

**LEVEL AND FACTORS ASSOCIATED WITH UTILIZATION OF POSTNATAL CARE SERVICES
AMONG MOTHERS IN IGANGA GENERAL HOSPITAL**

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**A DISSERTATION SUBMITTED TO THE FACULTY OF PUBLIC HEALTH, NURSING AND
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**UGANDA CHRISTIAN
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DECLARATION OF AUTHORSHIP

I **Nakintu Betty** do declare that I am the author of this paper and to the best of my knowledge, this research entitled “Level and factors associated with utilization of postnatal care services among Mothers in Iganga hospital” is my own original research work and has never been submitted to this University for a reward of masters, degree or any qualification.

I also certify that this paper is prepared by me specifically for the partial fulfillment for the masters in public health leadership of Uganda Christian University.

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APPROVAL

This research work entitled “Level and factors associated with utilization of postnatal care services among Mothers in Iganga hospital” was supervised and approved by the Lecturer at Uganda Christian University, Mukono.

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Date: **9TH. OCTOBER 2023**

DEDICATION

I dedicate this research report to my mother Mrs. Beatrice Kintu Mutesi, my sons; Moses, Innocent, Derrick, my daughters; Dorcus and Rachel and my sister Milly.

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ACRONYMS

ACU	:	Antenatal Care Utilization
AHSR	:	Annual Health Sector Report
ANC	:	Antenatal care
BMC	:	Boston Medical Center
MDG	:	Millennium Development Goals
MCH	:	Mother and Child Health
MDG	:	Millennium Development Goals
MCH	:	Mother and Child Health
PNC	:	Postnatal care
UBOS	:	Uganda Bureau of Statistics
UDHS	:	Uganda Demographic and Health Survey
UNICEF	:	United Nation Children's Fund
WHO	:	World Health Organization

ABSTRACT

Introduction:

PNC is very critical for detection and management of complications in postpartum period for protecting maternal and child health unfortunately the PNC utilization is still low in Uganda. On average in Uganda postnatal care service utilization is lower at 54% and in Iganga hospital was estimated to be at 23% (AHSR, 2021).

Objective: The main objective of the study was to determine level and assess factors associated with utilization of postnatal care services among mothers within one week, at 2 weeks and 6 weeks in Iganga general hospital in Iganga general hospital.

Method: Analytical cross-sectional study design was used to collect quantitative data on the level and factors associated with PNC services at Iganga hospital. Data was collected using semi structured questionnaires for Young Child Clinic (YCC) services. A total of 177 participants were interviewed on socio-demographic characteristics, PNC services utilization and its associated factors. SPSS version was used to analyze the data.

Results: Bivariate and multivariate logistic regression models were fitted to identify factors associated with postnatal care utilization within one week, at 2 weeks and at 6 weeks at p value of < 0.05 . The study revealed that the level of PNC utilization was at 28% which is lower than the national average of 54%. The identified associated factors with significance were; lack of information on PNC at p-value of 0.001, Husband support at p-value of 0.002, health workers not providing a full PNC package at p-value 0.002 and lack of privacy at p-value of 0.010.

Recommendations:

Health providers should always educate pregnant women on PNC utilization during ANC visits as it prepares mothers to utilize the service and this improves health outcomes for both mothers and babies. Always provide privacy and offer a full PNC package to mothers and their babies in the postnatal unit.

Iganga Hospital and other health stakeholders in Iganga district should sensitize male spouses on the importance of PNC and to fully support their female spouses.

I also recommend for further research on PNC utilization in other districts of Uganda for appropriate inference and attract the attention of policy makers.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Globally in 2020, the maternal mortality ratio was 152 deaths per 100,000 live births up from 151 deaths per 100,000 live births in 2019 (www.gatesfoundation.org-report). These deaths are brought about by preventable causes related to pregnancy and childbirth; almost all these deaths (99%) occur in developing countries. Majority of maternal and neonatal deaths occur during child birth and the postnatal period. World Health Organization stresses that postnatal care (PNC) is the care given to the mother and her newborn baby instantly after the birth the placenta and for the first six weeks (42 days) of life. Missing PNC is very dangerous for not allowing discovery and management of problems in postpartum period, so relevant for protecting maternal and child health by preventing the majority of postnatal maternal and child deaths (Dansou et al.2017).

In Africa, Health Facilities are not visited by most mothers and their newborn babies after birth. This implies that post-natal services are among neglected agendas than all other reproductive and child health programs. The collective magnitude of postnatal care service utilization in sub-Saharan Africa countries were at 52.48%, with the highest PNC utilization in central region of Africa at 73.51% and the lowest PNC utilization in Eastern regions of Africa at 31.71% (Lake Yazachew et al 2020). The extent of postnatal care service utilization is very low, for example, 47% in Kenya, 41.2% in Nigeria, 43.53% in Tanzania, 43.5% in Zambia, 57.5 in Ethiopia and this is highly variable across sub-Saharan countries and unconvincing and requiring interventions.

In Uganda, Mothers die at an alarming and increasing rate, their Maternal Mortality Rate (MMR) has consistently is highest in the world with 440 deaths per 100,000 live births, according to the UNICEF's data. One woman out of every 49 die of maternal complication linked to pregnancy or delivery (UNICEF's report of 2019). The report specified that 63% of mothers and just 48% of newborns worldwide receive postnatal health check within the prescribed timeframe.

More so, almost all women (97%) receive antenatal care (ANC) from a skilled provider at least once during pregnancy, while the coverage of skilled birth attendance and postnatal care within 2 days is lower at 74% and 54% at six weeks respectively and yet postnatal care services are free in Government health facilities (World Bank Report, 2016). After

the second day the percentage of women seeking postnatal care deteriorates significantly (Uganda Bureau of Statistics and ICF 2018).

PNC offers an opportunity for women to discuss with provider's healthy behaviors such as exclusive breastfeeding, appropriate nutrition during breastfeeding, and use of effective family planning (Lawn et al. 2010), which are critical to maternal and child survival. For these reasons WHO endorsed the first postnatal visit within 24 hours of childbirth, and a minimum of three additional postnatal visits timed at 3 days (48-72 hours), 7-14 days, and 6 weeks after birth (WHO 2014). Nevertheless, less than a quarter of mothers and their newborns receive PNC within 48 hours of delivery in less advanced countries, however, use of postnatal care is still at very low levels (Akibu et al. 2018).

Despite the importance of PNC, the prevalence of postnatal care service utilization in Uganda was estimated at 57.5% by BMC study article, in the study on 27 Dec. 2018. This advocates that the postnatal period is relatively neglected in the continuum of care and hence creating a missing link in efforts to achieve safe motherhood by utilizing postnatal care services in Uganda. This prompted me to conduct a study to determine the level and factors associated with PNC utilization in Iganga Hospital.

1.2 Statement of the Problem

It is very necessary for all mothers who deliver to access postnatal care services from skilled health personnel, in health facilities of their choice, however, on average in Uganda postnatal care service utilization was low at 54% and in Iganga hospital it was estimated lower at 23% (AHSR, 2021). Inadequate care during postnatal period may result in death or disability as well as missed opportunities to promote healthy behaviors, affecting women, newborns, and children. Iganga district's Maternal Mortality Rate (MMR) was 390 yet the national was 336 (Kharim 2017). Majority of maternal and neonatal deaths occur during child birth and the postnatal period. Low utilization of PNC is among the factors contributing to the high MMR in Uganda and in particular Iganga district of 390 (Kharim 2017). Therefore, in this study we aimed at exploring the Level and factors associated with utilization of PNC services in Iganga hospital in 2022.

1.3 Purpose of the Study

The purpose of this study was to determine the level and identify factors associated with utilization of postnatal care within one week, week 2 and at 6 weeks among puerperal mothers in Iganga general Hospital in Iganga district. In some studies, findings suggested

that puerperal mothers who were expected to go for postnatal services at any hospital of their choice; it was influenced by factors like age, socio-economic backgrounds or educational levels, residence, place of birth and others. So the researcher investigated and found out that PNC utilization was significantly low and identified associated factors which were similar to the previous researchers. The findings were shared with stakeholders to streamline the interventions to improve on the PNC Utilization hence quality of life for mothers and their newborns

1.4 Main objective of the study

The main objective of the study was to determine the level and factors associated with utilization of postnatal care services within one week, at 2 weeks and 6 weeks after birth among mothers in Iganga general hospital.

1.4.1 Specific Objectives of the Study.

This study was guided by the following research objectives:

1. To determine the level of postnatal care utilization within one week, at 2 weeks and at 6 weeks among mother attending care at Iganga general hospital.
2. To identify the factors associated with utilization of postnatal care within one week, at 2 week and at six weeks among mothers in Iganga general hospital.

1.4.2 Research Questions

This study was guided by the following research questions

- 1) What is the level of postnatal care utilization within one week, at 2 weeks and at 6 weeks among mothers attending care at Iganga general hospital?
- 2) What are the factors associated with utilization of postnatal care services within one week, at 2 weeks and at six weeks among mothers attending care in Iganga general hospital?

1.5 Scope of the Study: this was divided into content scope, geographical scope and time scope as presented below;

1.5.1 Content Scope

This study was carried out to investigate and determine the Level and factors associated with utilization of postnatal care within one week, at 2 weeks and at six weeks among puerperal mothers in Iganga Hospital in Iganga district. It provides both preventive and curative services with lots of infrastructural and staff challenges. Iganga hospital

serves the entire population of Iganga district and the surrounding districts like Luuka, Kaliro, Namutumba, Bugweri, Bugiri and Mayuge. Amazingly out of all the mothers who deliver from these areas, only a smaller proportion utilizes the postpartum care and hardly complete the four postpartum care visits. Therefore, the Researcher was interested in determining the level and identifying knowledge, social and economic factors affecting utilization of postnatal care services in Iganga Hospital.

1.5.2 Geographical Scope: This study was conducted in Iganga general hospital, and it's also commonly known as Nakavule Hospital in Iganga municipal council in Iganga district. Iganga Hospital is a 100-bed government-owned hospital and was built in 1968. Iganga hospital is located along Iganga-Tororo high way about 40 kilometers northeast of Jinja Regional Hospital, Busoga region, Eastern part of Uganda. Iganga district is boarded by Kaliro district in the north, Namutumba district in the northwest, Mayuge district in the south, Bugweri district in the east, Jinja district in the southwest and Luuka district in the west. Iganga District has Iganga general Hospital, 2 HCIVs, 15 HCIIIs and 40 HCIIIs.

1.5.3 Time Scope;

The time scope for this study was from September to October 2022, though it was supposed to be completed in 2021 but due to Covid-19 pandemic, the time extended to 2022.

1.6 Justification

Majority of maternal and neonatal deaths occur during childbirth and the postpartum period. Globally, an average of 830 women die every day from preventable causes related to pregnancy and childbirth; of these deaths, almost all (99%) occur in developing countries (Alkema et al. 2013, WHO et al.2015). More than 60% of global maternal deaths occur in the postpartum period. Scaling up of maternal and newborn health through proper postnatal care services is the best way of reducing maternal and neonatal mortality. Uganda like any other Sub-Saharan country has the least PNC coverage with Busoga Region 38.9% Therefore, this justified the need to conduct a study on the level and factors associated with utilization of PNC among puerperal mothers with babies of 8 weeks to 12 months in Iganga general hospital.

1.7 Significance

The findings of this study will be used for practicing purposes to improve on the quality of health care among postpartum mothers and their newborns by the health workers. The

recommendations when adopted will influence change in health institution's emphasizing the importance of postnatal care to ensure that mothers are booked and served appropriately. The policy and decision-makers will also use the findings to strategize or align maternity services to achieve safe motherhood by advocating for male involvement. More so, in relation to practice, supervisors of midwives and Obstetricians will ensure that mothers are advised on PNC importance, timely booked and served as this contributes to increased chances of mother and child survival.

1.8 Conceptual Framework

The conceptual framework for this study is shown in Figure 1.

Andersen's Behavioral Model of health service utilization provided a relevant framework for understanding factors that shape use of postnatal care (Andersen 1995). The framework proposed that use of health care services, including postnatal care, was a function of some sets of characteristics;

Predisposing characteristics, such as age, religion, wealth, and marital status (Babalola and Fatusi 2009; Izudi et al. 2017; Akibu et al. 2018; Rutaremwa et al. 2015; Mohan et al. 2015).

Enabling characteristics, such as ANC attendance and distance to a health facility (Babalola and John 2012; Dahiru and Oche 2015; Rutaremwa et al. 2015); and

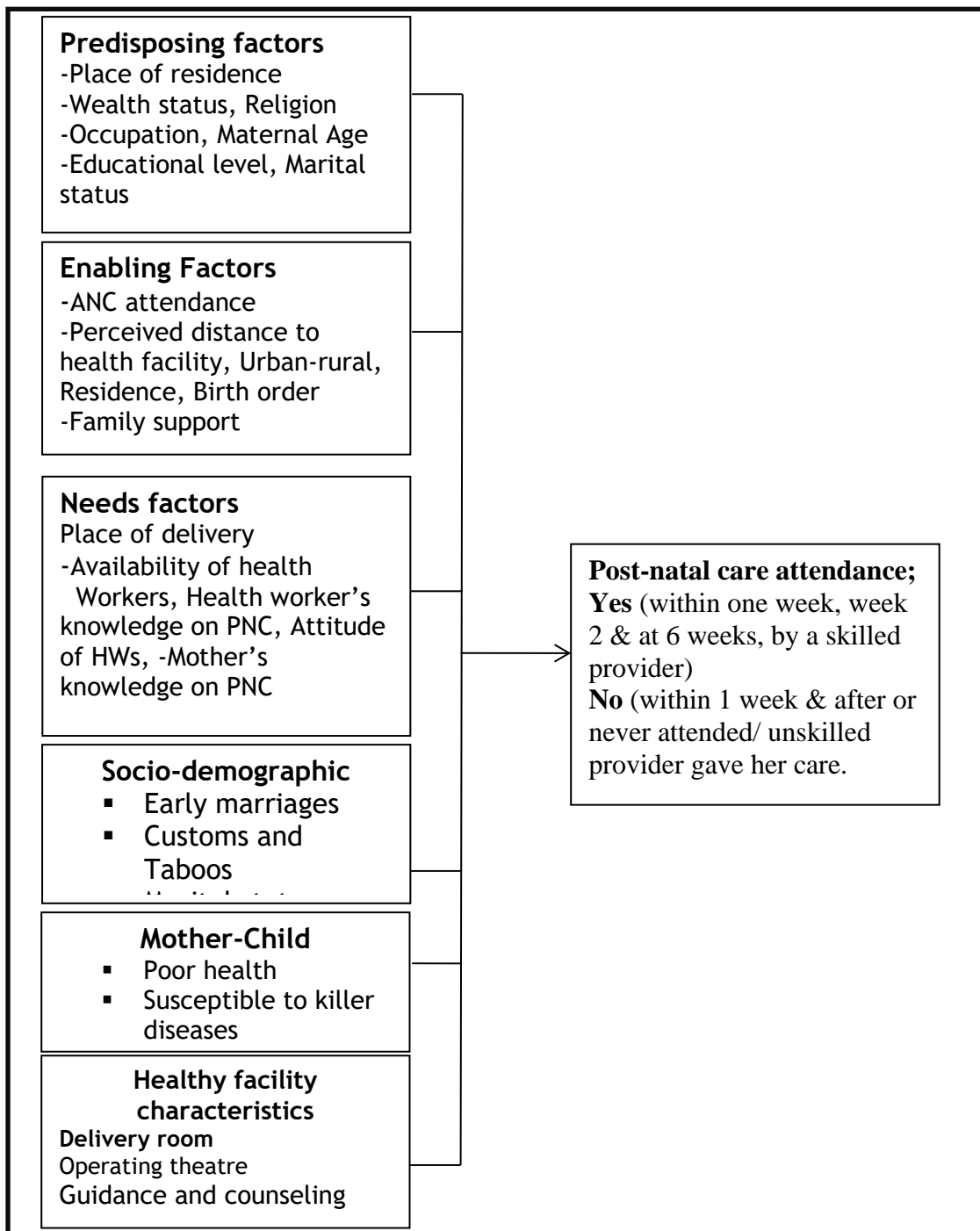
Need characteristics, such as place of delivery and size of the baby at birth (Akibu et al. 2018; Mohan et al. 2015).

Socio-demographic characteristics like early marriages, Customs and Taboos and Marital status.

Mother-child characteristics: Poor health Susceptible to killer diseases

Health facility characteristics: private delivery rooms, an operating theatre, water wells, and even a chapel and clinic to serve the greater community.

FIGURE 1: CONCEPTUAL FRAMEWORK FOR POSTNATAL CARE ATTENDANCE



Adapted from Andersen, 1995:

It represents professional judgment about people's health status and their need for medical care.

1.8 Narrative of the conceptual framework; an individual's access to and use of health services is considered to be a function of three major characteristics:

Predisposing Factors: The socio-cultural characteristics of individuals that exist prior to their illness just as outlined below;

Social Structure: Education, occupation, ethnicity, social networks, social interactions, and culture.

Health Beliefs: Attitudes, values, and knowledge that people have concerning and towards the health care system, **Demographic:** Age and Gender.

Age factors can influence postnatal care attendance through several pathways. For example, older maternal age may lead some women to believe that postnatal care attendance is not critical for optimal health outcomes due to confidence gained from previous pregnancies and births (Ayanore et al.2016).

In contrast, younger women might have better knowledge of maternal health care services due to improvements in educational opportunities for women in recent years, leading to more use of PNC.

Religion is important in shaping beliefs, norms, and values related to the use of maternal health care services, and may either hinder or facilitate women's use of PNC. For example, a study conducted in Ethiopia found that Muslim women were less likely to seek maternal health care compared with other religious groups (Woldemicael and Tenkorang 2010).

Low rates of maternal health service utilization in developing countries have been attributed in part to low levels of involvement in maternal health among Muslim men. Studies by Mosiur Rahman et al. (2011) in Bangladesh and Ganle (2015) in Ghana found that most Muslim women required permission from their husbands before pursuing activities outside the home, including seeking maternal services at health facilities. Employment can increase women's financial ability to use good-quality medical care and can empower women to take part in the decision-making process about their own health care, Izudi and Amongin (2015); Chakraborty et al. (2002).

Wealth status has been hypothesized to affect postnatal care attendance, particularly among women. Some women who deliver at home would like to seek postnatal care services immediately after childbirth but lack the resources to do so because these services are often expensive, Somefun and Ibisomi (2016); Amin et al. (2010); Mosiur Rahman et al. (2011). **Personal/Family:** The means and know how to access health services, income, health insurance, a regular source of care, travel, extent and quality of social relationships.

Enabling Factors: The logistical aspects of obtaining care. ANC visits provide an excellent opportunity for providers to deliver adequate counseling regarding the postnatal danger signs and symptoms, enhancing women's knowledge of possible postpartum complications and the benefits of PNC services, Joshi et al. (2014). Hence, women who attend the four or more antenatal care visits recommended by WHO are more likely to use PNC compared with women who attend fewer than four visits, Somefun and Ibisomi (2016).

Need Factors: The most immediate cause of health service use, from functional and health problems that generate the need for health care services. "Perceived needs will better help to understand care-seeking and adherence to a Medical regimen, while evaluated need will be more closely related to the kind and Amount of treatment that will be provided after a patient has presented to a medical care provider." (Andersen, 1995)- Perceived: "How people view their own general health and functional state, as well as how they experience symptoms of illness, pain, and worries about their health and whether or not they judge their problems to be of sufficient importance and magnitude to seek professional help. Evaluated: "Represents professional judgment about people's health status and their need for medical care." (Andersen,1995). These are factors like knowledge of PNC, availability of health worker and positive attitude of Health workers. It is essential for health workers to be knowledgeable and able provide information to women about PNC services as in regards to what it is, why it is important and the services offered. Full information regarding PNC will enable women to make informed decisions about utilizing the MCH services. The Adelaide conference in Australia on public health policy for the promotion of women's health, recommended that, women should have access to information network and funds to enable them to effectively participate in issues concerning their health. All women have the right to self-determination about their health and should be partners in the formulation of public health policy so that it is culturally relevant and acceptable (WHO, 1991).

Women who deliver at home may be particularly concerned about the distance to a health facility, thus affecting their use of PNC, Somefun and Ibisomi (2016). Health worker's knowledge and attitude also contribute much to utilization of PNC and this can be achieved if health workers are well equipped with knowledge and portraying a positive attitude in all health facilities. Furthermore, need factors also influence women to use PNC services. Need factors, are known to pose risks to women and newborns and may influence women to seek early postnatal care. For example, women who deliver at a

health facility are more likely to receive early postnatal services compared with home deliveries (Somefun and Ibisomi 2016; Ononokpono et al. 2014).

1.9 Operational definition of key terms

Post-natal care (PNC) is care given to the mother and her new born baby immediately after the birth of the placenta and for the first 42 days of life.

Utilization is the action of making practical and effective use of something.

Postnatal period is the period of first six weeks after birth and is critical to the health and survival of a mother and her new born.

Maternal mortality is the death of a mother due to conditions related to pregnancy and child birth within the 42 days.

Puerperium is the period of about six weeks after child birth during which the mother's reproductive organs return to their original non-pregnant condition.

Puerperal mothers are mothers in the puerperium period or in the six weeks after delivery their babies.

1.10 Summary of Chapter One

On average, in Uganda postnatal care service utilization is lower at 54% and in Iganga hospital it was estimated to be at 23% (AHSR, 2021). Limited care during postnatal period may result in death or disability as well as missed opportunities to promote healthy behaviors, affecting women, newborns, and children.

More so, PNC service utilization plays a critical role in reducing maternal mortality, but a little is known about its determinants in Iganga Hospital. Thus, understanding the level and factors associated to PNC utilization is critical for countries like Uganda with a high maternal mortality ratio of 336 and for Iganga district is 390. I adapted a conceptual framework from Andersen, 1995 and the study aimed at investigating to determine the level and factors association with utilization of postnatal care services within one week, at 2 weeks and at 6 weeks among women in Iganga general hospital.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This part reviewed literature related to this study which was put down by different scholars and researchers to see whether there were some gaps that required for further study. Review of this literature was based on the research objectives which were to determine the level of postnatal care utilization and to establish factors associated with utilization of postnatal care among mothers attending care within one week, week 2 and at six weeks in Iganga hospital.

According to World Health Organization (WHO), 289,000 women die from complications related to pregnancy, labor and delivery, and the postpartum period every year. Average of 830 women die every day from preventable causes related to pregnancy and childbirth, worldwide. According to Alkema et al. (2013) and, WHO et al.(2015) out of deaths that occur in the world, almost all (99%) occur in developing countries. WHO (2014) deposit that more than 60% of the world's maternal deaths happen in the postpartum period demarcated by the World Health Organization (WHO) as the period beginning 1 hour after the delivery of the placenta and continuing until 6 weeks (42 days) after delivery.

Globally, over 65% of maternal deaths befall during the postpartum period; in the first 42 days after delivery yet according to UNICEF's brief report of 2019, 63% of mothers and 48% of newborns globally receive a postnatal health check within the prescribed timeframe. The Ugandan MMR is 336 (bmc pregnancy child birth 20, 686 2020). WHO/SDG's target by 2030 is to decrease the global MMR to be below 70 per 100,000 live births. In Uganda the estimate for PNC attendance is at 57.5%. This implies that post-natal services are among neglected agendas than all other reproductive and child health programs. Although women may die at any time during the postpartum period, research has estimated that maternal mortality is extremely high within the first 2 days of childbirth.

According to Maswime and Buchmann (2016) stressed that in Johannesburg, South Africa, a retrospective study of maternal deaths in health facilities found that, of the 17 maternal deaths that occurred within 42 days of caesarean births, 13 (76%) occurred within the first 2 days of delivery. Related to Maswime, Barnett et al. (2008) found out

that nearly half (48%) of maternal deaths among Indian women occurred within the intrapartum period and up to 48 hours after delivery. These deaths are mainly a result of complications such as postpartum hemorrhage leading cause of maternal mortality in developing countries, hypertensive disorders, prolonged or obstructed labor, and puerperal sepsis (Say et al. 2014).

The World Health Organization (2014) commends that after an uncomplicated vaginal birth in a health facility, healthy mothers and newborns should receive care in the facility for at least 24 hours' after birth. WHO suggests further that mothers who deliver from home should have postnatal contact as early as possible within 24 hours of birth. At least three additional postnatal contacts are recommended for all mothers and newborns, on day 3 (48-72 hours), between days 7-14 after birth, and six weeks after birth.

UBOS and ICF (2018) noted that 64% women received early postnatal care for those who delivered from health facilities and only 9% among women who delivered from home, It indicated in the same report that only 23% of the mothers who had had live births received postpartum care within the critical first two days after delivery; and overall 74% of the women did not receive postpartum care at all. And that after the second day, PNC declines significantly yet postnatal services were available and nearly free in most of public hospitals and health centers in Uganda. However, it was also noted that each facility operated according to its own regulations, rules and conditions of services depending on the availability of resources.

Despite the fact that postnatal services existed in most of the Hospitals and Health Centers in Uganda, each facility operated according to its regulations, rules and conditions of services depending on the resources. However, I had a great concern about the small number who turned up for these services. Uganda's targets do not directly address postpartum care as major component of maternal health, yet there is sufficient evidence to show that postpartum care use is very low. It was reported that 23% of the mothers who had had live births received postpartum care within the critical first two days after delivery; and overall, 74% of the women did not receive postpartum care at all (UBOS, 2018).

2.2 Level of postnatal care utilization within one week, week 2 and 6 weeks among mother attending care.

World Health Organization (WHO, 2015) defined postnatal care as a care given to the mother and her newborn baby immediately after the birth of the placenta and for the first 42 days of life. Majority of Maternal and Neonatal deaths occur during childbirth and the postpartum period.

WHO commends that after an uncomplicated vaginal birth in a health facility, healthy mothers and newborns should receive care in the facility for at least 24 hours' after birth. If birth is at home, the first postnatal contact should be as early as possible within 24 hours of birth. At least three additional postnatal contacts are recommended for all mothers and newborns, on day 3 (48-72 hours), between days 7-14 after birth, and six weeks after birth (WHO 2014).

According to UNICEF (2019), 63% of mothers and just 48% of newborns worldwide receive a postnatal health check within the prescribed time frame. In Africa, health institutions are not visited by most mothers and newborns after birth. This implies that post-natal services are among neglected agendas than all other reproductive and child health programs.

Maswime and Buchmann (2016) who conducted research in Johannesburg, South Africa, found out that, of the 17 maternal deaths that occurred within 42 days of caesarean births, 13 (76%) occurred within the first 2 days of delivery. These deaths are mainly a result of complications such as postpartum hemorrhage—a leading cause of maternal mortality in developing countries, hypertensive disorders, prolonged or obstructed labor, and puerperal sepsis in the postpartum period (Say et al. 2014)

The pooled magnitude of postnatal care service utilization in sub-Saharan Africa countries were at 52.48%, with the highest PNC utilization in central region of Africa at 73.51% and the lowest PNC utilization in Eastern regions of Africa at 31.71% (Lake Yazachew et al 2020). The magnitude of postnatal care service utilization is very low, for instance, 47% in Kenya, 41.2% in Nigeria, 43.53% in Tanzania, 43.5% in Zambia, 57.5 in Ethiopia and this is highly variable across sub-Saharan countries and unconvincing and requiring interventions. In Uganda almost all women (97%) receive antenatal care (ANC) from a skilled provider at least once during pregnancy, while the coverage of skilled birth

attendance and postnatal care within 2 days is lower-at 74 and 54% respectively. On average 64% women received early postnatal care for those who delivered from health facilities and only 9% among women who delivered from home, UBOS and ICF (2018). It is indicated in the same report that only 23% of the mothers who had had live births received postpartum care within the critical first two days after delivery; and overall 74% of the women did not receive postpartum care at all. Postnatal or postpartum care is incredibly important for an array of reasons. They go a long way toward protecting the health of the new born baby and the mother during the vulnerable time after giving birth. Quality PNC services are provided to the possible escalation of health complications to mother and baby.

In Uganda the impact of low coverage of EPNC is reflected as high maternal mortality (336 maternal deaths per 100,000 live births) (Uganda Bureau of Statistics and ICF 2018). Given the urgent need to reduce maternal mortality rate to 320 maternal deaths per 100,000 by 2019/20, as outlined in Uganda's Health Sector Development Plan 2015/16-2019/20, providing appropriate postnatal care within the first 2 days following childbirth has the potential to dramatically avert maternal deaths through early identification of postnatal danger signs.

Scaling up of maternal and newborn health through proper postnatal care services is the best way of reducing maternal and neonatal mortality. But most research studies show that the prevalence of PNC is unacceptably low; Analysis of the 2016 Uganda Demographic and Health Survey Data was done in Uganda and findings came out showing that 50% of mothers used EPNC services for their most recent delivery in the 2 years preceding the survey and that the associated factors were; Women's residence, education level, religion, wealth status, marital status, occupation, antenatal care (ANC) attendance, place of delivery, birth order perceived accessibility of health facilities, and access to mass media messages were associated with greater use of EPNC.

With UDHS (2016) women in urban areas were more likely to use EPNC than women in rural areas, at 63% versus 46%. Nearly two-thirds of the women with secondary education or higher (64%) received EPNC compared with less than half of women with no education (47%) and women with a primary education (44%). This analysis was for only Early PNC yet some studies revealed that PNC attendance declines significantly after the second day of birth. Utilization of PNC after childbirth presents a high risk of dying for a mother, so

providing postnatal care within the first two days after childbirth and subsequently can help avert maternal mortality because it allows early detection of problems that could result in adverse maternal health outcomes. Unfortunately, knowledge on the uptake of early (EPNC) and subsequent postnatal care, which are imperative for informing policies aimed at reducing maternal mortality, remains low in Uganda. Yet in Busoga Region where Iganga District is found, it is worse. Therefore, the purpose of this study was to investigate and determine the Level and factors associated with the utilization of PNC services among puerperal mothers in Iganga Hospital.

2.3 Factors associated with utilization of postnatal care within one week, week 2 and at six weeks among mothers.

WHO (2014) states that Postnatal care (PNC) is the care given to the mother and her newborn baby(s) immediately after the birth of the placenta and for the six weeks of life (42 days). Postnatal period is a time of increased death risk for mothers and their babies. Most Maternal and infant deaths occur in the first month after birth: almost half of Post-natal maternal deaths occur within the first 24 hours and 66% occur during the first week. Although for most women and babies the Post Natal period is uncomplicated, its effectiveness is also about recognizing any deviation from expected recovery after birth, evaluating and intervening appropriately in a timely manner.

WHO (2014) says further that during post-natal care, these are the important conditions to inquire; any excessive post-natal bleeding, puerperal pyrexia, puerperal sepsis, involution of the uterus, breast complications which includes breast, mastitis, cracked nipple, and breast abscess. It as well includes the postnatal counseling, nutrition education, among others. This period makes the establishment of a new phase of family life for women and their partners and beginning of the lifelong health record for newborn babies (Neonates-a term used by doctors, nurses and midwives. Maternal health is a persisting challenge; post-natal complications are considered maternal health problems that should be addressed. Majority of maternal and neonatal deaths occur during child birth and the post-partum period. The reason why we should focus on post-natal period is that this is a critical time for a mother and her new born baby(s). Some Researchers and Scholars found out the following on the factors associated with utilization of postnatal care services:

According to Dahiru and Oche (2015) place of residence (rural or urban) is also a variable that may affect the use of PNC. Urban residents generally live closer to health care facilities than their rural counterparts. Studies have indicated that geographical distance to a health facility is closely associated with health service utilization.

Additionally Mrisho et al. (2009) says that women residing in rural areas are less likely to utilize postnatal care services than their urban counterparts. This statement is consistent with findings in Ethiopia by Mekonnen & Mekonnen, (2002). Accessing a health service may be facilitated by the location and distance of the facility. If the locality of the facility is near the residence of clients and if there is efficient transport to the health facility may enhance the utilization of health services (Kaufman, 2002).

Myriad studies in Uganda and elsewhere in Sub-Saharan Africa (SSA) have identified physical or geographical access to health care as major factor for women not to seek delivery services from formal hospitals specifically (Kasolo et al.; 2000). Other researchers have explained that urban women have many advantages over their rural counterparts which may influence their postnatal care use. These advantages include; higher levels of knowledge, access to services and health care promotion programs that use urban-focused mass media (Ezeonwu, 2011; Koblinsky et al., 2006; Singh et al., 2011).

Anwar et al., (2008) and Mrisho et al., (2009) stipulated that place where mothers give birth usually indicates whether or not the birth was attended to by skilled birth attendants. More than one half of Nigerian babies die at home. According to the 2008 NDHS, at least 62% of births occur at home, while only 35% take place in a health care facility and there had been no significant increase in facility births over the five years preceding the survey. Health care facility delivery and assistance of delivery by healthcare workers are two of the factors that have been found to be associated with the increased utilization of postnatal care services. For instance, a nationally representative study in Nepal found that place of delivery was independently associated with postnatal check-up within 2 months of delivery (Neupane and Doku, 2013).

Another study in Nepal which was community-based also discovered that mothers who had delivery assisted by healthcare workers and had their delivery at a health care facility were more likely to utilize early PNC service than their counterparts who did not (Paudel et al.,2013). Similarly, Mwaniki et al.(2002) conducted a cross sectional

descriptive study on a sample of 200 mothers to determine the utilization of postpartum care services and maternity service in four rural health centers in Mbeere district, Kenya.

The findings of the study revealed that utilization of health facilities was significantly influenced by the distance to the health facilities. In addition, the mothers who were living in a distance less than 5 kilometers to the health facilities utilized the services better than those who lived in a distance 5 kilometers away and beyond. Other reasons for not utilizing the services, which were mentioned in the study include, lack of satisfaction with the quality of the services, lack of cleanliness in the health facilities, poor quality of catering services, lack of money for transport and hospital fee.

Maternal Age; Age factors can influence postnatal care attendance through several pathways. For example, older maternal age may lead some women to believe that postnatal care attendance is not critical for optimal health outcomes due to confidence gained from previous pregnancies and births (Ayanore et al.2016).In contrast, younger women might have better knowledge of maternal health care services due to improvements in educational opportunities for women in recent years, leading to more use of PNC.

Marital status; Married women may have support from their partners and are therefore more likely to attend EPNC compared with unmarried women (Angore et al.2018).

Religion; Commonly held beliefs and norms in form of religious practices shape the way women perceive their own health and their response to the health services available. Religion has an important role in the utilization of postnatal care services. Religion helps in shaping beliefs, norms and values (Stephenson et al., 2006). These values or beliefs that women hold may prevent women from utilizing. Religious belief has been found to be a push factor or source of exclusion from maternal health care utilization in India and Africa (Stephenson et al., 2006; Ochako et al., 2011; Rahman et al., 2011).

Study conducted in a peri-urban town in Zimbabwe revealed that religion (apostolic faith) was associated with non-utilization of postnatal care services, because the women believed in faith healing and prefer traditional midwives. It has also been found that non-Catholic women were less likely to use maternal healthcare in Ghana, whilst Catholic women were less likely to utilize maternal healthcare in Kenya when compared

to Protestants (Stephenson et al., 2006). This shows that religious affiliation is strong as it is usually a community head belief (Muchabaiwa et al., 2012).

Wealth Status; In Nigeria, the lack of finance emerged as the major issue among women who did not fulfill the minimum requirements of four antenatal care services or two postnatal care services within the first month after delivery. This was related to the cost of health services, transportation costs, or both. Also, the limited availability of health services in remote areas was a problem, especially if the village midwife frequently travelled out of the village. In addition to the long distances away from health facilities, the poor condition of the roads was a major concern for pregnant mothers or mothers who had just given birth, particularly for those living in remote areas. Fosu,(1994) and Elo, (1992) assert that the economic status has been consistently shown to have a positive association with utilization of health care service and postnatal care is no exception. That was a result of the high cost of getting to care in sub-Saharan Africa which may include transportation and medications.

Related to the above women who are poor may not be able to afford these costs and this may discourage them from the use of these services. Thus the non- utilization of postnatal care services among poor households could be due to the low priority assigned to health seeking when compared to other basic daily needs or to the lack of resources for health care expenses, whereas households with funds available could spend a proportion of their earnings on health care (Muldoon et al., 2011).

Furthermore poor young women are often found to be uneducated, unemployed, and detached/excluded from social networks; thus they are less easily reached by programs that rely on mass media for the diffusion of information regarding the utilization of existing health services (Singh, Rai, & Singh, 2012; Rani & Lule, 2004). Generally, they found that the determinants of postnatal care non-utilization are not uniform across regions and countries.

Mother's level of education; Higher levels of education can enhance female autonomy and help women develop greater confidence and capability to make decisions about their own health, thereby influencing their access to PNC services (Regassa 2011; Akibu et al. 2018; Somefun and Ibisomi 2016; Dahiru and Oche 2015).

Kogan & Leary (1990) identified social economic status, level of education, parity, age, language, marital status and adequacy of prenatal services as the variables associated with postnatal service utilization. The study found that the more number of children a

woman had, the less likely that she returned for postnatal services. Eighty-two percent of the women with first births returned, 77 percent of those with second or third births and only 70 percent of those with fourth or subsequent births did return for postnatal services. The author further found out that the higher the level of education of a mother, the greater the likelihood of returning for postnatal services after delivery. Strategies such as reaching the women as early as possible in their pregnancies, ensuring continuous care and elimination of financial barriers were recommended to increase the chances of women to return for postnatal services.

According to Izudi and Amongin (2015); Chakraborty et al. (2002) among other strategies, education of women, follow-up to ensure comprehension, media use and outreach campaigns through religious leaders, business and broad based groups were recommended to help women to access healthcare. Employment can increase women's financial ability to use good-quality medical care and can empower women to take part in the decision-making process about their own health care.

Occupation: It has been found that employment increases awareness and provides new ideas, behavior and opportunities through interaction with other people outside the home and community (Riley, 1997)

It is assumed that women who are employed will have enough finance to pay for postnatal services which may translate into high decision making power in the home but some researchers have argued that the type of employment a woman is involved in determines her use of these services (Miles-Doan, Brewster, 1998). This has led to mixed results from studies which have aimed to determine the effect of work status on the utilization postnatal care services. Some studies have found that formally women are more likely to utilize postnatal care services (Kishor & Neitzel, 1997), due to their capacity to be more empowered.

Other studies have shown that women employed in the agricultural sector are less likely to utilize postnatal care services (Obermeyer and Potter, 1991 and Addai, 2000). A reason for this could be because majority of mothers who are into agricultural services reside in the rural areas and may only seek modern postnatal care services after they have exhausted resources and expertise in their communities (Addai, 2000).

Furuta & Salway (2006), report that women's employment does not translate directly into greater use of maternal healthcare in Nepal. It was found that Nepalese women who

work but have no control over the use of their earnings were least likely to receive maternal healthcare. This may be because most of the women who work are from poor households and work for family survival. Hence, working women were no more likely to receive maternal healthcare than women who did not work, even after controlling for socioeconomic status and place of residence. Even though the answer is not clear, working women perhaps experience time constraint that reduces their opportunities for receiving health care (Furuta & Salway, 2006)

Birth order; Birth order is an important predictor in explaining the utilization of postnatal care services. Due to the uncertainty and the perception of risk associated with first pregnancies, women are more likely to seek medical attention for first-order births than for subsequent ones. For instance, in Malawi, adolescent women with a high order of birth (birth order 2/3) had lower probability in utilizing postnatal services compared to adolescent women with a first birth order (Singh et al., 2013). This finding relates to the observation made by studies conducted in Nigeria (Rai, Singh, & Singh, 2012) and Turkey (Celik & Hotchkiss, 2000) which showed that women are significantly more likely to use maternal healthcare services for their first child. Another reason could be because women are more cautious toward health risks with their first pregnancy are more cautious toward health risks (Raj et al., 2009).

Women tend to believe that modern health care is not necessary and rely more on past experiences provided that they have not had any bad experiences (Mekonnen and Mekonnen, 2002). There is evidence that a higher birth order suggests a greater family size and hence fewer resources are available to access PNC services (Bhatia and Cleland, 1995).

Likewise, Mwaniki et al. (2002) revealed that utilization of health facilities was significantly influenced by the number of children a woman had. The more the number of children a woman had, the less likely she used the services.

Pregnancy wantedness: Unwanted fertility increases the probability of under- utilization of maternity healthcare (Gage, 1998). In Namibia and Kenya, it was concluded that unwanted pregnancy and poor timing of pregnancy was associated with low utilization of ANC (Gage, 1998).

Libet, (2003) noted that women who were happy with their pregnancy were significantly more likely to seek postnatal care-taking services There are results from Indonesia that showed that the opposite can happen. In Indonesia, mothers that intended to become

pregnant were actually more likely not to utilize postnatal care services (Titaley, 2009). The reason for this in Indonesia could be as a result of maternal education or household wealth index.

Antenatal Care utilization; Use of antenatal care services has been found to be associated with the use of postnatal care. The utilization of antenatal care services usually ensures the use of skilled medical attendants at birth and postnatal care (Lincetto, 2006).

Chimankar and Sahoo, (2011) found a positive association between use of antenatal care services and the utilization of postnatal care. They found that women who received partial and full antenatal care were 1.7 and 2.9 times respectively more likely to go for postnatal checkup than women who received no antenatal care

Magoma, (2013) articulated that the use of antenatal care promotes the utilization of PNC services relatedly Singh et al., (2013) observed that the utilization of postnatal care services by adolescent mothers was significantly influenced by the (at least four) antenatal care visits In addition, a study in Nigeria concluded that urban women who received antenatal care in South Eastern Nigeria were more significantly more likely to utilize postnatal care services (Ugboaja, 2013).

The association between antenatal care and postnatal care may be partly explained by the existence of contextual factors that affect both phenomena simultaneously (Sepehri et al., 2008; Stephenson et al., 2006) but it has also been documented that women may utilize ANC services and ignore PNC services as they may just want to know the status of the health of the child at that time (Amooti-Kaguna & Nuwaha, 2000).

Antenatal care utilization could improve women's awareness and knowledge on the importance and the availability of postnatal care services, which can motivate them to utilize postnatal care services (York, et al., 2000). This link between the two should encourage concentrated efforts by policymakers to motivate mothers' in Nigeria to utilize antenatal services and ultimately to use the PNC services.

Mother's Knowledge/Awareness on PNC services; Findings from the study conducted at Mengo and Mulago hospitals in Uganda, (Nankwanga,2004), showed that most women lacked awareness about postnatal services and those who knew about these services only knew about immunization and family planning services. The majority of the mothers did

not know about other services, such as physiotherapy, counseling, growth monitoring, and physical examination. Lack of knowledge about the PNC services could be a major barrier to women's utilization of postpartum services. Due to lack of knowledge pregnant women are likely to have limited knowledge and experiences in seeking health care. Matua (2004) and Jewkes et al (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 PNC services

According to Nankwanga Annet, (2004), lack of awareness about PNC services, level of education, unemployment, lack of decision making power by mothers, distance from the healthcare facility, transport cost and lack of time to go back for the services were found to influence the utilization of PNC services at these hospitals.

Relatedly (Matua 2004), 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. Behavior 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 PNC as well as the implications of not attending PNC. Lack of knowledge about the PNC services could be a major barrier to women's utilization of postpartum services. Due to lack of knowledge pregnant women are likely to have limited knowledge and experiences in seeking health care.

Matua (2004) and Jewkes et al (1998) cited lack of adequate knowledge and information about pregnancy, laboratory tests result and dangers of late bookings or not attending ANC at all, as contributors to the poor utilization of PNC services. Lack of awareness is an important factor underlying maternal healthcare utilization. This is because women and their families lack understanding of the danger signs or gravity of the condition, or because they do not know where to go to seek help.

Lack of information affects women's capabilities to make their own decisions about seeking healthcare and constrains their ability to exercise their reproductive rights as well. Ladfors et al. (2001) argued that informed consent (i.e. the process by which a

fully informed woman can participate in decisions about her healthcare) is mandatory. The authors further contended that the procedure requires women to have knowledge and that the healthcare provider should inform the women in an appropriate way so that the women can understand why they need to use the services. This denotes that it is imperative for women to be knowledgeable of postnatal services in order for them to utilize the services. Several studies have investigated mothers' knowledge about antenatal and postnatal services with varying results. For instance, (Soltani et al.1999) conducted a study to evaluate mothers' knowledge about preventive care in Tunisia. The results indicated that a large number of women, (95%), knew the importance of antenatal examination but 5% did not know. The study did not report on the extent of the availability and utilization of antenatal services. Earlier, Collinson and Cowley (1998) conducted a study to identify the reasons why women access health services. They questioned the women about their perceptions of the value of services and how they thought the services could be improved. The findings indicated that clients' knowledge was related to utilization of the services. The extent to which the service meets expectations of clients appeared to influence the value which women placed on health visits and the subsequent use of services. But much earlier, in Pakistan, Agrawal et al. (1994) had conducted a study to assess the delivery patterns of maternal and child health services at Varanasi in Uttar Pradesh.

The findings indicated that 26.2% of the beneficiaries knew about maternal and child health centers and 25% had used them. That study indicates, that probably all the beneficiaries who knew about health services used them. Livingstone (1990) posited some objectives for carrying out postnatal physiotherapy. They include: assisting the physical recovery of the mother following pregnancy and the child birth process; addressing any specific individual needs relating to the physical changes in the postnatal period; helping the mother adjust emotionally to her new role; and preventing after birth complication such as muscle imbalances. However, the mothers need to know supporting reasons why they should attend postnatal physiotherapy services in order for them to appreciate the services.

Health worker's knowledge and attitude; It is essential for health workers to be knowledgeable and able provide information to women about PNC services as in regards to what it is, why it is important and the services offered. Full information regarding PNC will enable women to make informed decisions about utilizing the MCH services.

The Adelaide conference in Australia on public health policy for the promotion of women's health, recommended that, women should have access to information network and funds to enable them to effectively participate in issues concerning their health. All women have the right to self-determination about their health and should be partners in the formulation of public health policy so that it is culturally relevant and acceptable (WHO, 1991) Sulochana et al. (2007), in their study titled utilization of postnatal care among rural women in Nepal revealed that, out of the 150 women who had delivered, 66% had no knowledge or were not aware of postnatal services and this did not make use of the services which could have helped improve on their health. Only 34% of the mothers had knowledge or aware and thus made use of the facility

Availability and quality of healthcare services/place of delivery

Studies in Hoima and Moyo districts of Uganda found that the use of primary health units and referral hospitals, access to ANC and PNC including reporting any complications was considered only as a last resort (Onama 2001, kyomuhendo, 2003). Accordingly, some of the reasons for this would be lack of skilled staff at primary health care level, abuses, neglect and poor treatment in hospitals, poor hygiene in the labor wards, lack of privacy and poorly understood reasons for procedures such as caesarean sections and frequent assessment of labor by several providers which may be in conflict with cultural norms plus health worker's views that women were ignorant (Kyomuhendo, 2003).

These concerns are further compounded by the limited number of health providers available to pregnant women that have no ability to exercise their choice of which provider they would like to see. Despite the fact that postnatal services are available in most of the hospitals and health Centre in Uganda and though some researchers have done investigations and put recommendations as in the above literature, each facility operates according to its own regulations, rules and conditions of services depending on the available resources.

In a nutshell, there was a great concern about the small number who turns up for PNC services. Uganda's targets do not directly address postpartum care as major component of maternal health, yet there is sufficient evidence to show that postpartum care use is very low. It was reported that only 23% of the mothers who had had live births received postpartum care within the critical first two days after delivery; and overall, 74% of the women did not receive postpartum care at all (UBOS, 2018).

The proposed site for this study was Iganga Hospital because of its poor MCH indicator outcomes as reflected in this proposal literature like its estimated PNC is at 23% yet the National estimate is 54.7%. Iganga District hospital is located along Jinja -Tororo high way, Iganga Municipal council, Iganga district, Busoga region in Eastern Uganda. This hospital supports the entire population of Iganga district and the surrounding districts. Unfortunately, out of all the mothers in this area, only a smaller proportion utilizes the postpartum care services within one week and those few still hardly complete the postpartum care period. Therefore, the researcher intends to conduct a quantitative cross-sectional study to explore the level and factors associated with utilization of PNC services in Iganga main hospital in Iganga district

2.3 Summary of Literature Review

Most Maternal and infant deaths occur in the first month after birth: almost half of Post-natal maternal deaths occur within the first 24 hours and 66% occur during the first week (WHO 2014). The study's literature review was based on the two research objectives;

1. To determine the level of postnatal care utilization at one week, week 2 and 6 weeks among mother attending care in Iganga Hospital: some research revealed that only 23% of the mothers who had live births received postpartum care within the critical first two days after delivery; and overall, 74% of the women did not receive postpartum care at all in Iganga Hospital (UBOS, 2018). My research findings revealed an average of 28% PNC utilization and a completion PNC utilization of 6% among mothers in Iganga general hospital.

2. To identify factors associated with utilization of postnatal care within one week, week 2 and at six weeks among mothers; Most research studies revealed that the prevalence of PNC was unacceptably low in Uganda; analysis of the 2016 Uganda Demographic and Health Survey Data was done in Uganda and findings revealed that 50% of mothers used EPNC services for their most recent delivery in the 2 years preceding the survey and that the associated factors were; Women's residence, education level, wealth status, marital status, occupation, Antenatal care (ANC) attendance, place of delivery, birth order, health provider's knowledge and attitude and perceived accessibility of health facilities, were associated with greater use of PNC and my research findings almost revealed the same factors. So, in order to improve on postnatal care utilization, the above factors have to be addressed hence reducing maternal and neonatal mortality.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Study Design

The researcher used an analytical cross-sectional design and conducted the study in September 2022. This research design was selected because it would permit the researcher to analyze the variables under study from one given point in time to another. In addition, the investigator applied a quantitative research approach. The Quantitative research design involved the collection of numerical data which gave facts on the study variable.

The data was collected by the Research Assistants through face-to-face interviews. Bivariate and multivariate logistic regression models were fitted to identify factors associated with postnatal care utilization within one week and at 6 weeks at p value of < 0.05 . SPSS version 20 was used to analyze the data.

3.2 Study area

The study was conducted in the Maternal and Child Health Department of Iganga general hospital which is located in the center of Iganga municipal council, Iganga district, Busoga region, Eastern Uganda. It is situated a long Jinja-Tororo high way. The hospital was selected as an area of study because it offers EPNC to mothers and even after discharge from the hospital. Patients from other health centers within and outside Iganga district deliver from Iganga hospital but amazingly only a smaller proportion were utilizing the postpartum care services and hardly complete the four postpartum care visits. The hospital also offers under-five clinic services, which can be an appropriate place for interview of women about PNC.

3.3 Study Population

This study focused on the responses of mothers with babies from 8 weeks to twelve (12) months of age, who had brought their babies for Young Child Clinic (YCC) services.

3.3.1 Target population: These were mothers of child bearing age (15-49 years old) attending care in Maternal and Child health (MCH) from Iganga hospital but with normal child birth history of the previous pregnancy.

3.3.2 Accessible population

All eligible mothers attending YCC/Under-Five Clinic with babies of 8 weeks to 12 months old in Iganga general hospital during the period of data collection participated in the study. According to the HIMS reports of Iganga hospital, on average, 50 mothers were bringing their babies for immunization daily, so they were randomly selected and voluntarily consent to meet the eligibility criteria.

3.4 Sample size determination

Sample Size was determined by using Krejcie & Morgan 1970. It's widely used by social science and behavioral researchers to determine sample sizes. It can be used without calculations and applies to any specified population.

It helped me to select a sample from within a general population, eliminated bias in the selection process with reduced costs. Krejcie & Morgan formula is as below:-

$$n = \frac{\chi^2 NP(1-P)}{d^2(N-1) + \chi^2 P(1-P)} \quad \text{Where}$$

n =Sample size (the number of respondents required in the study)

χ^2 = Chi-Square table valve

N= Total number of the population of the study i.e. 320

P =Population proportion 23%

CI=Confidence interval level is at 95% with degree of freedom (N-1)

Krejcie & Morgan formulated a table of sample sizes for different populations like of (N=320) and I used it to estimate my sample size of 177; (n=177).

3.4.1 Sampling Procedure

I applied the systematic random sampling technique, meaning I selected samples basing on a system of intervals in my numbered population to minimize the bias and obtain the study subjects from the Young Child Clinic. This sampling technique was simple and convenient to use. I created the sample basing on precision and it reduced the potential for bias in the information. It also created an even distribution of members that formed the sample. I followed these steps; created a list of mothers, selected a beginning number, selected a fixed and periodic interval and then gathered the list of mothers (sample frame) from the YCC Register to participate in the study by randomly deciding on which number. The technique provided randomized results from a larger pool. The

resulting smaller sample of the participants was fair a representative of the entire population.

3.4.2. Inclusion criteria: The study included women who attended Young Child Clinic (YCC/Under-Five Clinic); who had brought their babies for vaccination & growth monitoring services in Iganga Hospital using a systematic random sampling technique. I focused on the following characteristics for the study participants; willing to participate, having their second child or more, with their last child alive, Attending the under-five clinic and with their child between the ages of 8 weeks and 12 months.

3.4.3 Exclusion criteria: Women who attended MCH services in Iganga hospital but did not consent to participate in the study, those with babies who were above 1 year of age, those with very sick babies and those who were delivered by Caesarian Section for their previous child birth.

3.5 Data collection procedure

After my research being approved the University Research Council, I got an introductory letter which I presented to the Hospital Administrators then I was permitted to interact with the respondents. Thereafter, I used, a semi-structured questionnaire composed of closed-ended questions to the respondents. The questionnaires were administered to the respondents by the research assistants who collected the data from participants seeking Young Child Clinic services in Iganga hospital. The questionnaire was designed according to the research objectives and in line with the conceptual framework of the study variables with the aim collecting data about the Demographic Characteristics.

The questionnaire was prepared and administered in English but the interviewers also read and translated for mothers who do not understand English. The pretest was done on 5% (9 mothers) of the total sample size and necessary adjustments were made. Two Midwives who were also fluent in speaking the local language were trained and involved in the data collection. The In-charge for MCH served as the supervisor all through the data collection activity. One-day training was conducted for the data collectors and supervisor. In addition, the questionnaire was preserved to the respondents' confidentiality, thus participants were encouraged to freely express their opinions about the study variables.

3.6 Data collection tool: A semi-structured questionnaire was prepared in such a way that it adequately addressed the research questions. The questionnaire consisted of four sections. Section 1 covered questions on general information, Section 2 covered on socio-demographics of the respondents, section 3 covered questions to determine the level and lastly section 4 covered associated factors of the respondents on postpartum care utilization. A semi-structured questionnaire was used because the format was familiar to most respondents, simple to administer and be filled in by the research assistants and was easy to analyze. The purpose of the study was well explained to the respondents for them to give accurate information during interviewing.

3.7 Criteria for Measuring PNC Utilization among women Seeking Young Child Clinic Services: This was achieved by using of a semi-structured questionnaire, I prepared it with questions on different variables and questions had responses as either Yes or No, Agree or Disagree and with open ended questions (dichotomous responses)

3.8 Data sources

3.8.1 Primary data sources: The study involved primary data which was gathered by the use of a semi-structured questionnaire as administered by research assistants to the respondents.

3.8.2 Desk review; I accessed some data from textbooks, periodicals, internet, postpartum care related articles and news, hospital registers and reports.

3.9 Study Variables and Measurements:

3.9.1 Dependent Variables

The dependent variable in this study was utilization of postnatal care services. The variable on postnatal care service utilization which refers to postnatal care service uptake within 24 hours of delivery, the first 2-3 days after delivery (within one week), 7-14th day and at 6 weeks subsequently. Women who had received the service during these four visits were considered to have completed PNC utilization.

3.9.2 Independent Variables: The independent variables comprised of various socio-demographic (age, educational status, income, and marital status), obstetrics (parity, mode of delivery, ANC use, and desire for pregnancy), and other health facility related characteristics (privacy and timing of postnatal care visit with four possible responses (i.e. (1) only received postnatal care within 24 hours after delivery, (2) received twice;

within 24 hours and at 2-3rd. day after childbirth), and (3) received thrice; 7-14 days and then 4th. time subsequent postnatal care visits at 6 weeks (within the recommended time frame by WHO). The self-reported visit was cross confirmed by reviewing their postnatal registration record. Finally, the outcome variable was dichotomized as 1: complete PNC utilization and 0: sporadic PNC utilization.

3.10 Plan for data Management. The completed questionnaires were checked for any data discrepancies and corrected. The questionnaires were pre-tested before data collection which was ensured that all the research related questions are adequately cover by the questionnaires. The interviewer-administered semi-structured questionnaires were cross checked at the end of each day and this ensured correctness and completeness of the data and coding was made for each questionnaire.

3.11 Plan for Data Analysis: after collecting the data, were stored and backed up. The data were coded, cleaned and entered using EPI-INF version 7 and then further analysis was done using Statistical Package for the Social Sciences (SPSS) version 20 software provided a detailed analysis and cleaned to minimize error. The data were described using frequency and/or cross-tabulation for categorical variables and mean (standard deviation (SD) for continuous variables. Binary and multiple logistic regression tests were carried out to identify associated factors at p-value threshold < 0.05.

3.12 Quality control measures

A pretest was conducted on nine (9) mothers; this is the 5% of the sample size from a different public health facility (Iganga Municipal HCIII) and these mothers were selected using a systematic random sampling technique and were interviewed to identify problems with the same questions. This pilot study was carried out to assess whether the questionnaire collects the intended data and whether the questions would be easily understood by the participants. Respondents with similar characteristics to this study population were interviewed.

3.13.1 Validity: The research instrument was given to my supervisors for acceptance after checking whether it was sufficiently comprehensive in seeking the proper range of responses, whether appropriate in terms of space and length, flow of questions, and whether the questions had logic for validity.

3.13.2 Reliability: The Research assistants were trained on the data collection procedure and ethics so that the data collected was reliable. I ensured that the tools were accurate and carefully phrased of each question to avoid ambiguity and leading respondents to a particular answer. Respondents were informed of the purpose of the interview and of the need to respond truthfully. The questionnaires were administered by the research assistants who understand the language used in the area, because this solved the problems of language barrier. The team also ensured that all questions of each questionnaire were fully answered before leaving a participant.

3.14 Ethical considerations: I observed ethics in data collection. An introductory letter from UCU to MS Iganga hospital was obtained. Permission sought from the University' Research and Ethics Committee, the administration of Iganga district, Iganga hospital and as well as from the respondents with explanations on how the research would contribute towards a healthy population of mothers and their babies. Privacy, confidentiality and dignity of the respondents were considered during the research. Codes were used in the questionnaires. No compensation either financially or materially was given to the respondents for their participation in the study. Participants were informed that participation was voluntary and that their withdrawal or refusal to participate would not affect their entitlement to health services. At the end of the explanation, every participant was asked to sign a written study informed consent form before participating in the study as this ensured voluntarism and acceptability to participate in the study.

3.15 Limitations of the study

1. There was a sampling restriction in the study since all participants were recruited through the YCC/under-five clinic.
2. Results will not be generalized to other regions of Uganda, since the study was only conducted in one hospital.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION OF FINDINGS

4.0 Introduction

This chapter focused on level and factors associated with utilization of postnatal care services among mothers in Iganga general hospital. The chapter began by reflecting on the basic socio-demographic characteristics of the respondents and then analyzed interpreted and presented the findings in respect to study objectives of the study.

Table 4.1: Represents the Statistical Analysis for Demographic Characteristics of Respondents

Marital status	Frequency	Percentage	Cumulative Percentage
Married	168	95	95
Single	6	3.3	98.3
Divorced /Separated	3	1.7	100
Total	177	100	
Age in years			
15-20	15	8.4	8.4
21-25	66	37.3	45.7
26-30	53	30	75.7
31+	43	24.3	100
Total	177	100	
Education Level			
None	6	3.4	3.4
Primary	53	29.9	33.3
O" Level	82	46.4	79.7
A" Level	19	10.7	90.4
Tertiary/University	17	9.6	100
Total	177	100	
Occupation			
Un employed	3	1.6	1.6
House wife	66	37.4	39
Peasant	24	13.6	52.6
Salary earner	16	9.1	61.7
Business lady	45	25.4	87.1
Other	23	12.9	100
Total	177	100	

Source: Primary data 2022

Under descriptive statistics, the study had respondents that included; women (mothers) from Iganga and the surrounding areas that receive healthcare from Iganga general Hospital and were interviewed. In total, they were 177 respondents. In analyzing the

demographic characteristics of the respondents the following items were considered; age, education level, marital status, and occupation /work of mothers receiving the postnatal care services. Majority of the respondents are married, 168(95%) while the single were 6(3%) and about 3(2%) divorced or separated. This implies that more respondents were married women. It was also found out that 119(67.3%) of the respondents were aged 21-30yrs were more as compared to 43(24.3%) that are above 31 years and finally only 15(8%) those that were below 20 years. It was also discovered that 66 (37%) were housewives as compared to 45(25%) of the mothers were Business oriented. While 24(14%) engaged in subsistence farming and finally 16(9%) were salary earners and 3(2%) were unemployed respectively. More so, it was further noted that the majority of the respondents under study had attained O'level with 82(46%) followed by 53(30%) primary compared 17(10%) had passed through tertiary institutions while 6(3%) didn't attain any level of education in their career. This implies that most of the respondents had O' level education as indicated in Table 4.0 above.

Table 4.2: Level of Utilization of Postnatal care services Among Mothers after child birth in Iganga general hospital.

Variable	Category	Frequency	Percentage
PNC utilization	1 ST Within 24 hrs.	150	84
	2 nd (day3 or 48-72hrs)	27	15
	3 rd (7-14days)	14	8
	4 th (6weeks/42days)	11	6
Non PNC utilization	1 ST Within 24 hrs	27	16
	2 nd (day3 or 48-72hrs)	150	84
	3 rd (7-14days)	163	92
	4 th (6weeks/42days)	166	94

Source: Primary Data 2022

Out of 177 respondents who participated in the study, majority 150 (84%) utilized postnatal care services as a routine before discharge from the health facility while 27(16%) responded that they never utilized postnatal care services within 24 hrs However, the number of PNC attendance kept reducing in the subsequent visits; 2nd. Visit 27(15%), 3rd. visit 14(8%) and 4th. visit 11(6%) only. Mother who did seek for PNC services on visits 2, 3 and 4 were the majority with percentages 84%, 92% and 94% respectively. Therefore, the average total of PNC attendance or visits was 28% and PNC visits completion was at 6%.

Table 4.3 Distribution of respondents' general services received during PNC visits.

Variables	Categories	Frequency	Percentage (%)
Delivered from health facility	No	2	1.7
	Yes	175	98.3
Visited health facility after discharge	No	125	71
	Yes	52	29
General physical examination done	No	153	87
	Yes	24	13
Breast examination done	No	162	91
	Yes	15	9
Abdominal palpation	No	161	90
	Yes	16	10
Vaginal examination done	No	164	92.1
	Yes	11	7.9
Mental health assessed	No	172	95.6
	Yes	5	4.4
Education on diet, Hygiene, rest & sleep	No	152	86
	Yes	25	24
Counseled on delaying sex intercourse	No	160	90.4
	Yes	17	9.6
Checked the baby's umbilical cord	No	152	86
	Yes	25	24
Mother taught on proper cord care	No	153	86.4
	Yes	24	13.5
Attended ANC 1 st . visit 1	No	57	32
	Yes	120	68
Attended ANC 2-3 rd . visit	No	70	39
	Yes	102	61
Attended ANC 4 th . visit & above	No	127	72
	Yes	50	28

Source: Primary Data 2022

From the above table about 125(71%) mothers did not visit a health facility after discharge though the majority of mothers 175(98%) delivered from health facilities in table above. Findings also revealed that only 24(13%) had general physical examination and 11(8%) of mother had vaginal examination against 167(92%) that were not examined, furthermore only 25(24%) had health education on diet, Hygiene, rest & sleep by the health personnel and these low percentages indicate that the lives of mothers were at risk of developing complications without the knowledge of health workers.

Then on the side of newborns, the findings revealed that 152 (86%) of mothers were not asked to remove baby's clothes to check the umbilical cord and only 24(13%) of the mothers were taught how to care for the umbilical cord. The above variables play a vital role in safeguarding the lives of mothers and their babies after child birth; however, the health personnel did not give them much attention to some extent and contributes to high maternal and infant mortality rate in Iganga hospital.

Table 4.4 showing mothers who received specific services from the health facility during the three subsequent PNC visits.

PNC Visit number	Physical examination		Taking vital signs		Abdominal examination done		Vaginal examination		Diet/Rest assessment		Mother taught about Postnatal exercises		Advised on sexual intercourse	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
2 nd . (2-3 Days)	12%	8%	9%	1%	10%	90%	7%	83%	30%	70%	35%	65%	20%	90%
3 rd . (7-14 days)	7%	93%	7%	3%	4%	96%	2%	98%	23%	77%	28%	72%	15%	85%
4 th . (at 6 weeks)	5%	95%	5%	95%	2%	98%	1%	99%	16%	84%	20%	80%	13%	87%

Primary data source 2022

In the above table, all the mother's responses to the questions, a No took the bigger percentage during all the PNC visits and this informed the researcher, besides that, even the few mothers who sought for services, did not receive quality PNC from the skilled service providers, so the PNC utilization still has a very big gap in Iganga general hospital.

Table 4.5 showing PNC services offered to babies during the three PNC visits

PNC Visit number	Physical examination done		Observation of cord		Baby weighed		Kangaroo taught to Mother		Advised on danger signs		Breast Feedings assessment		Immunization done	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
2 nd . (3-7 Days)	14%	86%	13%	87%	90%	10%	10%	90%	14%	86%	28%	72%	94%	6%
3 rd . (7-14 days)	10%	90%	9%	91%	95%	5%	6%	94%	11%	89%	21%	79%	93%	7%
4 th . (at 6 weeks)	8%	92%	4%	96%	97%	3%	4%	96%	10%	90%	33%	77%	98%	2%

Source: Primary data 2022

The findings in the above table indicate that it was only baby weighing and immunization or vaccination of children which were given much attention when mothers went back to health facilities during the postnatal period in all the three (3) PNC subsequent visits, with percentages of 90%, 95% & 97% (baby weighing) then 94%, 93% & 98% (baby immunization) respectively. Yet the other variables were equally important and this needs action so as to improve on child survival.

This chapter also presents the two data analysis which include: Bivariate and Multivariate logistic regression analysis on factors associated with PNC service under this section it employed Adjusted odds ratios (AOR), 95% confidence intervals (CI) and *p*-values were calculated with statistical significance level set at *p*-value < 0.05. Before multivariate logistic regression, each exposure/predictor (independent variable) was assessed separately for its association with PNC utilization using bivariate logistic regression and also presentation of the crude odds ratio (COR), 95% confidence interval (CI) and *p*-values also the use of adjusted odds ratios (AOR).

The other analysis was the use of chi square (χ^2) on Modalities to Improve the Utilization of Postnatal Care Services of factors associated with PNC service utilization among mothers who received MCH care in Iganga general Hospital.

Table 4.6. Bivariate and multivariate logistic regression analysis of factors associated with PNC service utilization among women.

Variables and categories	Utilized PNC		COR (95% CI)	AOR (95% CI)
	No	Yes		
Educational status of mother			1	1
No formal education	2	4		
Primary	13	40	3.4 (0.8-4.5)	1.2 (0.6-2.1)
O'level	4	78	4.6 (3.4-7.2)	2.2 (0.6-2.5)
A 'level	2	18	10 (3.4-7.2)	2.4 (0.7-2.9)
Tertiary		16	1.4 (0.2-2.8)	2.6 (1.7-7.4)*
Attended ANC			1	1
General physical examination done	31	146	4.1 (2.0-8.3)	3.5 (1.6-7.6)**
Advice from healthcare professionals on PNC	123	54	1.1 (1.7-1.8)	0.9 (0.4-2.1)
Place of delivery			1	1
Home	2	175	0.5 (15.9-58.2)	2-37.9*
Health facility	7	170	6.7 (4.0-11.1)	2.3 (1.2-4.7)*
Mental health assessed			1	1
	160	12	2.0 (1.1-3.4)	1.4 (0.6-3.1)*

PNC: Post Natal Care; COR: Crude Odds Ratio; CI: confidence interval; AOR: Adjusted Odds Ratio ; ANC: Ante Natal Care Statistically significant at p-value < 0.005;** significant at p-value < 0.001

In bivariate logistic regression analysis, six variables (attending ANC, place of delivery, educational status of the mother, getting advice from healthcare providers on PNC services, General physical examination done, and mental health assessment, were found to be candidate for multivariate logistic regression analysis. After controlling the confounders using multivariate logistic regression analysis, attending ANC, place of delivery, educational status of the mother, and getting advice from healthcare providers on PNC services were found to be statistically significant predictors of PNC utilization. Those whose educational level was Tertiary/ Universities were 2.6 times more likely to use PNC service when compared with their counter parts (an illiterate mothers) (AOR =

2.6; 95% CI = 1.7-7.4). Those mothers who gave birth at health facility were two times more likely to use PNC when compared with those who gave at home (AOR = 2.3; 95% CI = 1.2-4.7). Mothers who got information/advice on postnatal care services utilization from health professionals during ANC visits were 18.7 times more likely to use postnatal care utilization than those who did not get information (AOR = 18.7; 95% CI = 9.2-37.9). In addition, mothers who received general physical examination were 3.5 times more likely to have utilized PNC services than those who did not access the service (AOR = 3.5; 95% CI = 1.6-7.6) from Table above.

Table 4.7 Correlation of factors associated with PNC utilization in postnatal care services and modalities to improve PNC utilization.

Characteristics	Crude model COR (95% CI)	P-value	Adjusted model AOR (95% CI)	P-value
Had information on PNC				
Yes	1		1	
No	1.10 (3.20-15.76) ^a	< 0.0010	8.01 (3.37-19.07) ^a	0.001
Good privacy in Health facility				
Yes	1		1	
No	1.77 (1.44-2.18) ^a	< 0.0100	1.80 (1.46-2.20) ^a	0.010
Received full package on PNC				
Yes	1-		1-	
No	1.42 (1.12-1.81) ^a	0.0020	1.37 (1.08-1.73) ^a	0.002
Age in years				
31+	1-			
26 to 30	1.26 (1.08-1.48) ^a	0.003	1.06 (0.87-1.29)	0.544
21 to 25	1.30 (0.98-1.73)	0.068	0.98 (0.66-1.43)	0.898
15 to 20	1.34 (0.74-1.89)	0.075	0.99 (0.51-1.55)	0.901
Husband support				
Yes	1-		1-	
No	0.61 (0.49-0.75) ^a	< 0.0020	0.66 (0.52-0.84) ^a	0.002
Working status				
Yes	1-47 (0.90-2.38)	0.121	0.95 (0.55-1.66)	0.861

No				0.001
Lock down due Covid19 and mothers feared to move to hospital				
Yes	1.31 (1.06-1.62) ^a	0.012	1.24 (0.99-1.54)	0.052
No	1-		1-	
Had no time to go for PNC				
Yes	1.18 (0.93-1.50)	0.178	0.77 (0.60-1.00)	0.052
No	1-		1-	
ANC is very important for health				
No	1-		1-	
Yes	1.76 (1.17-2.66) ^a	0.007	0.94 (0.59-1.51)	0.801
Need permission to access PNC				
Big problem	1-		1-	
Not big problem	1.51 (1.21-1.90) ^a	< 0.001	1.51 (1.19-1.90) ^a	0.061
Distance to health facility				
Big problem	1-		1-	
Not big problem	1.25 (0.99-1.59)	0.065	1.02 (0.78-1.33)	0.869

Source: Primary data 2022

After adjusting for other variables, factors that were positively associated with PNC utilization as shown in Table 4.6 were; delivery from health center (AOR 8.01, 95% CI: 3.37-19.07), husband support (AOR 1.80, 95% CI: 1.46-2.20), had no information on PNC (AOR 1.37, 95% CI: 1.08-1.73), having tertiary education (AOR 2.71, 95% CI: 1.32-5.56) and having no big problems seeking permission to access healthcare (AOR 1.51, 95% CI: 1.19-1.90). Working status (working) (AOR 0.66, 95% CI: 0.52-0.84) was marginally associated with more odds of PNC utilization compared to those not working. On the other hand, Lock down due Covid19, and mothers feared to move to hospital (COR 5.86, 95% CI: 5.60-7.47) this affected access to have better health services and, had no time to go for PNC (AOR 0.69, 95% CI: 0.56-0.85) were associated with lower odds of utilizing PNC compared to husband supported and being a working woman.

Modalities to improve the utilization of PNC services included; having information on availability of PNC services through health education, health workers providing full package of PNC and also providing privacy then mothers being supported by their husbands.

CHAPTER FIVE: DISCUSSION OF FINDINGS

5.0 Introduction

The purpose of this study was to investigate and determine the level and factors associated with utilization of postnatal care services among mothers. The study was conducted in Iganga general hospital. It was guided by the following research objectives:

1. To determine the level of postnatal care utilization within one week to 6 weeks among mother attending care at Iganga main hospital.
2. To identify the factors associated with utilization of postnatal care within one and at six weeks among mothers in main hospital Iganga district.

5.1 Discussion

Utilization of postnatal care attendance in Iganga district was previously low at 23% and also my study found out 28% of PNC utilization which was far below the national PNC utilization of 54%. This implied that very few mothers utilized postnatal care services due to a number of factors. Most postnatal mothers felt that it was less important to seek healthcare services after child birth since they had not faced any major health complications which would force them to visit healthcare facilities. Others perhaps lacked money for transport to the healthcare facility or else lacked support from their husbands.

Husbands involvement in seeking PNC care was significantly associated with utilization of postnatal care ($\chi^2= 9.48$, $P=0.001$). It was found that majority of mothers' husbands were not involved in healthcare which could be attributed to lack of money and being busy with work.

It was also found out that most of the postnatal mothers never worked and a mother being engaged in any income generating activity was significantly associated with utilization of postnatal care services ($\chi^2=32.87$, $P=0.001$). Postnatal mothers who worked were more likely to utilize postnatal care services as compared to those who never worked. Seven out of ten postnatal mothers who utilized postnatal care services were engaged in income generating activities. This was attributed to that fact that they could afford the transport costs to the healthcare facility thus having higher chances of utilizing the services.

Riley in 1997, he revealed in his study that employment status increases awareness and provides new ideas, behavior and opportunities through interaction with other people outside the home and community. It was also assumed that women who are employed

will have enough finance to pay for postnatal services which may translate into high decision making power in the home but some researchers have argued that the type of employment a woman is involved in determines her use of these services by Miles-Doan & Brewster, in 1998. These findings led to mixed results from studies which aimed at studying to determine the effect of work status on the utilization of postnatal care services. Some studies have found that formally women were more likely to utilize postnatal care services according to Kishor & Neitzel, in 1997, due to their capacity to be more empowered through education.

In my study, findings revealed that working status (working) (AOR 0.66, 95% CI: 0.52-0.84) was marginally associated with more odds of PNC utilization compared to those not working. On the other hand, Lock down due Covid19 mothers feared to move to hospital (AOR 5.86, 95% CI: 5.60-7.47) this affected mother's accessibility to better health care services and being a working woman (AOR 0.66, 95% CI: 0.52-0.84) were associated with lower odds of utilizing PNC compared to being a house wife and not being a working woman.

Husbands involvement in seeking MCH health care services was also significantly associated with utilization of postnatal care ($\chi^2= 9.48$, $P=0.001$). It was found that majority of mothers' husbands were not involved in healthcare which could be attributed to lack of money and being busy with work.

Healthcare factors that were significantly associated with utilization of PNC services among postnatal mothers attending Iganga district Hospital include; not get full PNC package from the healthcare facility ($\chi^2= 24.27$, $P=0.001$). It was also found out that postnatal care services were more likely to be utilized by mothers who resided in less than one kilometer from the health care facility as compared to mothers who travelled long distances. This was because staying nearer the healthcare facility meant that one could even just walk to the facility for services even if they didn't have money unlike mothers who came from far and had to incur transport costs. Similar findings were reported in an earlier study carried out in Uganda where results indicated that being far away from the nearby health care facility especially public health centers forces many mothers who would have preferred to attend postnatal care services to abscond and resort to TBAs because the latter are easily accessible. Being health educated about health care seeking is the primary pillar of having knowledge about the benefits of seeking healthcare from trained healthcare providers and knowing the dangers one may

be predisposed to if she does utilize the services. Getting routine education regarding reproductive health and PNC was also a reason for utilizing postnatal care services among postnatal mothers who delivered from Iganga Hospital ($\chi^2= 6.89$, $P=0.009$). Majority of the respondents reported that, they did not get routine health education about the importance of utilizing postnatal care services, which could have kept them ignorant of the importance of seeking postnatal care services.

Postnatal mothers who had received routine health education about reproductive health care services had higher utilization of postnatal care services as compared to mothers who were not health educated. Postnatal mothers who had received routine health education about reproductive health care services had higher utilization of postnatal care services as compared to mothers who were not health educated. Being health educated about health care seeking is the primary pillar of having knowledge about the benefits of seeking healthcare from trained healthcare providers and knowing the dangers one may be predisposed to if she does utilize the services. Getting routine education regarding reproductive health and PNC was also a reason for utilizing postnatal care services among postnatal mothers who delivered from Iganga Hospital ($\chi^2= 6.89$, $P=0.009$). Majority of the respondents reported that, they did not get routine health education about the importance of utilizing postnatal care services, which could have kept them ignorant of the importance of seeking postnatal go back for the services were found to influence the utilization of PNC services at these hospitals.

My study findings align with (Matua 2004) who noted that 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. Behavior 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 PNC as well as the implications of not attending PNC. Lack of knowledge about the PNC services could be a major barrier to women's utilization of postpartum services. Due to lack of sensitization, pregnant women are likely to have limited knowledge and experiences in seeking PNC services. Matua (2004) and Jewkes et al (1998), cited lack of adequate knowledge and information about pregnancy, laboratory tests result into late bookings or not attending

ANC at all, as contributors to the poor utilization of PNC services, hence getting complications in their delivering or after. This is consistent with Singh (2013) who observed that the utilization of postnatal care services by adolescent mothers was significantly influenced by the (at least four) antenatal care visits (Singh et al., 2013). The place of delivery was paramount in the utilization of postnatal care services where it was significantly associated factor at bivariate analysis ($\chi^2= 11.79$, $P=0.009$). Postnatal mothers who had delivered from a health facility were health educated about cord care and exclusive breastfeeding within the first hour after delivery. This increased bonding between the mother and the child. For postnatal mothers who delivered from home were not visited by midwives at home, never health educated about umbilical cord cleaning. My study findings are in agreement with a study conducted in Nepal which discovered that mothers who had assisted delivery by healthcare workers in health care facility were more likely to utilize early PNC service than their counterparts who did not (Paudel et al., 2013).

Antenatal care utilization was also discovered to be a great influence in PNC utilization as it was also in Nigeria that urban women who received antenatal care in South Eastern Nigeria were more significantly more likely to utilize postnatal care services by Ugboaja in 2013. The association between antenatal care and postnatal care may be partly explained by the existence of contextual factors that affect both phenomena simultaneously according to Sepehri et al., 2008; Antenatal care utilization could improve women's awareness and knowledge on the importance and the availability of postnatal care services, which can motivate them to utilize postnatal care services as discovered by York, et al., (2000).

In summary, my study findings are in line with those of Nankwanga Annet, (2004) and the above researcher's findings revealed that lack of awareness about PNC services, level of education, unemployment, distance from the healthcare facility, transport cost, lack of privacy, long waiting time and effects of Covid-19 were the factors affecting PNC utilization in Iganga hospital.

CHAPTER SIX

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATION

6.0 Introduction

This chapter presents the summary, conclusion and recommendations derived and drawn from the research after having presented, analyzed and discussed the findings of the study.

6.1 Summary of findings

The purpose of this study was to determine the level and assess factors associated with utilization of postnatal care services among mothers. The study was conducted in Iganga District hospital in the eastern region of the country and it was guided by the following research objectives:

1. To determine the level of postnatal care utilization within one week, at 2 and 6 weeks among mother attending care at Iganga general hospital.
2. To identify the factors associated with utilization of postnatal care within one, 2 weeks and at six weeks among mothers in Iganga general hospital.

The study also identified some modalities to improve the Utilization of Postnatal Care Services.

Level of utilization of postnatal care services in Iganga general hospital was found low at 28% by this study yet nationally PNC is at 54%. This implied that very few mothers utilized postnatal care services and the study also identified a number of associated factors. Most postnatal mothers felt it less important to seek healthcare services after child birth as they were not having major complaints; others either lacked money for transport to the healthcare facility or support from their husbands.

Husbands involvement in seeking MCH health care services was significantly associated with utilization of postnatal care ($\chi^2= 9.48$, $P=0.002$). It was found that majority of mothers' husbands were not involved in healthcare which could be attributed to lack of money and being busy with work.

It was also found out that most of the postnatal mothers never worked and a mother

Being engaged in any income generating activity/working status was significantly associated with utilization of postnatal care services ($\chi^2=32.87$, $P=0.001$). Postnatal mothers who worked were more likely to utilize postnatal care services as compared to

those who never worked. Seven out of ten postnatal mothers who utilized postnatal care services were engaged in income generating activities. This was attributed to that fact that they could afford the transport costs to the healthcare facility thus having higher chances of utilizing the services.

Health facility factors that were significantly associated with utilization of PNC services among postnatal mothers attending Iganga district Hospital included; distance to the healthcare facility ($\chi^2= 24.27$, $P=0.002$). It was found out that postnatal care services were more likely to be utilized by mothers who resided in less than one kilometer from the health care facility as compared to mothers who travelled long distances. This was because staying nearer the healthcare facility meant that one could even just walk to the facility for services even if they didn't have money unlike mothers who came from far and had to incur transport costs. Similar findings were reported in an earlier study carried out in Uganda where results indicated that being far away from the nearby health care facility especially public health centers forces many mothers who would have preferred to attend postnatal care services to abscond care.

The place of delivery was paramount in the utilization of postnatal care services where it was significantly associated factor at bivariate analysis ($\chi^2= 11.79$, $P=0.009$). Postnatal mothers who had delivered from a health facility were advised not to bath their babies before 24 hours and were health educated about cord care and exclusive breastfeeding within the first hour after delivery. This increased bonding between the mother and the child. For postnatal mothers who delivered from home they did not receive any care from midwives and were not health educated about umbilical cord care and this increases the risk of infant mortality.

6.2 Conclusion

The study established a low utilization of postnatal care services in Iganga general hospital as compared to the national average. The identified factors associated with low utilization were; education/knowledge level, lack of husbands support, health facility factors like; lack of full package of PNCs services and privacy in the healthcare facility.

6.3 Recommendations

To Iganga hospital and its stake holders

Health providers should always educate pregnant women on PNC utilization during ANC visits as it prepares mothers to utilize the service and this improves health outcomes for both mothers and babies.

Health providers should always provide privacy and offer a full PNC package to mothers and their babies for mothers to realize its relevancy.

Iganga Hospital and other health stakeholders in Iganga district should sensitize male spouses on the importance of PNC and to fully support their female spouses.

I recommend for further research on PNC utilization in other districts in Uganda so as to have evidence-based data and attract the attention of policy makers.

APPENDIX 1:

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lganga.go.ug>dept>health [www.electives.net>previewen.m.wikipedia.org>wiki.lganga](http://www.electives.net/previewen.m.wikipedia.org/wiki/lganga)

APPENDIX 2

INFORMED CONSENT FORM

Title of Research: Prevalence and Factors associated with Utilization of Postnatal Care Services among mothers in Iganga Hospital, Eastern Uganda.

Principle Investigator: Nakintu Betty; Tel. contact +256-779146220/ 758146220

Affiliated to Uganda Christian University- MPHL STM, P.O Box 4, Mukono, Uganda:

Office of Research Telephone;

1. Introduction and Purpose of the Study

This is an Academic research study which aims at improving maternal and child health services by identifying factors that hinder mothers from utilizing postnatal care services in Iganga Hospital. The information got will be used in training institutions and health facilities to make services better hence having good health outcomes and promote Safe motherhood.

2. Description of the Research

When you accept to participate in this program, you will be asked to complete this questionnaire by answering the questions asked by the Research assistant. You will also be asked to explain the intervention in basic terms. It will take you a few minutes.

3. Subject Participation

We estimated that **177** Mothers who seek maternal and child health care services in Iganga Hospital will enroll into this study. These participants should be willing to participate, having their second child or more, with their last child alive, attending the under-five clinic, with their child between the ages of eight weeks and 12 months and who can verbally communicate. Your participation will involve this visit; approximately, it will take like 30 minutes only.

4. Potential Risks and Discomforts;

As you participate in this study, no known potential risk or discomforts will happen to you because we shall just talk and no other procedures will be done to you.

5. Potential Benefits;

People who will participate in this study will give us information which will guide in streamlining and strengthening Maternal and Child Health services, contributing towards a healthy population of mothers and their babies and this improves well-being of People in Families, Communities and Nation at large.

6. Confidentiality

It's our responsibility to ensure privacy, confidentiality and dignity as you provide us with the information during this study. Codes instead of names will be used in this questionnaire. No compensation either financially or materially is being given to the respondents for their participation in the study.

Your participation is voluntary and if you to withdraw or refuse to participate, you will not be affected in your entitlement to health services.

every participant will be asked to sign a written study informed consent form before participating in the study as this ensures voluntarism and acceptability to participate in the study.

No personal identifying information or IP addresses will be collected. Data will be aggregated via the Qualtrics reporting function. Quantitative results will be shared with the Research Board or Council and the faculty in the academic unit. I will store any electronic or printed transcripts in encrypted files or in a locked, secure location for five years after the publication of this research, after which, all files will be destroyed.

7. Authorization

By signing this form, you will be authorizing us to use and disclosure of the following information for this research: For example, I authorize the use of my records, any observations, and findings found during the course of this study for education, publication and/or presentation.

8. Participation: Your decision to participate in this study is completely voluntary. If you decide to not participate in this study, it will not affect the care, relationships with the researchers, services, or benefits which you are entitled to, in this Hospital.

9. Withdrawal from the Study and/or Withdrawal of Authorization

As you participant in this study, you can withdraw at any point if you choose not to continue. In this case, you inform the researchers about your feelings and sign on the questionnaire any time without penalty.

10. Cost/Reimbursements

There is no cost for participating in this study.

I voluntarily agree to participate in this research program; to tick appropriately

Yes

No

I understand that I will be given a copy of this signed Consent Form.

Name of Participant (Optional):

Signature:

Date:

APPENDIX 3:

QUESTIONNAIRE

TITLE OF THE PROPOSAL: LEVEL AND FACTORS ASSOCIATED WITH UTILIZATION OF POSTNATAL CARE SERVICES AMONG MOTHERS IN IGANGA MAIN HOSPITAL

Dear respondent,

My name is Nakintu Betty of Uganda Christian University undertaking a research on “Level and Factors Associated with Utilization of Postnatal Care Services among Mothers in Iganga General Hospital”. This is entirely made for an academic project and the information that will be got from you will be handled with extreme confidentiality. You have been selected to take part in this research because of your major role in the Health Service delivery in this hospital. It is also believed that you have the relevant information that can guide this research. I therefore, request you to spare some valuable time to thought fully respond to the following questions. The information you provide will strictly be used for academic purposes and will be treated with utmost confidentiality, for this reason, you don’t have to indicate your name on the questionnaire.

You are therefore humbly requested to respond to the questionnaire with the best of your knowledge of the questions that are asked.

SECTION 1:

1.1 GENERAL INFORMATION

TO BE FILLED IN BY INTERVIEWER			
Interviewer’s Name		District of respondent	
Date (DD/MM/YY)		Sub-county/Division of respondent	
Name of respondent (optional)		Contact of respondent (optional)	

Parish of respondent		Village of respondent	
		Specify distance in KM.....	

SECTION 2: SOCIO-DEMOGRAPHIC INFORMATION OF THE RESPONDENT:

2.1 What is your age? Tick in the appropriate box

(a) 15-20 yrs (b) 21-25yrs (c) 26-31yrs (d) 31yrs and above

2.2 What is your religion?

(a) Islam (b) Protestant (c) Catholic (d) other specify

2.3 What is your Marital Status? (a) Single (b) Married

(c) Separated/divorced

2.4 What is your level of Education?

(a) None (b) Primary Level (c) O' Level (d) A' Level

(e) Tertiary Level/University Level

2.5 What do you do? (For example Teacher, Lawyer, Nurse, House wife, Business woman and if other specify)

SECTION 3: LEVEL OF POSTNATAL CARE UTILIZATION

Instructions; Tick in the appropriate box for the appropriate response

3.1 Did you deliver from a health facility? Yes No

3.2 Did the health worker give you care and advice within the 24 hours after delivery (First PNC) in the Health facility?

Yes No

3.3 Did you visit the health facility for checkup (PNC) after discharge?

Yes No and if no, skip and go to question 3.5

3.4 When did you return for PNC and what did the health worker do for you/baby?

(a) Did you go for the second PNC Visit on Day 3 or within 48-72 hours after birth?

Yes No

If yes, tick services received and a cross for services not received in this Visit

Mother's care listed below:

Baby's care listed below:

- | | |
|---|---|
| -Asked some questions on your health? | -Asked mother how the baby feeds? |
| -General physical examination done? | -General physical examination done? |
| -B/P, Temperature & pulse taken? | -Checked the baby's umbilical cord? |
| -Breast examination done? | -Mother taught on proper cord care? |
| - Abdominal palpation done? | -Baby immunized if had missed on day one? |
| -Vaginal examination done? | -Mother told the baby's danger signs? |
| -Mental health assessed? | -Mother told to breastfeed exclusively? |
| -Educated on diet, Hygiene, rest & sleep? | -Mother encouraged to do kangaroo? |
| -Counselled on delaying sex intercourse? | |

(b) Did you go for the Third Visit (Between 7-14 Days)?

If yes, tick services received or put a cross if not received during this Visit:

Mother's care

Baby's care

- | | |
|---------------------------------|----------------------------|
| -Vital signs assessed or taken? | -General examination done? |
|---------------------------------|----------------------------|

-Abdominal palpation done?

-Umbilical area checked?

-Vaginal discharge (lochia) assessed?

-Mother asked how faring?

-Given supplements like Iron/Folic?

-Baby weighed?

-Taught postnatal exercises?

-observed breastfeeding?

(c) Did you go for the Fourth visit (at six weeks/42 days)?

If yes, tick services received in this Visit

Mother's care

Baby's care

-Questions on her general health?

-Questions on baby's general health?

-General physical examination done?

-General physical examination done?

-Uterus checked for involution?

-Baby weighed?

-Initiated on contraception?

-Baby Immunized or vaccinated?

-Okayed for coitus?

-Given return date for further?

-Health educated?

-Vaccinations and grow monitoring?

3.5 Did not receive any kind of PNC after delivery: Instructions Tick on the statements below for reason(s) that apply for not receiving PNC

(a) Had no information about it? YES No

(b) My husband was not supportive? Yes No

(c) Health facility is very far (more than 5km from home)? Yes No

(d) Delivered from home? Yes No

(e) Had no time to go for PNC? Yes No

SECTION 4 FACTORS ASSOCIATED WITH PNC UTILIZATION

4.1 Predisposing Factors or Social & Environmental factors: Instruction: Tick in the appropriate box for your response.

4.1.1 A woman has to get permission from the husband to go for PNC services;

Agree Disagree

4.1.2 My Religion does not permit me to seek for postnatal care services.

Agree Disagree , If response is Agree, specify the Religion.....

4.1.3 Most mothers travel long distances to Iganga hospital; Agree Disagree

4.1.4 Lock-down due to Covid-19 or Feared to go to hospital to contract Covid-19

Agree Disagree

4.1 Enabling Factors or Economic & knowledge factors: Instruction, Tick Yes or No

4.2.1 Did you attend ANC visits: Yes No , if yes which visits? tick all that apply in the boxes 1st-visit 2nd.visit 3rd.visit 4th. visit 5th.-8th.visit

4.2.2 ANC is very important for the health of mother & baby; Yes No

4.2.2 I work and earn a living: Yes No

4.2.3 PNC is relevant in saving mother's and baby's lives; Yes No

4.2.4 Can recommend a mother to go for PNC in Iganga main Hospital?

Yes No

4.2.5 Needs or Health Facility Factors: Instructions; Tick in the appropriate box

4.3.1 Delivered normally from the health facility; Yes No

4.3.2 Health workers in Iganga Hospital shout at mothers who seek for PNC

Agree Disagree

4.3.3 Lack of Privacy limit mothers to seek for PNC services in Iganga Hospital

Agree Disagree

4.3.4 No specific package for PNC services offered by the health workers in Iganga hospital (Limited health provider knowledge); Agree Disagree

4.3.5 Mothers wait for Long time because patients are many in the hospital

Agree Disagree

4.3.6 PNC services are only provided from Monday to Friday

Agree Disagree

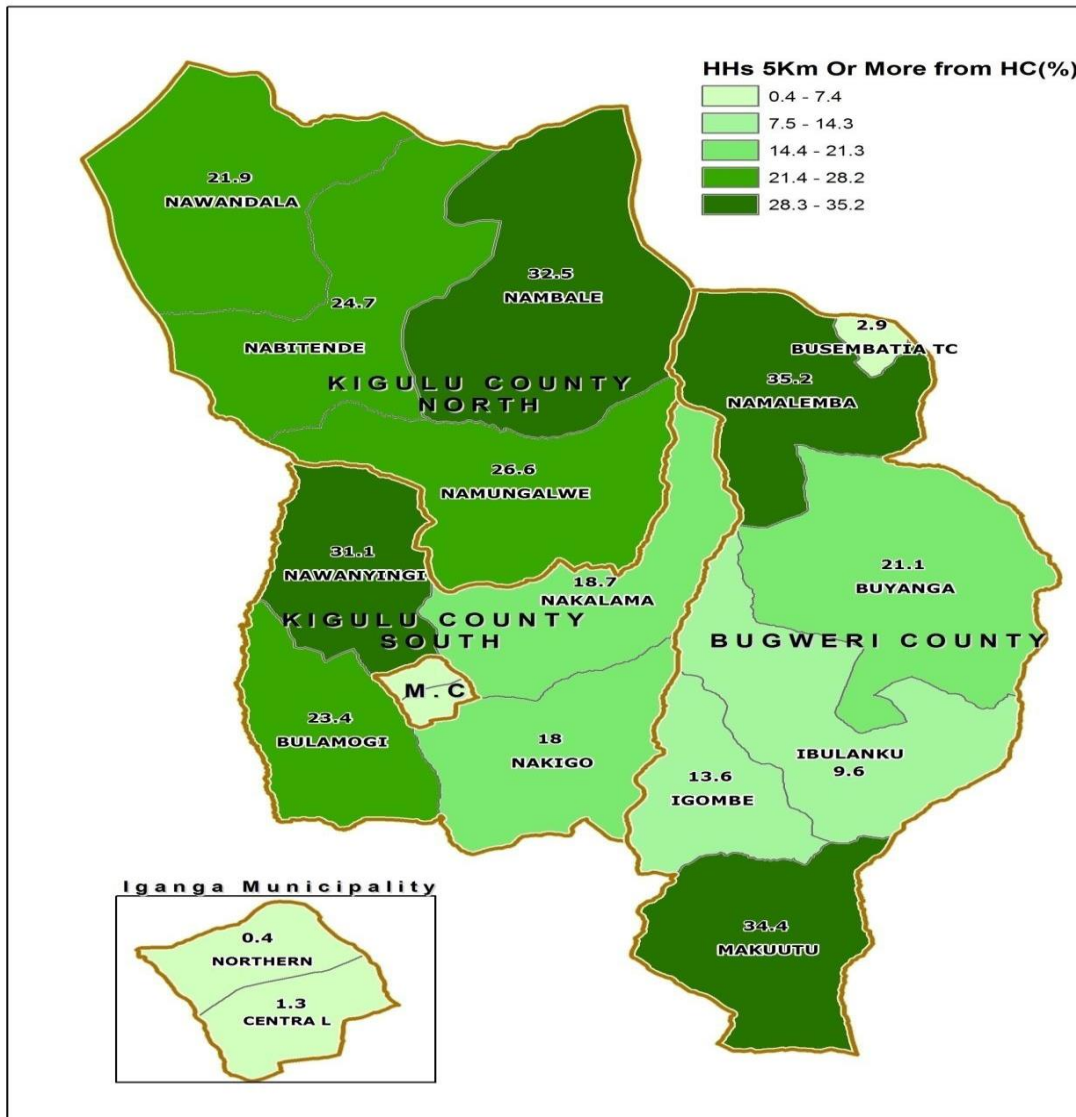
END OF OUR INTERVIEW

THANKS FOR PARTICIPATING

APPENDIX 4:

MAP OF IGANGA DISTRICT

The small map shows Iganga Municipality with its two divisions; Northern and Central divisions; Iganga Hospital is located in the Central Division.



The above map also shows the Percentage Distribution of Households 5 Km and over to



the nearest Public Health Facility; Iganga District, 2014

APPENDIX 5

Supervisor's Report

UGANDA CHRISTIAN UNIVERSITY

School for Research and Postgraduate Studies

"A Centre of Excellence in the Heart of Africa"

REGULAR SUPERVISION REPORT

Supervisor's Name: Jacqueline Kobusingye

Student's Name: Nakintu Betty Reg No: RS19M07/020

Date of Submission of Work to Supervisor 9/3/2021

Date of Meeting that Discussed the Work 17/3/2021

SUPERVISORS COMMENTS ON STUDENT'S WORK AND RECOMMENDATION FOR ACTION

Discussed comments corrected in the concept Note. The student was advised make corrections and revert.

STUDENT'S SIGNATURE

Cc Head of Department

SUPERVISOR'S SIGNATURE



Cc Co-supervisor (if there is)
Cc Head of Department
Cc Co-supervisor (if there is one)

UGANDA CHRISTIAN UNIVERSITY

School for Research and Postgraduate Studies

"A Centre of Excellence in the Heart of Africa"

REGULAR SUPERVISION REPORT

Supervisor's Name: Jacqueline Kobusingye

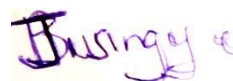
Student's Name: Nakintu Betty Reg No: RS19M07/020

Date of Submission of Work to Supervisor 10/7/2021

Date of Meeting that Discussed the Work 6/7/2021

SUPERVISORS COMMENTS ON STUDENT'S WORK AND RECOMMENDATION FOR ACTION

Discussed comments corrected in the first draft of the proposal . The student was advised make corrections and revert.



STUDENT'S SIGNATURE

SUPERVISOR'S SIGNATURE

Cc Head of Department
Cc Co-supervisor (if there is one)
Cc Head of Department
Cc Co-supervisor (if there is one)



UGANDA CHRISTIAN UNIVERSITY

School for Research and Postgraduate Studies

"A Centre of Excellence in the Heart of Africa"

REGULAR SUPERVISION REPORT

Supervisor's Name: Jacqueline Kobusingye

Student's Name: Nakingtu Betty Reg No: RS19M07/020

Date of Submission of Work to Supervisor 9/8/2021

Date of Meeting that Discussed the Work 17/8/2021

SUPERVISORS COMMENTS ON STUDENT'S WORK AND RECOMMENDATION FOR ACTION

Discussed comments corrected in the second draft of the proposal . The student was advised to make corrections and revert.

STUDENT'S SIGNATURE

SUPERVISOR'S SIGNATURE

Cc Head of Department
Cc Co-supervisor (if there is one)
Cc Head of Department
Cc Co-supervisor (if there is one)



REGULAR SUPERVISION REPORT

Supervisor's Name: Jacqueline Kobusingye

Student's Name: Nakingtu Betty Reg No: RS19M07/020

Date of Submission of Work to Supervisor 2/8/2022

Date of Meeting that Discussed the Work 17/7/2022

SUPERVISORS COMMENTS ON STUDENT'S WORK AND RECOMMENDATION FOR ACTION

Discussed comments corrected in the first draft of the report . The student was advised to make corrections and submit for approval for data collection.

STUDENT'S SIGNATURE

Cc Head of Department
Cc Co-supervisor (if there is one)
Cc Head of Department
Cc Co-supervisor (if there is one)

SUPERVISOR'S SIGNATURE

APPENDIX 6

INTRODUCTORY LETTER



UGANDA CHRISTIAN UNIVERSITY

A Centre of Excellence in the Heart of Africa

12th September, 2022

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

RE: INTRODUCTORY LETTER FOR NAKINTU BETTY

Warm greetings from Uganda Christian University!

This serves to introduce the above named; Nakintu Betty, as our student registered number RS19M07/020 pursuing a Master of Public Health.

Betty is conducting a research as a requirement for the award of the above mentioned degree entitled; *Level and Factors associated with utilization of Postnatal Care Services among Mothers in Iganga General Hospital.*

She has fulfilled all clearance requirements such as getting Research Ethics Approval from UCU-REC which is accredited and regulated by Uganda National Council for Science and Technology (UNCST).

Any assistance given to her in achieving this goal will be highly welcome.

Thank you so much.

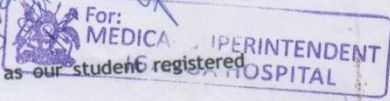
Yours faithfully,

for
Dr. Owor Joseph Jakisa
Directorate of Postgraduate Studies,
Uganda Christian University
jowor@ucu.ac.ug



cc. Executive Secretary, Uganda National Council Science & Technology
cc. Chairperson, UCU-Research Ethics Committee

Permission to data collect this research of 19/09/22



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P.O. Box 4, Mukono, Uganda (East Africa), Plot 67-173, Bishop Tucker Road, Mukono Hill, Tel: +256 (0) 31 235 0800. www.ucu.ac.ug
Ugandachristianuniversity @UCUniversity, Founded by the Province of Church of Uganda, Chartered by the Government of Uganda.



UGANDA CHRISTIAN UNIVERSITY

School for Research and Postgraduate Studies

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REGULAR SUPERVISION REPORT

Supervisor's Name: **MRS. JACQUELINE KOBUSINGYE**

Student's Name: **NAKINTU BETTY** Reg No: **RS19M07/020**

Date of Submission of Work to Supervisor: **22ND. MARCH. 2024**

Date of Meeting that Discussed the Work: **15TH. MARCH, 2024**

SUPERVISORS COMMENTS ON STUDENT'S WORK AND RECOMMENDATION FOR ACTION

<u>SN</u>	<u>COMMENTS BY THE SUPERVISOR</u>	<u>ACTION TAKEN</u>	<u>INDICATOR</u>
1.	Edit the problem statement by writing MMR full	I wrote MMR in full as Maternal Mortality Rate in the problem statement	Research book/ report
2..	Write age of respondents in years in table	I wrote ages in years	Research book/ report
3.	Replace the verb assess on the objective 2 with identify	I replaced the verb assess with identify	Research book/ report
4.	Change scale; use Dichotomous instead of Likert scale	I changed Likert scale to Dichotomous	Research book/ report
5.	Rewrite the recommendations (remove the economic empowerment)	I removed the economic empowerment from recommendations	Research book/ report
6.	Recommend for further research	I recommended further research on PNC	Research book/ report
7.	Plan for publishing		Looking for a sponsor

STUDENT'S SIGNATURE

SUPERVISOR'S SIGNATURE

Cc Head of Department

Cc Co-supervisor (if there is one)



UGANDA CHRISTIAN UNIVERSITY

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UGANDA CHRISTIAN UNIVERSITY

SCHOOL OF RESEARCH & POSTGRADUATE STUDIES

DISSERTATION CORRECTION COMPLIANCE REPORT BY THE CANDIDATE (POST VIVA FORM)

DATE: 25TH. MARCH, 2024

NAME OF CANDIDATE: NAKINTU BETTY REG. NO: RS19M07/020

TITLE OF DISSERTATION: LEVEL AND FACTORS ASSOCIATED WITH UTILIZATION OF POSTNATAL CARE SERVICES AMONG MOTHERS IN IGANGA GENERAL HOSPITAL

SN	COMMENTS BY EXTERNAL EXAMINER	ACTION TAKEN	INDICATOR
1.	The problem statement should have maternal mortality rate (MMR) for unit not just flat like MMR was 390 becomes meaningless. Repackage the problem statement	I wrote MMR in full as Maternal Mortality Rate in the problem statement	Research Report/Book
2.	Tables should be properly labeled like table 4.1; age should be shown as "age in years"	I edited the tables as instructed	Research Report/Book
3.	There is need to give a summary of the research gap at the end of literature review chapter	I wrote the research gap in the summary of chapter two (2)	Research Report/Book
3.	Conclusions and recommendation are relevant and very useful and potentially useful to improve the health care services. The final score is 72% and so passes	I was called for VIVA and I did it on 7/3/2024	Passed it with a score of 86%

SN	COMMENTS BY INTERNAL EXAMINER	ACTION TAKEN	INDICATOR
1.	During the writing, my internal examiners guided me on some gaps in	I worked on them	Research Report/Book

	the research report		
3.	Satisfied with the research report	Report was submitted to external examiner Report was reviewed and Scored 72%	I was invited for VIVA on 7/3/2024

SN	COMMENTS BY VIVA VOCE PANNEL	ACTION TAKEN	INDICATOR
1.	Student should describe the full package of PNC	I described the PNC full package according to World Health Organization(WHO)	Research Report/Book
2.	Replace the verb assess on the objective 2 with identify	I replaced the verb assess with identify	Research Report/Book
3.	Change scale; use Dichotomous instead of Likert scale	I changed Likert scale to Dichotomous	Research Report/Book
4.	Remove statistics from the conclusion section	I removed the statistics from the conclusion section	Research Report/Book
5.	Rewrite the recommendations (remove the economic empowerment	I removed the economic empowerment from recommendations	Research Report/Book
6.	Recommend for further research	I recommended further research on PNC	Research Report/Book

CANDIDATE'S NAME

NAKINTU BETTY

SIGNATURE

SUPERVISOR'S NAME

MRS. JACQUELINE KOBUSINGYE

SIGNATURE



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Student A87785, Nakintu

Betty

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