

**FACTORS AFFECTING UTILIZATION OF POSTNATAL CARE SERVICES AT
KABIRA HEALTH CENTRE III MITOOMA DISTRICT
SOUTH WESTERN UGANDA**

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DECLARATION

I Nyamete O. Geoffrey declare that this research report entitled “Factors affecting utilization of postnatal care services at Kabira Health Centre III in Mitooma District”, is my own work and has never been submitted to any other institution for any award.

.....

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APPROVAL

This research report entitled, factors affecting utilization of postnatal care services at Kabira Health Centre III, in Mitooma District, has been done under my supervision and submitted to with my approval.

.....

Mr. Agaba Jude
Supervisor

.....

Date

DEDICATION

This piece of work is dedicated to my beloved family and to my lecturers of Kampala International University-Western Campus who showed devotion in guiding during the process of research project

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My sincere gratitude first goes to the almighty God for me opportunity to undertake this academic journey and seeing me through to the end and all kinds of assistance rendered to me during the studies and during this research in particular cannot stand unacknowledged.

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LIST OF ABBREVIATIONS AND ACRONYMS

| | |
|---------------|------------------------------|
| ANC | Antenatal Care |
| EPNC | Early Postnatal Care |
| EU | European Union |
| GDG | Guidelines Development Group |
| HC III | Health Center Three |
| MCH | Maternal and Child Health |
| MDG | Millennium Development Goal |
| MMR | Maternal Mortality Ratio |
| MoH | Ministry of Health |
| PNC | Postnatal Care |
| PPH | Postpartum Hemorrhage |
| TBA | Traditional Birth Attendant |
| WHO | World Health Organizations |

DEFINITION OF TERMS

Postnatal care: is the assistance given to a mother immediately after birth for a period of six weeks to reduce complications and deaths as well as promote health.

Parity: number of children a woman has delivered.

Postpartum period: period that starts one hour after expulsion of placenta up to 42 days (6 weeks)

Postnatal services: it comprises of care given to women after birth and includes: physical examination, immunization, family planning, health education on mother and baby care, treatment and counseling services.

Maternal health: refers to the well- being of a mother during pregnancy and after birth.

Maternal mortality: is death of a woman while pregnant or within 42 days of termination of the pregnancy irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by pregnancy and its complications but not from accidental or incidental causes (WHO, 2010).

Maternal Mortality Ratio (MMR): number of maternal deaths during given time period per 100 000 live births during the same time-period.

Utilization of services: use of postnatal services by women after delivery of their babies.

Barriers to utilization: in this study refer to what prevent women from utilizing postnatal care services.

Awareness: having knowledge of or understanding of postnatal care services

Postnatal clinic: In this study a postnatal clinic refers to a clinic in a public health facility where postnatal and physical examinations are conducted on the mother and the necessary care to address given needs.

Immunization clinic: Immunization clinic refers to a facility in a public health institution where babies, children and adults are immunized.

Maternal and child health (MCH) clinic: For purposes of this study, an MCH clinic refers to a facility in a public health institution where postnatal care services are given.

Mothers: women who gave birth to a child and who are supposed to attend postnatal care.

ABSTRACT

The study assessed factors that influence the utilization of PNC services by mothers at Kabira HCIII in Mitooma district. The objectives of the study were to identify socio-demographic factors influence utilization of postnatal care services, to find out client factors influence utilization of PNC services and to determine the health system factors influence the utilization of PNC services by mothers at Kabira HCIII in Mitooma district.

The survey was a descriptive cross sectional study where by women in child bearing age attending MCH clinics at Kabira Health Centre III in Mitooma district as well as health workers of Kabira Health Centre III and while using Morgan's table, a sample size of 148 were recruited.

The study found out that utilization of postnatal care in the study area was (55.6%). The services were mainly accessed at or after 6 weeks. The socio-demographic determinants that were found to be predictive of utilization of PNC services were level of education, household wealth status, and employment status. Health systems associated with PNC services were quality of care and delivery in a government facility, knowledge of PNC services and a positive attitude were also predictive of utilization of PNC services

In conclusion, although there are some programs by ministry of health to help and extend postnatal services to mothers, more interventions need to be done to improve access of PNC services by women and the following were recommendations made.

The MOH needs to sensitize the communities on the importance of PNC services, the health care workers need to inform the clients about PNC service and schedule appointments and also the quality of services in the facility needs to be improved and be responsive to the users

CHAPTER ONE

INTRODUCTION

1.0 Introduction

This chapter gives a background to the study, problem statement, objectives, research questions, significance and scope of the study

1.1 Background to the study

Post natal care (PNC) is the care given just after delivery and throughout the first 6 weeks of life and is recognized as a critical time for both mother and the baby. PNC is one of the most important maternal health care services not only for the prevention of complications of impairment and disabilities but also reduction of maternal mortality. PNC enables health professionals to identify post-delivery problems including potential complications and prompt treatment as well as promoting health of the mother and the baby (WHO, 2006).

According to WHO (2006), the elements of PNC are inter-alia prevention of complication of mother and baby including vertical transmission of diseases from mother to baby, early detection and treatment of problems and complications, provision of care to mother and baby by skilled health professionals, assisting the mother and her family to evaluate and develop personalized postnatal care plan, counselling for HIV and testing, counseling for contraception, and resumption of sexual activity health promotion using health messages and counseling, referral of mother and baby for spacing care where necessary (WHO, 2006). Approximately, 30-40% of the maternal deaths in Africa are due to hemorrhage, mostly in the post-partum period (Lancet, 2006).

The post-partum period in Africa is often marked by cultural practices, many communities observe practices that keep mothers and babies indoors for the first month after birth, a period of seclusion. If a mother becomes ill during this period of seclusion, seeking formal health care is often delayed (Charlotte et al 2008).

In Uganda, only 36% of the women utilize PNC services (WHO, 2014). This indicates that the majority of the maternal deaths and disabilities could have been avoided if more women have access to the appropriate PNC since mothers and children are most vulnerable to ill health or death immediately after delivery.

The consequence of poor postnatal care may be seen in form of disability, morbidity and mortality. It had been established by WHO that complications following child birth are more common due to poor health care, resources and social attitudes towards medical care in developing countries. The long term maternal complication in the postnatal period include; chronic pain, impaired mobility, damage to the reproductive system and infertility (Onama, 2011).

A study of 30 countries in Asia using DHS, data found out that 7/10 mothers who delivered outside a health institution did not receive post natal care (Fortkothari Nouredine, 2006). In the same study, about 40% of the women with live birth outside the health institution interviewed 5years preceding the survey did not receive a PNC checkup (Fort 2006). Ethiopia has the highest number of women who did not receive postnatal care at 90%. This is followed in descending order by Bangladesh, at 73%, Nepal at 72% and Rwanda 71%. Other sub-Saharan countries which have a substantial proportion of women who did not receive postnatal care include Uganda, (57%), Mali (49%), Kenya (46%), Burkina Faso (44%), Malawi (41%) and Zambia (41%) (Fort, 2012)

A large number of women in the sub-Saharan region do not have access to health care during the early postnatal period which puts them at a risk of disease and mortality (Lawin, 2014).The harsh reality is that about 4million infants do not live through the immediate postnatal period and a large number of them are disabled due to pregnancies and birth that are poorly monitored or handled (De Bernis, 2003). This is a situation that has remained almost unchanged for many years. Studies show that, death within the first week of life account for almost 40% of all deaths among children under the age of 5. Also about 700 babies die (around 30 every hour on a daily basis in sub-Saharan).Africa, which has the highest number of newborn deaths in Africa and the second highest in the world (WHO, 2012).

Some women suffer genital prolapse after bearing several children (Ikman, 2014).This condition is extremely uncomfortable and can lead to other complications in future pregnancies if not properly addressed in the postnatal period (Ashford 2014). These complications can be prevented/ eliminated through preventive maternal health care services such as physiotherapy, family planning health education and screening.

The lack of health care during post natal period may a miss opportunity to promote health attitudes such as breast feeding practices, full child immunization and knowledge on FP for the mother. In order to avoid these complications and save the lives of mothers and their babies, the study therefore intends, to investigate the factors affecting utilization of postnatal care services of mothers at Kabira HC III in Mitooma district.

1.2 Statement of the Problem

The post-partum period constitutes an important transition period necessary for maternal health among women who have just delivered. There have been government efforts to ensure that mothers have access to postnatal services at Kabira health center III,like most public health facilities in Uganda. Postnatal services are offered and offered freely (MOH, 2014).Mothers who are expected to go to postnatal services for PNC at any hospital of their choice vary by age, parity, distance to the health facility and socio-economic background or education level. It is reported that only 26% of mothers who had had live births at Kabira HCIII receive post-partum care within the critical first two days after delivery and overall 72% of the women did not receive postpartum care at all in the year 2014 (MOH Annual performance Report, 2014)

Despite the above effort, there is a great concern about the small number who turns up for PNC services by mothers at Kabira HCIII in Mitooma district. This study therefore intended to assess the factors the utilization of PNC services at Kabira Health Center III in Mitooma district.

1.3 General Objective/Aim of the study

To establish the factors affecting utilization of postnatal care services at Kabira HCIII in Mitooma district.

1.3.1 Specific objectives

- 1) To determine socio-demographic factors influencing utilization of PNC services at Kabira HCIII in Mitooma district.
- 2) To examine the health system factors influencing the utilization of PNC services by mothers at Kabira HCIII in Mitooma district.
- 3) To determine the awareness about PNC services among mothers attending health services at Kabira HCIII in Mitooma district.

- 4) To determine the attitude towards utilization of PNC services among mothers attending health services at Kabira HCIII in Mitooma district.

1.3.2 Research questions

- 1) What socio-demographic factors influence utilization of postnatal care services by mothers at Kabira HCIII in Mitooma district?
- 2) In what ways do client factors influence utilization of PNC services by mothers at Kabira HCIII in Mitooma district?
- 3) What health system factors influence the utilization of PNC services by mothers at Kabira HCIII in Mitooma district?

1.4 Significance of the study

The findings from this study will add to the existing literature and will be used in developing interventions to increase uptake of PNC at Kabira health Centre III, Mitooma district and beyond. The results of this study will be used by policy makers to design appropriate policies to increase uptake of PNC. As well as serving as a learning experience to the researcher, the results will also act as a point of reference to future researchers on infection control and have helped the researcher to compile a report in partial fulfillment for the award of a bachelor of medicine and surgery of Kampala International University.

1.5 Scope of the study

The study was restricted to Kabira Health Centre III in Mitooma district. It focused on socio demographic, health system and client factors that affect the uptake of PNC and was conducted in July 2018.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The literature review is about results from related studies and is guided by the study objectives. It is arranged in three themes as follows; over view of PNC services, factors affecting the uptake of PNC services and in the last section barriers to uptake of PNC services

2.1 General introduction to the role of PNC in Maternal Child health services

Care in the period following birth is critical not only for survival but also to the future mothers and new born babies. Major changes occur during this period that determines their wellbeing and potential for a healthy future. The major purposes of post-natal care are to maintain and promote the health of a woman and her baby and to foster an environment that offers help and support to family and community on health needs (WHO, 2013). These needs can involve physical and mental health as well as social and cultural issues that can affect health and wellbeing. In addition, the new parents need support for parenting and its responsibilities thus; the conceptual framework for guidance on post-natal care should place the woman and her baby at the center of care provision. This concept promotes the appreciation of delivery of all postnatal care in partnership with the woman and her family and be individualized to meet the needs of each mother-objectives reported (Izudi and Amongin, 2015).

It is essential to provide a seamless continuum of care from antenatal care (ANC) to skilled delivery and postnatal period as this provides a transition to uptake of reproductive and for child health services (WHO, 2013). Postnatal care is one of the pillars of maternal and newborn health in Uganda.

WHO 2013, recommends that PNC services should be provided at 6 hours, 6days, 6 weeks, and 6 months post-delivery but this was generic and individual countries were encouraged to implement this according to their own needs and capabilities. According to WHO 2013, the first consultation should be carried out within 48hours on the postnatal ward before discharge. This assures that the neonate and mother are evaluated by a health provider.

This consultation presents an opportunity to identify and address problems to counsel on essential care like exclusive breast feeding, cord care, keeping the infant warm, counsel on

nutrition, prevention of mother to child transmission (PMTCT), sensitize on family planning (FP) methods and to commence immunizations. The mother is also informed about her danger signs and that of the neonate and encouraged to seek medical help early if they identify and danger sign during preparation.

In developed countries, virtually all women and their infants receive postnatal care (WHO, 2013). In the study conducted in 30 developing countries, an average of 40% of all women with alive birth in the previous years did not receive any post-partum care checkups (WHO, 2010). According to Malawi demographic and health survey (MDHS, 2011) 30% of mothers attended PNC services while in Congo 34.6%. Post natal women had attended PNC by 42days after delivery (Francoise, Dramax and Donen, 2012)

In Kenya, PNC utilization is 51% (KDHS, 2014). A study done in Uganda showed that only 15.4% of mothers attend the early PNC (Izudi and Amongin, 2015).

The timing of the PNC service is also important and at least one in 4 child deaths occur during the first month of life (WHO, 2013). These deaths often take place before child health services begin to provide care, usually at 6 weeks for the first immunization visit.

From these studies, it is clear that a large proportion of women and children are without health care during this critical period (post-partum period).

2.2 Socio-demographic factors affecting Post-natal care

The period following birth in Africa is often marked by cultural practices. Understanding these practices and beliefs is important part of insuring effective and timely care. Many communities throughout Africa observe practices that keep mothers and babies indoors for the first months after birth; this is seen as a period of seclusion (Mrisho et al, 2009).

Also the older women dictate the behavior of the newly delivered women. Lubbock and Stephenson (2008) reported that the mother in-law gives out instructions on whether the new mother would seek care or not. Where TBA assist in delivery many women prefer TBA for PNC because they are accessible (Titaley et al, 2010).

Onama 2011 further states that long distance to the appropriate health service, poor road and scarce means of transport; make it hard for mothers to reach for PNC services. Surveys in many

countries confirm that many women seeking PNC services are unable due to problems reaching their. According WHO report, (2014) 90% of women in Malawi in one survey wanted to go for PNC services at health services but only 30% actually did.

Lack of knowledge about postnatal services could be a barrier to women utilization to PNC services. Due to lack of knowledge, pregnant women are likely to have limited knowledge, and experiences in seeking health care. Matua (2014) and Jewkes et al, (2008) cited lack of adequate knowledge and information about pregnancy, laboratory test results and dangers of late booking or not attending ANC at all as contributions to the poor utilization of PNC services.

Maternal health care seeking behaviors are shaped by other factors such as parity. Reasons described to this attitude include the experience, women gain with each succeeding pregnancy and child birth, time and pressures with larger families which decrease the utilization of PNC services (Mrisho et al, 2009).

Maternal education has profound effect on seeking, medical care (Tital et al 2009). Educated women are more likely to enjoy autonomy within and outside the household and the skills acquired from schooling enable women to communicate with the health care professionals and demand health care services as reported by Dhaher, Mikolajeny and Kramer 2008). Educated women are also likely to have improved knowledge and information on modern medical treatment and have greater capacity to recognize specific illness, appreciate the need to seek medical care (Titaley et al 2009).The influence of education is also with high age at marriage low fertility and mortality and reduced vulnerability to HIV/AIDs as reported by Anyanwu and Okeleke, 2009.

According to the World Bank, 2013, poverty hinders mothers from seeking PNC services after delivering. World Bank noted that there has been no significant decline in poverty rates throughout most of the developing countries 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, and moreover most developing countries spend less on health and welfare than they do on servicing their debts.

Age of the respondent is represented by a continuous variable from 15-49 years old, the age could be the contributing factor in the utilization of PNC services, among the predisposing

factors such as age, represent biological imperatives suggesting the likelihood for the need of health services, and mothers age at birth is an important factor to determine the use of postnatal care services.

2.3 Health system factors affecting utilization of PNC

These are presented in two dimensions: quality and accessibility of services. The ultimate aim of a health system is to equitably maintain or restore the health of all people it serves. Health system is defined by WHO (2010) as the sum of the organizations, institutions and resources whose shared primary purpose is to improve health. The broad health system includes, everyone responsible for good health, is also encompasses sanitation and nutrition, it involves all branches of government and operates within the public sector, civil society and non-for-profit entities. WHO (2010) states that there are six building blocks that are the foundation for health system that support access to high quality health services.

These are leadership and governance, motivated work force, financial management, medicines and medical supplies, health information, health service delivery that address the basic health needs of the population to be served. Together, these building blocks are the foundation for health systems that support access to high quality health services, leading to positive health outcomes for clients and communities as identified by management science for health (2010).

At the center of a health system are two groups a of people; the health care providers and the clients, the goal of providing quality health care cannot be achieved without the powerful interaction of these two group of people.

The health workers look at quality objectively, consider products or services that meet or surpass standards of safety, proper function and otherwise general excellence.

This is often referred to as quality assurance or medical quality and it depends mainly on provider perspectives as documented by Donabedian 2005. Providers tend to highlight technical competences, infrastructure and logistical support in an effort to improve quality. On the other hand, clients often emphasize the human aspect of care, respectful treatment, privacy and confidentiality information and counseling in addition to safety. Convenient location and hours, reasonable waiting times, affordable cost, and a clean comfortable facility (Mrisho et al 2009. and Kamau 2014).

In provision of maternity services, staff attitudes keep the women from hospital delivery, as they prefer TBAs who are perceived to be friendlier than health care providers (Fomba et al 2010), Bowser and Hill 2010).

This negative provider attitude at health facilities gives TBAs an edge over the health providers. Women's subjective experiences are at the core of measuring disrespect and abuse in child birth, as their perceptions would have the most influence in their decisions to seek health facilities in the future.

Disrespectful and abusive treatment covers a range of provider behaviors, such as shouting at or scolding patients, requesting bribes, threatening to withdraw health care, physical abuse, abandonment in times of need, conducting procedures without consent and detaining mothers or babies at the facility due to failure to pay (Management science for health, 2010).

2.4 Summary

While many factors contribute to maternal and child health outcomes, the use of PNC service is important in the maternal child health care to improve the health and survival of mothers and infants.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter presents the research methodology. Areas discussed in this chapter include:-study design, target population, sample size, sampling techniques, and the sources of data, data collection instruments, data analysis and plan for dissemination of the study results

3.1 Study design

The survey was a descriptive cross sectional study. Quantitative and qualitative data was collected and then integrated in the interpretation of the overall results. This was all for comprehensive analysis of description of the association between the dependent variables (use of PNC services) and independent variables (socio-demographic factors, health system factors, and client factors).

3.2 Study population

These were women in child bearing age attending MCH clinics at Kabira Health centre III, Mitooma district as well as health workers of Kabira Health centre III as key informers.

3.3 Sample size determination

Kabira Health centre III's target population for Women in child bearing age 15-45 is 800 (Kabira Health centre Annual work Plan 2016/17). Using the estimated uptake of PNC at the centre estimated at about 30%.

Therefore the target population = $\frac{30}{100} \times 800 = 240$

Using Morgan's table (see appendix), a sample size of 148 was determined and therefore considered.

3.4 Sampling Procedure and rationale

The district and health facility for the study was conveniently selected and assessed due to the observed high low uptake of PNC services according to the health facility annual work plan 2016/17. Every woman aged 15-49 attending clinical care at Kabira Health centre III months was considered for the study till the required number (148) was achieved.

3.5 Data collection tools

Data from women in the reproductive age (15-49) years was collected by use interviewer administering questionnaire with both closed and open ended questions. The questionnaires contained questions related to the background information of respondents, the client's factors affecting utilization of PNC services by mothers, the social demographic factors affecting the utilization of PNC services by mothers in Kabira health center III Mitooma district. A key informer's interview guide was used to get data from key informants.

3.6 Data collection procedure/method

After identifying a mother meeting the inclusion criteria, she would then be asked questions as per designed questionnaire. Selected health workers would be asked using the key informer's interview guide.

3.7 Piloting the study

A pilot study involving 10 respondents was conducted at Bushenyi Health Centre IV Bushenyi Municipality, before the commencement of the actual study in order to pre-test the study instruments. The purpose of the pilot study was to validate the research instruments and assess their reliability. Through `piloting, the researcher identified instrument deficiencies and either modified or discarded inconsistent items. This helped the researcher to eliminate study methods that might not work.

Study Variables

The dependent variable was utilization of postnatal services while the independent ones included; sociodemographic characteristics of the mothers, health system factors and client factors affecting the above mentioned dependent variable.

3.8 Inclusion and exclusion criteria

3.8.1 Inclusion criteria

The study subjects that were included for the study were:-

- i) Women of reproductive age obtaining health services at Kabira health center III
- ii) Women whose previous delivery was within one year and the infant was more than two weeks old.
- iii) Women who were willing to participate in the study by signing the consent form.

3.8.2 Exclusion criteria

Women were excluded from the study if:

- i) their children died during the period of reference
- ii) they were unwell
- iii) they were not permanent residents of Kabira health Centre III catchment area

3.9 Data Analysis and presentation

Quantitative Data was processed using a data master sheet; with the help of an electronic calculator and by use of Microsoft excel program, data was processed and presented in percentage frequency distribution tables, pie chart and bar/line graphs. Qualitative data was organized in themes and presented as statements during presentation of data.

3.10 Ethical consideration

A letter of authorization was obtained from the Dean's office faculty of Clinical Medicine and dentistry; KIU Western Campus. This letter introduced the researcher to the local District health officer Mitooma district. The District Health officer then introduced the researcher to the Incharge of the Health facility, who then permitted conduct of the study in the facility. Verbal consent was sought from each respondent by first explaining the objectives and relevance of the study. A selected respondent was at liberty to participate or to opt out of the study confidentiality was assured and ensured while respondents' names would neither be asked nor recorded. Data on utilization of PNC history was collected in two weeks

Informed consent of each individual participant was obtained at the start of the study and a copy, of a consent form were presented. A researcher had to respect the culture of the respondents during data collection process; confidentiality was maintained by the use of code numbers on the questionnaire instead of names. Information obtained was used for the purposes of this study. The data that was collected is to be accessible to the people who were involved in the study. The researcher then stored the questionnaires and other study tools in a lockable filing cabinet.

3.11 Limitations for the study

- Some respondents might have given wrong information concerning the utilization of PNC services at the health center, especially those who tend to reserve information about their maternal health issues. This was overcome by assuring them that the information would be treated with utmost confidentiality, apart from the researcher no one would be allowed to access it.
- Some respondents were illiterate; this was overcome by giving them a detailed explanation to avoid effects of ignorance.
- The researcher had inadequate time to exhaust the study due to attention to other academic programs. This was overcome by putting up a time schedule which had to be followed
- Transport costs to the health center, since he was not staying there. This was overcome by hiring a Taxi to transport him to and from the health unit
- Resources like funds were limited but the researcher solicited money from relatives and friends in order to overcome the problem.
- Some health workers may refused to participate while others were absent during the time of the study.

3.12 Dissemination of results

The results have been presented to Faculty of Clinical Medicine and upon approval they will be disseminated to the following;

- Incharge Kabira Health centre III
- District Health Officer, Mitooma district.

CHAPTER FOUR

RESULTS

4.0 Introduction

In this chapter, the results of the study are described and the analysis of the data presented the results are derived from 148 respondents. The results describe the level of utilization of PNC services, socio-demographic variables, and knowledge of postnatal services and health system factors with utilization of postnatal services.

4.1 Demographic characteristics of the respondents

Table 1 below shows the socio-demographic characteristics of the respondents. According to the results, most of the respondents were aged between 20-24 years (37.8%) and least proportion was age over 35 years (3.4%).

Nearly half (43.9%) of the women had secondary school education while 30.4% and 25.7% of women had college and primary education respectively. Most of the respondents were Protestants by religion (63.7%), nearly a half (49.9%) of the respondents had two or three children. More than three quarters (75.6%) of the respondents were married.

Among the married women, most of them had secondary education 47% while 36.4% and 15.6% of the spouses had college and primary education respectively. Of the married women, most of their spouses were formally employed 40%, 33.5% were self-employed and 26.2% were in casual employment.

Table 1: Socio-demographic characteristics of the respondents (n=148)

| Respondents characteristics | Frequency | Percentage (%) |
|------------------------------------|------------------|-----------------------|
| Age categories | | |
| 15-19 | 23 | 11.5 |
| 20-24 | 56 | 37.8 |
| 25-29 | 47 | 31.8 |
| 30-34 | 17 | 11.5 |
| >35 | 5 | 3.4 |

| | | |
|-----------------------------------|-----|------|
| Highest level of education | | |
| Primary | 38 | 25.7 |
| Secondary | 65 | 43.9 |
| College | 45 | 30.4 |
| Marital status | | |
| Married | 114 | 77 |
| Single | 9 | 6.1 |
| separated/divorced | 25 | 16.9 |
| Religion | | |
| Muslim | 7 | 4.7 |
| Roman catholic | 52 | 35.1 |
| Protestants | 87 | 58.8 |
| SDA | 2 | 1.4 |
| Parity | | |
| 1 child | 22 | 14.9 |
| 2-3 children | 73 | 49.3 |
| >3 children | 53 | 35.8 |
| Spouses occupation | | |
| Self employed | 43 | 37.7 |
| Causal | 21 | 18.4 |
| Formal employment | 50 | 43.9 |
| Wealth status | | |
| Lowest | 53 | 36 |
| Middle | 70 | 47 |
| Highest | 25 | 17 |

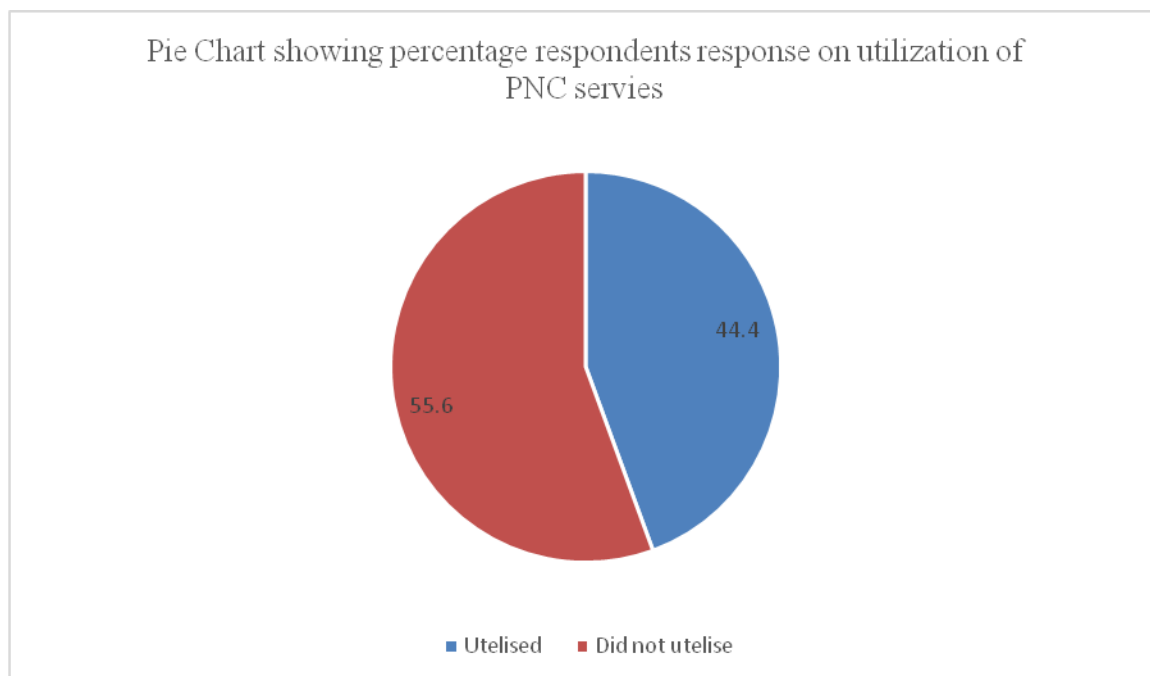
4.2 Utilization of PNC services

4.2.1 Uptake of PNC care services

Utilization of the PNC services was the dependent variable in this study. Interviewed Utilization of PNC services was looked at from two aspects; these are proportion of mothers to utilized

services and timing of the visits on the post natal period. In this study, a woman was deemed to have utilized services if she was attended to at the health facility at-least twice in the postnatal period (within 42 days). Women were categorized into two groups: Women who utilized PNC services and those who did not. From the study, 44.4% of the women interviewed were categorized as those that utilized PNC services, whereas 55.6% of women were categorized as those that did not utilize PNC services. Fig1 below shows graphically the utilization of PNC services in an FGD when mothers were asked about the frequency of Visits, a mother echoed, “*It is a waste of time for all those visits if the mother and her baby are all okay*”.

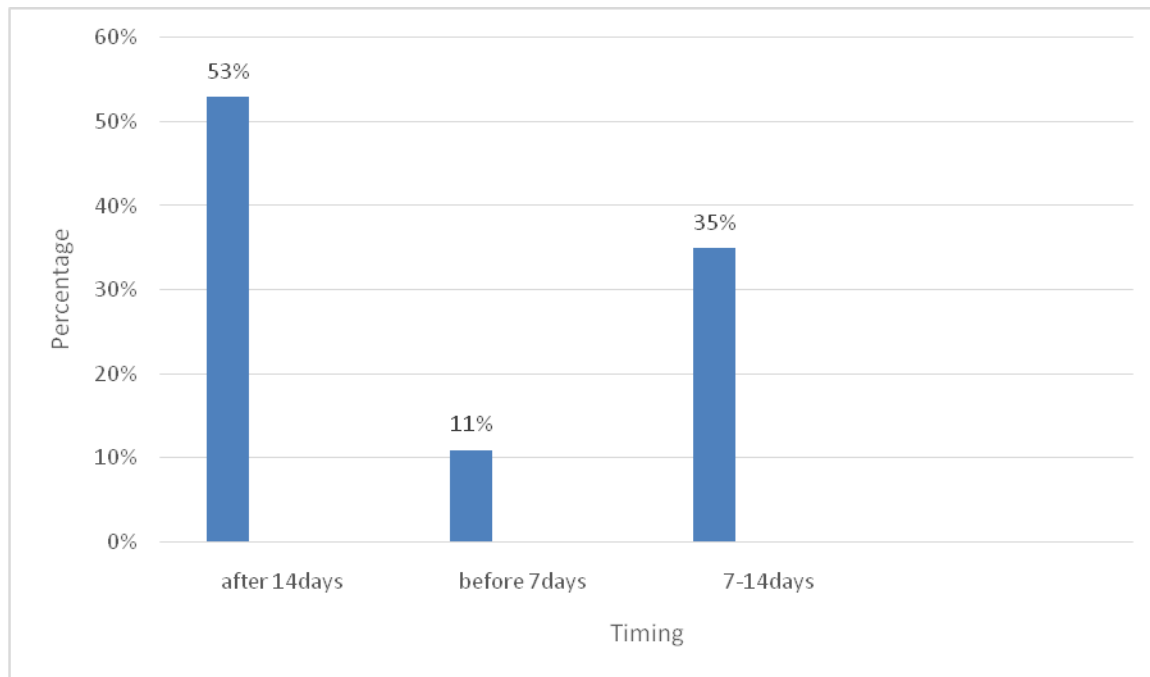
Figure 1: Percentage distribution of utilization of PNC services (n=148)



4.2.2 Timing of the first PNC visit

Mothers and the neonates are at a great risk of developing complications during the first week following delivery. Notably this study showed that over a half (53%) of the women sought for PNC services for the first time after more than 14 days post-delivery, while 11% and 35% within 7 days and between 7-14 days post-delivery respectively.

Figure 2: Percentage distribution of respondents according timing for attending PNC services after delivery (n=148)



4.2.3 Reasons for attending PNC services

Results showed that women attended PNC services for various reasons which ranged from general checkup, wellness of the baby and mother, child immunization and family planning among others needs. Because it was a multiple choice question, the mothers gave more than one and different reasons but the most mentioned reason (69.1%), mothers mentioned that they wanted to make sure the baby is well and least mentioned reason was seeking treatment services for the sick mother (7.2%).

This was captured in an FGD when a mother said *“I go to the health facility primarily for the baby’s health”* and another mother said, *“I take the baby at six weeks for immunization”*.

Table 2. Table showing the percentage of reasons why mother attend PNC services (n=148)

| Reason | Percentage (%) |
|-------------------------------------|----------------|
| Wanted to make sure baby was well | 69.1 |
| Wanted to be sure am back to normal | 58.4 |
| Wanted to start family planning | 11.2 |
| Was told by the nurse to come back | 17.7 |
| For baby immunization | 39.0 |
| Was un well | 7.2 |

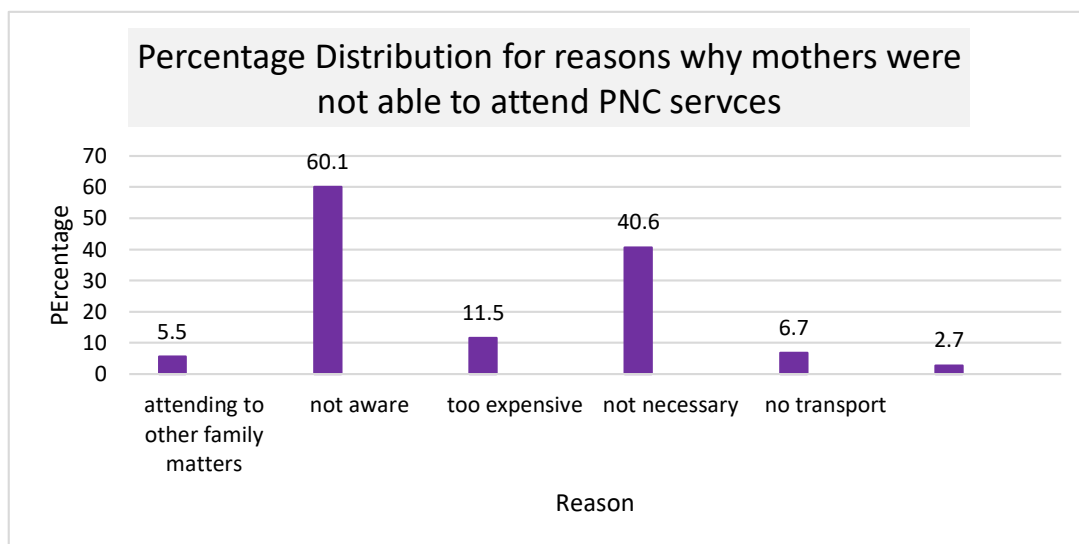
(Multiple selections)

4.2.4 Reasons for not attending PNC services

Among the women who didn't attend PNC services, lack of awareness of PNC services was highly mentioned by 60.1% as an inhibitive factor followed by the reasoning that the visit was unnecessary as both the mother and baby were well and all the other reasons ranged from 15.5% and 6.7%. This was a multiple choice question and the mothers gave more than one reason.

This is shown in the figure below during FGD one participant said, “Asking us to attend clinic two weeks after delivery is too early, one can hardly walk”.

Figure 3: Reasons for not attending PNC services(n=148)



4.3 Socio-demographic factors influencing utilization of PNC services

The association of these factors with utilization of PNC services was explored using variables such as age, level of education, marital status, women occupation, wealth status, religion, parity, spouse occupation and spouse education level.

4.3.1 Association between age and PNC utilization

This is showed in the table below; the proportion of women that utilized PNC services was highest at age's 24-25years at 83%.

Table 3: Association between age of respondent and PNC services utilization (n=148)

| Respondents Age | Utilization of PNC services (n=148) | |
|-----------------|-------------------------------------|------------------------------|
| | Utilized PNC services | Did not utilize PNC services |
| <19(=23) | 13(56.5%) | 10(43.5%) |
| 20-24 (n=56) | 36(64.3%) | 20(35.7%) |
| 25-29 (n=47) | 39(83.0%) | 8(17.0%) |
| 30-34 (n=17) | 9(52.9%) | 8(47.1%) |
| >35 (n=5) | 3(60%) | 2(40.0%) |

4.3.2 Association between education status and PNC service utilization

The majority of women who utilized PNC services had attained college level with (84.4)84.4%

Table 4: Association between education status of the respondent and PNC service utilization (n=148)

| Respondents level of education (n=148) | Utilization of PNC services | |
|--|-----------------------------|-----------------|
| | Utilized | Did not utilize |
| Primary level (n=38) | 18(47.4%) | 20(52.6%) |
| Secondary level (n=65) | 36(55.4%) | 20(44.6%) |
| College level (n=45) | 38(84.4%) | 7(15.6%) |

4.3.3 Association between religion and PNC utilization

Table 5: Association between religion of the respondent and PNC service utilization (n=148)

| Respondents religion (n=148) | PNC services utilization | |
|------------------------------|--------------------------|--------------|
| | Utilized | Not utilized |
| Muslim (n=7) | 3(42.9%) | 4(57.1%) |
| Catholic (n=52) | 20(38.5%) | 32(61.5%) |
| Protestant (n=87) | 42(48.3%) | 45(51.5%) |
| SDA (n=2) | 1(50%) | 1(50%) |

4.3.4 Association of marital status and PNC utilization

Among the respondents, the highest proportion of utilizers were married women 70% compared to un-married women at 20% and 10.7% respectively. This is related in the FGD finding where mothers reported that “those with husbands are more likely to visit the health facility because they can have someone to leave at home to attend to other family matters”.

Table 6: Association between marital status and PNC service utilization (n=148)

| Respondents marital status | Utilization of PNC services | |
|----------------------------|-----------------------------|--------------|
| | Utilized | Not utilized |
| Married (n=114) | 80(70%) | 34(30%) |
| Single (n=4) | 2(20.2%) | 7(77.8%) |
| Divorced (n=25) | 5(20%) | 20(80%) |

4.3.5 Association of parity and PNC utilization

Table 7: Association between parity of the respondent and PNC utilization (n=148)

| Respondents parity (n=148) | Utilization of PNC services | |
|----------------------------|-----------------------------|-----------------|
| | Utilized | Did not utilize |
| 1 (n=22) | 10(45.5%) | 12(54.5%) |
| 2-3 (n=73) | 36(49.3%) | 35(50.7%) |
| >4 (n=53) | 25(47.2%) | 28(52.8%) |

4.3.6 Association between Employment status and PNC services

A higher proportion of 32.7% of women on formal employment had utilized PNC services compared to those in self-employment (25.4%). The cross-tabulation of these variables showed presence of statistical association between the women's employment status and utilization of the services. During FGD, the mothers said, *“those in formal employment enjoy maternity leave and are therefore able to visit the health facility several times”, another one said “those in casual jobs do not have time to visit the health facility as often as may be required because they much attend to other family matters and some of them resume work within a week after delivery.*

Table 8: Association between employment status and PNC service utilization (n=148)

| Respondents employment status (n=148) | Utilization of PNC services | |
|---------------------------------------|-----------------------------|--------------|
| | Utilized | Not utilized |
| Self-employed (n=17) | 6(35.3%) | 11(64.7%) |
| Casual (n=31) | 17(45.2%) | 17(54.8%) |
| Formal employment (n=27) | 20(74.1%) | 7(25.9%) |
| House wife (n=73) | 41(43.8%) | 41(56.2%) |

4.3.7 Association between spouse's education and PNC utilization

Among the married women a higher proportion of women whose spouse attained secondary level of education utilized PNC services more (64.9%) compared to those whose spouse had college education (48.8%) or primary education (35.7%)

Table 9: Association between spouse's education level and PNC utilizations (n=148)

| Spouse's level of education | Utilization of PNC services | |
|-----------------------------|-----------------------------|--------------|
| | Utilized | Not utilized |
| Primary (n=14) | 5(35.7%) | 9(64.3%) |
| Secondary (n=57) | 37(64.9%) | 20(35.1%) |
| College (n=43) | 21(48.8%) | 22(51.2%) |

4.3.8 Association between wealth status and PNC utilization

Table 10 Association between wealth status of the respondents and PNC utilization (n=148)

| Wealth status (n=148) | Utilization of PNC services | |
|-----------------------|-----------------------------|--------------|
| | Utilized | Not utilized |
| Lowest (n=53) | 19(35.8%) | 34(64.2%) |
| Middle (n=70) | 36(51.4%) | 34(48.6%) |
| Highest (n=25) | 22(88.0%) | 3(12.0%) |

4.4 Health system factors

Factors that were examined under health systems were accessibility to the health facility, cost of care, place of delivery, 4th ANC visit and perceived quality of services.

4.4.1 Association between distance to the health facility and PNC utilisation

Table 11: association between distance to the health facility and PNC utilization (n=148)

| Distance to health facility (n=148) | Utilization of PNC | |
|-------------------------------------|--------------------|--------------|
| | Utilized | Not utilized |
| <6km (n=102) | 71(72.6%) | 31 (30.4%) |
| >6km (n=46) | 23(30%) | 23(50%) |

The table above shows that many mothers who utilized PNC services were coming at-least <6km to the health facility.

4.4.2 Association between mode of transport to the health facility and PNC utilisation.

Mothers were asked about mode of transport to the health facility and were categorized into 3groups. Those who walked, used public means or private transport. The proportion of those used public means was high compared to other means of transport (87%).

Table 12: Association between mode of transport to the health facility and utilization of PNC service

| Mode of transport to health facility | Utilization of PNC services | |
|--------------------------------------|-----------------------------|--------------|
| | Utilized | Not utilized |
| Walking (n=83) | 72(87%) | 11(13.3%) |
| Public transport (n=43) | 25(57%) | 18(43%) |
| Private transport (n=22) | 18(53%) | 10(47%) |

4.4.3 Association between place of delivery and utilization of PNC services

Mothers were asked about the place of last delivery and categorized into four groups, those who delivered from home, delivered by a TBA, private health facility, and government facility. This is depicted on the table below the proportion of women who utilized PNC services was high among those who delivered from the government health facility, followed by those who delivered from private health facilities, the by TBA and delivered from home respectively.

Table 13: Association between place of delivery and Utilization of PNC services (n=148)

| Place of last delivery | Utilisation of PNC services | |
|-----------------------------------|-----------------------------|--------------|
| | Utilized | Not utilized |
| Government health facility (n=77) | 62(80.5%) | 15(19.5%) |
| Private health facility (n=52) | 31(59.6%) | 21(40.4%) |
| TBA (n=16) | 7(43.8%) | 9(56.2%) |
| Home (n=3) | 1(33.3%) | 2(66.7%) |

4.4.4 Association between 4th ANC visit and Utilisation of PNC services

The table below shows the association between 4th ACN visit and utilisation of PNC services. An analysis revealed that a higher proportion of women who attended the 4th visit utilized the PNC services (94%) compared to those who had not completed the 4th ANC visit. Mothers stated that on the 4th ANC visit they received mother kits and a lot of counselling on PNC service attendance.

Table 14: Association between 4th ANC and utilization of PNC services (n==148)

| Those who attended 4 th ANC visit | Utilisation of PNC services | |
|--|-----------------------------|--------------|
| | Utilisation | Not utilized |
| Yes (n=110) | 103(94%) | 7(6%) |
| No (n=38) | 17(44.7%) | 21(55.3%) |

4.4.5 Quality of care and utilisation of PNC services

Women were asked questions which assessed perceived quality of care received during their most recent health visit. These questions included friendliness of health workers, availability of staff when needed, privacy maintained during examination, availability of medicines and reasonable health facility working hours. The clients were asked to write their experience from 1-5 representing very poor to very good services respectively. Nearly half of the women perceive quality services as poor (48.3%) while (32.0%) and (19.2%) perceived quality services as average and good quality respectively.

4.4.5.1 Quality of care studied

About 34.8% said that the staffs were friendly while 32.6% and 35% respectively reported that the staffs listened and are available. This was captured during the FGD session when participants reported that *“the nurses often report to work very late and keep them waiting very long and yet they have lots of work to do waiting at home”*. Another mother said, *“The nurses were very rude to me during delivery, I didn’t want to come back”*.

Table 15: Quality of care studied (n=148)

| Perceived quality of care (n=148) | Utilisation of PNC services | |
|-----------------------------------|-----------------------------|--------------|
| | Utilized | Not utilized |
| Good (n=63) | 38(60.3%) | 25(39.7%) |
| Average (n=44) | 27(61.4%) | 17(38.6%) |
| Poor (n=41) | 17(41.5%) | 24(58.5%) |

4.5 Women’s knowledge about PNC services

Women were asked several questions which assessed knowledge regarding PNC services. These questions included knowledge of breastfeeding counselling, mother health check, health check on a baby, immunization, family planning, and HIV counselling and nutrition guidance. The results were classified and very knowledgeable, average knowledge then low knowledge. A half

of the women were categorized as very knowledgeable 50% while nearly a quarter were categorized as average knowledgeable (24.7%) and low knowledgeable were (25.3%).

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter describes the discusses the study findings, makes sense of them (states the conclusions ad accordingly makes recommendations.

5.1 Discussion

5.1.1 Introduction

The study assessed utilization of PNC services and factors that influence its utilization. It was based on a sample size of 148 respondents. This chapter discusses the study results basing on the results closely referring to the literature available.

5.1.2 Utilization of PNC services

Less than half of women (44.4%) utilized PNC services, at Kabira HCIII in Mitooma district. Nationally 53% of mothers received postnatal checkup in the first 2days after their last live birth. This confirms that PNC services are poorly utilized especially in the maternal neonate continuum of care.

5.1.3 Socio-Demographic Determinants of PNC Utilization

The study has identified several socio-demographic factors that have important influence on PNC utilization. Education was significant and regression findings revealed that respondents who had completed college and secondary education utilized PNC services than those in the primary category. Similarly in Indonesia, Titaley and colleagues observed that maternal education had a profound effect on seeking medical care (Titaley et al. 2009). There are a number of explanations as to why education is a key determinant of health service use. Women who are highly educated have increased access to medical information and generally capacitated to make decisions or choices regarding their health seeking behaviors.

Indeed according to a study conducted in 2009, in Uganda showed that educated women are more likely to be financially independent, enjoy more autonomy within and outside the household and greater confidence to make decisions about their own and demand health care services.

Educated women are also likely to have improved knowledge and information on modern medical treatment and have greater capacity to recognize specific illnesses (Mulisho et al, 2009).

Awusi et al, (2009) reported similar results that respondents married to spouse with college education were likely to utilize PNC services; this is in line with the previous study.

Employment status was another determinant to the use of PNC services as more formally employed mothers used Postnatal services compared to their non-employed counterparts. From FGD's this was attributed to opportunity loss when mothers take him off from their daily work to attend clinic. Employment is synonymous with empowerment, which may affect families wealth status that in-turn motivates health service utilization. Wealth status was found to be a predictor of utilization of services with respondents from lower and middle class being less likely to be utilizers than those in the highest wealth status. These findings are consistent with finding by Wang et al, (2011), and (Izudi et al 2015) who reported that women from richer households were more likely to access PNC services. Other demographic features such as women's marital status, religion and parity, were not associated with utilization centrally to other findings (Mwanik, 2002), (Rullbock et al, 2008).

Mode of transport was a predictor of utilization of PNC services, those who walked to health facility were more likely to utilize the PNC services than those who use public and private means. Those who walked are likely to be coming from nearer the health facility and or do not spend on transport to attend PNC services bearing in mind that this is a predominantly a population with a low socioeconomic status.

5.1.4 Health system factors associated with PNC utilization

From the study distance to the health facility affected the utilization of PNC in that respondents who came from a distance of <6km were more likely to utilize PNC services (72.6%) compared to those who came from a distance of >6km.

Perceived quality of services was found to be predictive of PNC utilization with bias for good services. Respondents who rated services as good were 53% more likely to utilize the services compared to those who rates services as poor.

This is in line with other studies (Onah et al, 2006), (Mulisho et al, 2009, Kamau 2014), which highlighted that promptness of care, competence of health workers, desire for privacy, perceived

availability of equipment, friendliness of staff were all determinants of utilization of health services.

It was observed that where people have a choice between several facilities sometimes travel further is the target facility is perceived to offer superior quality care, (Gbrysch and Campbell, 2009). They further reported that where facilities are conveniently located, they are under used if their quality of services is considered bad. This was found to compare well with study as finding from the FGD showed that many women from the area travel to Kitagata hospital that reported to offer very good services.

Quality may have featured prominently in this study because of the high education level of the respondents. About 85% of the respondents who had attained college level of education utilized PNC services. It has been documented that people with more education are aware of their rights and demand quality services. (Titaley et al. 2009, Awusi et al, 2009)

5.1.5 Knowledge about and attitude towards Utilization of PNC utilization.

Knowledge of services was found to predict utilization, with those who rated PNC knowledge as poor being less utilizers. During FGD, it was evident that there was confusion about the frequency and components of PNC services among the women in the study population that could undermine prompt care seeking for mother and the baby. Low utilization of PNC has been rated to women's lack of knowledge about its importance and their lack of perceived need especially if they are feeling well (Rullbook et al, 2008). The majority of the mothers had an awareness of PNC services but did not know when they should seek for these services. From the results of this study, it can be concluded that mother's awareness about PNC services is more focused on the vaccination component than others.

Attitude towards care was also a predictor to service use; those with a positive attitude were more likely to utilize PNC services than those with a negative attitude. The fact that PNC was perceived to be unnecessary by women who were not sick demonstrates that these women do not recognize the importance of PNC for preventive health care, (Dhaher et al, 2009) reported that the most frequent reason for not obtaining PNC services was that women did not feel sick and therefore did not need PNC services, this has also been reported in other studies (Warren et al,

2009) that many women report that PNC services are for the children to receive vaccination and therefore wait to attend to the health facility only when vaccination time is due.

Women might ignore some of the negative health outcomes that can occur during puerperium may not be noticed early or initial signs therefore WHO 2013, recommends postnatal care for all women and infants including those who do not perceive any problem for the purpose of general assessment of both physical and mental wellbeing. There was perception that only women and neonates with health problems need to make effort to receive PNC services.

5.2 Conclusion

The study highlighted that utilization of postnatal care in the study area is (55.6%). The services were mainly accessed at or after 6 weeks. The socio-demographic determinants that were found to be predictive of utilisation of PNC services were level of education, household wealth status, and employment status. Health systems associated with PNC services were quality of care and delivery in a government facility, knowledge of PNC services and a positive attitude were also predictive of utilization of PNC services.

5.3 Recommendations

Based on the results of the study, the following recommendations were made.

- The MOH/health workers need to sensitize the communities on the importance of PNC services.
- The health care workers need to inform the clients about PNC service and schedule appointments.
- Quality of services in the facility needs to be improved and be responsive to the users.
- There is need to carry out a longitudinal study to confirm the variable that determine utilization of PNC services.

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APPENDIX ONE: QUESTIONNAIRE

Questionnaire number:..... (ID No).....

Date of interview

Date checked:.....

Area code:.....

My name is Nyamete Geoffrey Am conducting this research as part of my studies for the bachelor of medicine and surgery degree programme.

This questionnaire aims at obtaining information about the factors influencing utilization of postnatal care services. The information attained will only be used for the purpose of this study and is held confidential (please do not write your name).

Participation is voluntary and you can stop the interview at any time, however, I hope you will participate in this survey since your views are important.

| Socio Demographics | | | Code |
|--------------------|---|---|-----------------------|
| 01 | In which year were you born | Year | |
| 02 | What is your marital status | 1. Married (go to qn 3) 2. Never married 3. Separate/divorce | 1 2 3 |
| 03 | In what year was your spouse born? | Year | |
| 04 | What religion do you belong to? | 1. Moslem 2. Roman catholic 3. Protestant 4. None 5. Others (specify) | 1 2 3 4 5 |
| 05 | What is the highest educational level you attended? | 1. Primary 2. Secondary 3. Tertiary | 1 2 3 |

| | | | |
|------------------------|---|---|---------------------------------|
| | | 4. Others | 4 |
| 06 | What is your present occupation? | 1. Self employed 2. Casual 3. Formal employment 4. None | 1 2 3 4 |
| 07 | What is the highest education level your spouse attained? | 1. Primary 2. Secondary 3. Tertiary 4. Others | 1 2 3 4 |
| 08 | What is your spouse's present occupation | 1. Self employed 2. Casual 3. Formal employment 4. None | 1 2 3 4 |
| 09 | How many children do you have? | | |
| Background information | | | |
| 10 | Did you attend antenatal clinics during the last pregnancy? | | |
| 11 | How many times did you attend ante natal clinic? | | |
| 12 | Where did you deliver your last baby? | 1. Government hospital 2. Private hospital 3. Clinics 4. At home ` | Write name of facility |
| 13 | By what method did you deliver (mark one) | 1. Normal delivery 2. Cesarean section | |
| 14 | Who assisted you with the delivery of | 1. Health professional | 1 |

| | | | |
|-----|---|--|------------------|
| | your last baby? | 2. Traditional birth attendant s 3. Relative/friend 4. No one assisted | 2 3 4 |
| 15 | Did you go to the clinic during the 6 weeks after the child was born? | Yes No (go to q21) | 1 2 |
| 16 | Who gave information about attending clinic after delivery? | 1. Doctor 2. Nurse 3. Others (specify)..... | 1 2 3 |
| 17a | How many days after delivery did you go to clinic for the first time? | | |
| 17b | After that, when else did you go to the clinic? | | |
| 17c | Altogether how many times did you go to the clinic during the 6weeks following delivery? | 1. Once 2. 2times 3. 3times 4. >more than 3times | 1 2 3 4 |
| 18 | Why did you go to the clinic? (more than one could be marked if applicable) | 1. Because I was unwell 2. Because the baby needed immunization 3. Because the midwife had told me I should 4. Because I wanted to make sure I am back to normal (health check) | 1 2 3 4 |
| 19 | What stopped you from going to the clinic following child delivery? (more than one could be marked if applicable) | 1. Attending to other family matters 2. Not aware about services | 1 2 |

| | | | | | | |
|-----|--|---|---|---|---|---|
| | | 3. It is expensive | 3 | | | |
| | | 4. Did not think it was necessary as I was feeling well | 4 | | | |
| | | 5. No money for transport | 5 | | | |
| 20a | How far is here from the hospital? | Distance in km | | | | |
| 20b | How much do you pay for transport? | Ug shs | | | | |
| 20c | Did you have to pay any fee for the PNC services that you were provided in the hospital? | 1. Yes | | | | |
| | | 2. No | | | | |
| 20d | How much did you pay for services? | Ug shs | | | | |
| 21. | Quality care Think of previous visits to the hospital or clinic and rate the following statements, where 1 represents strongly disagree and 5 represents strongly agree. | | | | | |
| | | 1 | 2 | 3 | 4 | 5 |
| 21a | The staffs are friendly | | | | | |
| 21b | The staff listened to me | | | | | |
| 21c | There is privacy during examinations | | | | | |
| 21d | Medications are available | | | | | |
| 21e | The hours that the hospital is open are enough | | | | | |
| 21f | The hospital is clean | | | | | |
| 21g | The staffs are available when needed | | | | | |
| 22 | Knowledge of PNC services | | | | | |

| | | | | | | |
|-----|--|---|---|---|---|---|
| | Women are provided with services in the health facility in the 1 st 6weeks after delivery. Indicate to what extent you agree that the following services are available at the clinic, where 1 indicates strongly disagree and 5 strongly agree. | | | | | |
| | | 1 | 2 | 3 | 4 | 5 |
| 22a | Breast feeding counselling | | | | | |
| 22b | Health check on mother | | | | | |
| 22c | Health check on baby | | | | | |
| 22d | Vaccinations | | | | | |
| 22e | Family planning | | | | | |
| 22f | HIV counselling | | | | | |
| 22g | Nutrition counseling | | | | | |
| 23 | Attitude to PNC services From your opinion rate the following statements: where 1 indicates strongly disagree and 5 strongly agree | | | | | |
| | | 1 | 2 | 3 | 4 | 5 |
| 23a | It is recommended that women go to health facility after delivery | | | | | |
| 23b | Post natal services are useful to health of mother | | | | | |
| 23c | Post-natal services are important for the child's health | | | | | |
| 23d | You would attend post-natal services in future | | | | | |
| 23e | You would recommend the post-natal | | | | | |

| | | | | | | |
|--|---------------------|--|--|--|--|--|
| | services to others. | | | | | |
|--|---------------------|--|--|--|--|--|

APPENDIX II: KEY INFORMANT INTERVIEW GUIDE

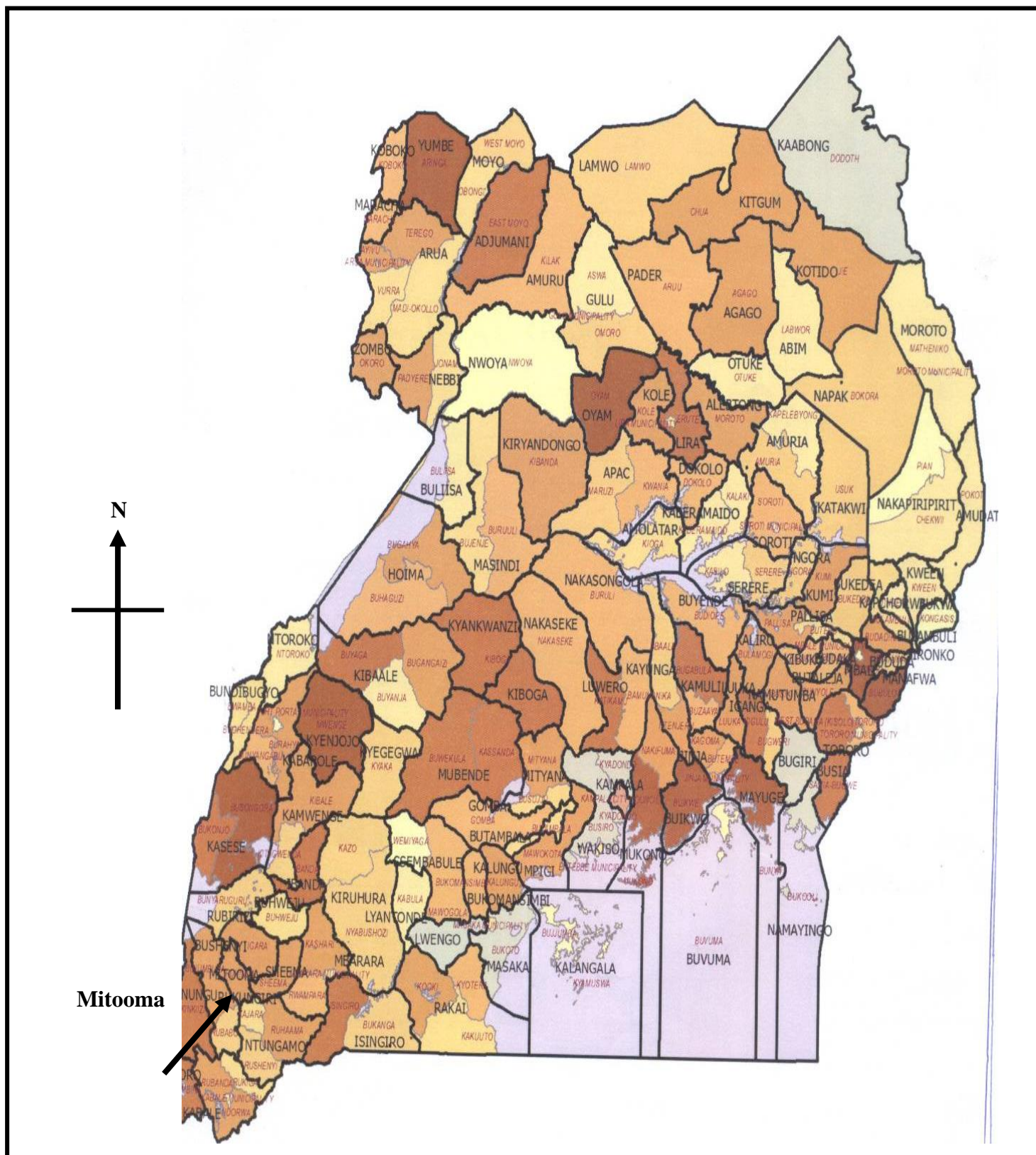
- 1) In your opinion what do you think are the barriers to uptake of postnatal services?
- 2) In your opinion what do you think promotes uptake of postnatal services?
- 3) Would you please tell me how caregivers are attended to the health facility during health visit for post natal services?

Probe for:

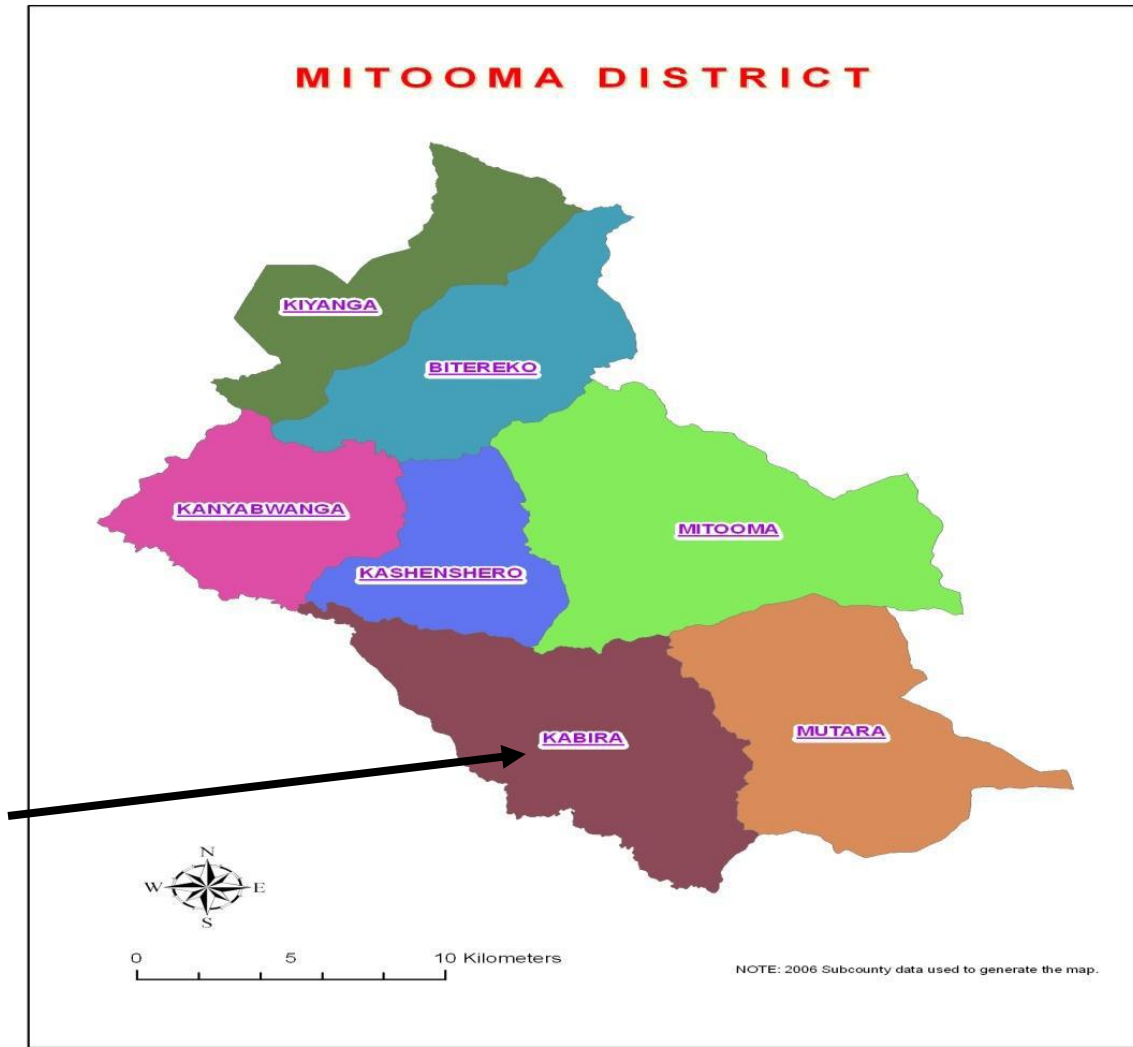
- a. Reception of caretakers at the health facilities;
 - b. Waiting time at the health facility;
 - c. Whether mothers were encouraged to keep coming for PNC services
5. What are your suggestions on how to improve uptake of postnatal services in your community?

THANK YOU FOR COOPERATION.

APPENDIX III: A map of Uganda showing location of Mitooma District



APPENDIX IV: MAP OF MITOOMA DISTRICT SHOWING SUBCOUNTIES



APPENDIX V: MORGAN'S TABLE

| Table 3.1 | | | | | | | | | |
|--|----|-----|-----|-----|---|------|-----|--------|-----|
| <i>Table for Determining Sample Size of a Known Population</i> | | | | | | | | | |
| N | S | N | S | N | S | N | S | N | S |
| 10 | 10 | 100 | 80 | 280 | 162 | 800 | 260 | 2800 | 338 |
| 15 | 14 | 110 | 86 | 290 | 165 | 850 | 265 | 3000 | 341 |
| 20 | 19 | 120 | 92 | 300 | 169 | 900 | 269 | 3500 | 346 |
| 25 | 24 | 130 | 97 | 320 | 175 | 950 | 274 | 4000 | 351 |
| 30 | 28 | 140 | 103 | 340 | 181 | 1000 | 278 | 4500 | 354 |
| 35 | 32 | 150 | 108 | 360 | 186 | 1100 | 285 | 5000 | 357 |
| 40 | 36 | 160 | 113 | 380 | 191 | 1200 | 291 | 6000 | 361 |
| 45 | 40 | 170 | 118 | 400 | 196 | 1300 | 297 | 7000 | 364 |
| 50 | 44 | 180 | 123 | 420 | 201 | 1400 | 302 | 8000 | 367 |
| 55 | 48 | 190 | 127 | 440 | 205 | 1500 | 306 | 9000 | 368 |
| 60 | 52 | 200 | 132 | 460 | 210 | 1600 | 310 | 10000 | 370 |
| 65 | 56 | 210 | 136 | 480 | 214 | 1700 | 313 | 15000 | 375 |
| 70 | 59 | 220 | 140 | 500 | 217 | 1800 | 317 | 20000 | 377 |
| 75 | 63 | 230 | 144 | 550 | 226 | 1900 | 320 | 30000 | 379 |
| 80 | 66 | 240 | 148 | 600 | 234 | 2000 | 322 | 40000 | 380 |
| 85 | 70 | 250 | 152 | 650 | 242 | 2200 | 327 | 50000 | 381 |
| 90 | 73 | 260 | 155 | 700 | 248 | 2400 | 331 | 75000 | 382 |
| 95 | 76 | 270 | 159 | 750 | 254 | 2600 | 335 | 100000 | 384 |
| <i>Note: N is Population Size; S is Sample Size</i> | | | | | <i>Source: Krejcie & Morgan, 1970</i> | | | | |