QUESTIONNAIRE

INTRODUCTION LETTER

MBAI CATHERINE MBINYA

P. O BOX 24743 – 00502

NAIROBI

1st October 2015

Dear respondent,

RE: FILLING OF THE RESEARCH QUESTIONNAIRE

I am the above named person, a student of the University of Nairobi. I am currently pursuing a Masters degree in Project Planning and Management. I am undertaking a research titled “*Factors influencing utilization of antenatal care services among women of reproductive age in urban squatter settlement: a case of Kibera.*” The questionnaire attached to it is meant to collect data for this purpose. All information gathered will be treated with utmost confidentiality and shall be used for this purpose only.

Kindly fill the questionnaire by answering the questions as honestly as possible.

Your participation will be highly appreciated.

Yours sincerely,

Catherine MbinyaMbai

APPENDIX 2: Questionnaire

Introduction

This research is meant for academic purposes. The aim of the study is to establish the factors influencing utilization of antenatal care services among women of reproductive age in urban squatter settlements: a case of Kibera. You are kindly requested to provide answers to these questions as honestly and precisely as possible. Responses to these questions will be treated as confidential.

Please do not write your name anywhere in this questionnaire. Please tick () where appropriate or fill in the required information in the spaces provided.

Section A: SOCIO-DEMOGRAPHIC DATA

1. How old are you (Your age bracket)?

15 – 25

26 – 35

36 – 49

Above 50

2. What is your occupation?

Housewife

Runs small business

Formal employment

Any other.....

Justify.....

3. What is your monthly income level?

Less than 3000

Between 3,001 – 10,000

Between 10,001 – 30,000

Between 30,001 – 50,000

Above 50,000

4. What is your highest level of education?

Primary

Secondary

Tertiary (University, Polytechnic, Training college)

Others (Specify)

5. What is your religion?

Islam

Christianity

Others, specify

6. What is your Marital Status?

Single

Married

Divorced

Widowed

Separated

Any other, specify.....

7. How many children do you have?

1-2

3-5

Above

Section B: KNOWLEDGE ABOUT ANTENATAL CARE SERVICES

8. How did you hear about Antenatal Care Services?

Through friends and relatives

During a visit to health institution

Through the media –TV, Radio, Social media

Any other, specify

9. In your view when should pregnant women access Antenatal Care Services?

1st Trimester (1-3 months)

2nd Trimester (4-6 months)

3rd Trimester (7-9 months)

Never

10. How many visits should a pregnant make to the Antenatal Care Services during the entire period of pregnancy?

Only one time

Twice

Thrice

Four times

Any other (Specify)

11. What are some of the benefits of Antenatal Care Services?

.....

Section C: QUALITY OF CARE RENDERED

12. Do you access Antenatal care services during all your pregnancies?

Yes No

13. Where do you attend Antenatal Care Clinics?

Government hospital

Private hospital

Traditional birth attendants

Any other, specify.....

14. Give reasons for your choice of Antenatal Care Services above?

.....

15. How many people attend to you when you access Antenatal Care Services at the clinic?

1-2people

3-4

Above 5

16. How would you rate the attitude of service providers towards pregnant women?

Very poor

Poor

Average

Good

Very good

18. Are you always referred in case of health problem?

Yes No

19. How long does it take to access Antenatal Care Service?

Between 1 – 20 minutes

20 – 40 minutes

40 – 60 minutes

Over 60 minutes

20. Are you satisfied with the Antenatal Care Services rendered? Which number rates your satisfaction?

Very poor

Poor

Average

Good

Very good

Section D: SERVICE OF ACCESSIBILITY

21. Are the Antenatal Care Service accessible?

Yes No

22. What means of transport do you use when accessing Antenatal Care Services?

Walk

Public means

Others (Specify)

23. How much do you pay for transport to and from the services?

Nothing

Between 20-40

Between 41-60

Above 60

24. Do you pay for the Antenatal Care Services?

Yes No

If yes,how much?

Between 0 -50

Between 51- 100

Between 101 -150

Over 151

25. Do you have any other comments?.....

APPENDIX 3 - Interview Guide for Questionnaire for Women in the Reproductive Age Respondents

Instruction

SECTION A: SOCIO-DEMOGRAPHIC INFORMATION

1. How old are you (Your age bracket)?
2. What is your occupation?
3. What is your monthly income level?
4. What is your highest level of education?
5. What is your religion?
6. What is your Marital Status?
7. How many children do you have?

Section B: KNOWLEDGE ABOUT ANTENATAL CARE SERVICES

8. How did you hear about Antenatal Care Services?
9. In your view when should pregnant women access Antenatal Care Services?
10. How many visits should a pregnant make to the Antenatal Care Services during the entire period of pregnancy?
11. What are some of the benefits of Antenatal Care Services?

Section C: QUALITY OF CARE RENDERED

12. Do you access Antenatal care services during all your pregnancies?
13. Where do you attend Antenatal Care Clinics?
14. Give reason for your choice of Antenatal Care Services above?
15. How many people attend to you when you access Antenatal Care Services at the clinic?
16. How would you rate the attitude of service providers towards pregnant women?
17. Are you always referred in case of health problem?
18. How long does it take to access Antenatal Care Service?
19. Are you satisfied with the Antenatal Care Services rendered?
20. Rate your satisfaction with Poor, Average or Good?

Section D: SERVICE OF ACCESSIBILITY

21. Are the Antenatal Care Service accessible?
22. What means of transport do you use when accessing Antenatal Care Services?
23. How much do you pay for transport to and from the services?
24. Do you pay for the Antenatal Care Services?
25. How much?

APPENDIX 4: Krejcie and Morgan Table

Table for Determining Sample Size for a Finite Population

| <i>N</i> | <i>S</i> | <i>N</i> | <i>S</i> | <i>N</i> | <i>S</i> |
|----------|----------|----------|----------|----------|----------|
| 10 | 10 | 220 | 140 | 1200 | 291 |
| 15 | 14 | 230 | 144 | 1300 | 297 |
| 20 | 19 | 240 | 148 | 1400 | 302 |
| 25 | 24 | 250 | 152 | 1500 | 306 |
| 30 | 28 | 260 | 155 | 1600 | 310 |
| 35 | 32 | 270 | 159 | 1700 | 313 |
| 40 | 36 | 280 | 162 | 1800 | 317 |
| 45 | 40 | 290 | 165 | 1900 | 320 |
| 50 | 44 | 300 | 169 | 2000 | 322 |
| 55 | 48 | 320 | 175 | 2200 | 327 |
| 60 | 52 | 340 | 181 | 2400 | 331 |
| 65 | 56 | 360 | 186 | 2600 | 335 |
| 70 | 59 | 380 | 191 | 2800 | 338 |
| 75 | 63 | 400 | 196 | 3000 | 341 |
| 80 | 66 | 420 | 201 | 3500 | 346 |
| 85 | 70 | 440 | 205 | 4000 | 351 |
| 90 | 73 | 460 | 210 | 4500 | 354 |
| 95 | 76 | 480 | 214 | 5000 | 357 |
| 100 | 80 | 500 | 217 | 6000 | 361 |
| 110 | 86 | 550 | 226 | 7000 | 364 |
| 120 | 92 | 600 | 234 | 8000 | 367 |
| 130 | 97 | 650 | 242 | 9000 | 368 |
| 140 | 103 | 700 | 248 | 10000 | 370 |
| 150 | 108 | 750 | 254 | 15000 | 375 |
| 160 | 113 | 800 | 260 | 20000 | 377 |
| 170 | 118 | 850 | 265 | 30000 | 379 |
| 180 | 123 | 900 | 269 | 40000 | 380 |
| 190 | 127 | 950 | 274 | 50000 | 381 |
| 200 | 132 | 1000 | 278 | 75000 | 382 |
| 210 | 136 | 1100 | 285 | 100000 | 384 |

Note.—*N* is population size. *S* is sample size.

Source: Krejcie & Morgan, 1970