



# Factors Affecting Access and Availability of Rehabilitative Services for Postnatal Mothers in Two Selected Health Facilities in Lusaka, Zambia

Martin Sililo<sup>1</sup>; Salome Simulyampondo<sup>2</sup>; Eurody Kamwendo<sup>3</sup>; Oliver Phiri<sup>4</sup>

<sup>1;2;3;4</sup>School of Medicine and Health Sciences Bachelor of Science in Basic Medical Science Research

A Dissertation Submitted to the University of Lusaka in Partial Fulfilment of the Requirement for the Award of Bachelor of Science in Medical Sciences.

<sup>1</sup>Student Number: BMBCHB 22115199

Supervisor: Kelly Mwayengo

Publication Date: 2026/01/23

**How to Cite:** Martin Sililo; Salome Simulyampondo; Eurody Kamwendo; Oliver Phiri (2026) Factors Affecting Access and Availability of Rehabilitative Services for Postnatal Mothers in Two Selected Health Facilities in Lusaka, Zambia. *International Journal of Innovative Science and Research Technology*, 11(1), 1726-1764.  
<https://doi.org/10.38124/ijisrt/26jan789>

## DECLARATION

I, Martin Sililo, do hereby declare that the work presented in this study for the degree of Bachelor of Science in Medical Sciences.

- Represents my own work.
- Has not been presented either wholly or partially for any other degree at this or any other university.
- Does not incorporate any published work or material from another dissertation, that it is my work in design and in execution, and that all the material contained herein has been duly acknowledged by means of complete references.

Signed.....

Date.....

## **CERTIFICATE OF APPROVAL**

The University of Lusaka has approved this dissertation of Martin Sililo as partial fulfilment of the requirements for the award of the Degree of Bachelor of Science in Medical Sciences.

**Mr. Kelly Mwayengo**  
(Supervisor)

## ABSTRACT

Postnatal care (PNC) is important for the mother and newborn's health, yet access to rehabilitative care still remains challenge in low-resource settings. The study assessed factors affecting access to and availability of rehabilitative services for postnatal mothers at Mtendere Health Centre and Chawama Level 1 Hospital in Lusaka, Zambia.

➤ **Methodology:**

A descriptive cross-sectional mixed-methods design was used, combining quantitative data from 96 purposively sampled mothers (with infants under 6 weeks). Additionally, in-depth interviews were conducted with some healthcare providers. Quantitative data were analyzed using SPSS with descriptive statistics and chi-square tests, while qualitative data were analyzed using NVivo.

➤ **Results:**

The findings showed that 78.0% of participants utilized PNC services, while 22.0% did not. 58.3% of the respondents were aware of PNC, only 37.5% could accurately define it, with many associating it only with immunization and family planning. The most frequently mentioned barriers to utilization were negative attitudes of healthcare workers (39.2%), lack of knowledge (25%), long distances or lack of resources (16.7%). Emotional distress following childbirth was reported by 65.6%, though just lasting less than a week. Key socio-demographic factors such as age ( $p = 0.011$ ), parity ( $p = 0.028$ ), employment status ( $p = 0.037$ ), marital status ( $p < 0.001$ ), and education level ( $p < 0.001$ ) significantly influenced PNC utilization. Maternal mental health outcomes were also significantly linked to parity ( $p = 0.018$ ).

➤ **Recommendation:**

➤ **Conclusion:**

Improving postnatal rehabilitative services in Zambia requires education, system strengthening, and policy alignment to close service gaps and strengthen maternal outcomes.

➤ **Dedication**

This dissertation is lovingly dedicated to my wife Salome and my Son Seth. To my supervisor, Mr. Kelly Mwayengo who continuously supported, showed great patience, and ensuring that this research is a success. Their encouragement has been an inspiration.

## LIST OF ACRONYMS

- **ANC:** Antenatal care
- **HBM:** Health Belief Model
- **LMIC:** Low and middle-income countries
- **MOH:** Ministry of Health
- **PNCs:** Postnatal Care Services
- **RPNC:** Rehabilitative postnatal care
- **SPSS:** Statistical Package for Social Sciences
- **WHO:** World Health Organization
- **ZDHS:** Zambia Demographic and Health Survey

## **DEFINITION OF TERMS**

- Rehabilitative Postnatal Services refers to specialized interventions and support designed to help women regain their physical, emotional, and mental well-being after childbirth (WHO, 2022).
- Postnatal refers to the time following childbirth to 6 weeks during which the body tissues particularly the genital and pelvic organs return back to normal state, and it begins as soon as the placenta is expelled (WHO, 2010)
- Maternal mortality is the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes, (WHO, 2020).
- Reproductive health is a state of complete physical, mental, emotional and social well-being in all matters related to the reproductive system, its functions and processes, (WHO, 2022).

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## CHAPTER ONE INTRODUCTION

This chapter introduces the study and lays out a foundation for the research by discussing: background, statement of the problem, justification for the study, research objectives, research questions, and study scope.

### *A. Background*

The global health community has made tremendous efforts directed towards improving maternal and child health in the past two decades, particularly in low and middle-income countries (LMICs). Despite these efforts, maternal mortality still remains very high. In 2020 alone, approximately 287,000 women died as a result of complications related to pregnancy, childbirth and the postpartum period and most of these deaths occurred in LMICs with most of them being preventable (WHO, 2020).

One important but most overlooked aspect of maternal health is rehabilitative care for postnatal women. This type of care encompasses a number of services specially designed to support a woman's physical, emotional, and mental recovery after childbirth. These services may include health education physiotherapy, counselling, family planning, and screening for conditions like postpartum depression (WHO, 2022). Sadly, a lot of women especially in developing regions do not access these important healthcare services, despite the significant impact they have on a mother's wellbeing and her ability to care for her newborn (WHO, 2014).

The World Health Organization (WHO, 2010) defines the postnatal period as the first six weeks after childbirth, beginning immediately the placenta is delivered. This period is a critical window for physical healing, identification and management of complications that may threaten the health of both the mother and her baby. WHO has continually emphasized the need for quality, routine postnatal care during this period.

Postnatal rehabilitative care serves a double purpose: to ensure the mother and child are recovering well and to offer a safe space where women can access support and guidance. Follow-up visits during this period mostly include screening and treatment for issues such as fistula's, postpartum hemorrhage, infections, anaemia, incontinence, and psychological challenges (Shaik et al., 2024). In high-income countries, nearly all women receive postnatal care, although the services may vary in scope and frequency. However, in countries like Zambia many women completely miss or delay this care mostly due to systemic and socio-economical barriers.

According to the Zambia Demographic and Health Survey (ZDHS, 2018), most maternal and neonatal deaths occur within the first 48 hours after delivery, mainly due to the missed opportunities for timely quality postnatal care. The report recorded 187 maternal deaths per 100,000 live births in the seven years period before 2018. These statistics highlight the critical need for accessible postnatal care services and greater awareness about their importance. Programs promoting safe motherhood recommend that all women receive a health check within the first two days post-delivery.

### *B. Problem Statement*

In many developing countries like Zambia, a large proportion of women do not receive adequate postnatal care. According to WHO (2022), this trend is particularly pronounced in Sub-Saharan Africa. The 2018 ZDHS indicated that while 70% of Zambian women aged 15 to 49 received a postnatal check within two days of delivery, 22% had not received any postnatal checkup even after 41 days.

Several factors contribute to this gap in care. These include but not limited to; long distances to health facilities, transportation challenges, limited education, cultural beliefs, and a general lack of awareness about the importance of postnatal services. Despite these well-known barriers, there is a lack of localized research especially in Lusaka District to understand why many women still do not access these vital rehabilitative services.

If this knowledge gap is not addressed, many postnatal women will continue to suffer from untreated complications which can lead to long-term health challenges or even death. Furthermore, without evidence-based data, it is difficult to design effective interventions or policies. This study, therefore seeks to identify and understand the specific factors that impede access to and availability of rehabilitative postnatal services in selected health facilities in Lusaka, Zambia.

### *C. Justification of the Study*

There is an urgent need to understand why a lot of women in Lusaka do not access rehabilitative postnatal care, despite its proven benefits. The available evidence shows that access to such care is limited, and the reason behind it remains poorly understood in this particular context. Barriers such as distance, transport costs, limited health education, and cultural practices significantly affect a woman's health seeking behavior after childbirth. This study aims to fill that knowledge gap by providing detailed insights into the factors that affect access to and availability of rehabilitative services. By focusing on two health facilities

in Lusaka, the research hopes to inform targeted interventions that improve maternal and child health outcomes in the district and beyond.

#### *D. Objectives of the Study*

##### ➤ *General Objective*

To assess factors affecting access to and availability of rehabilitative services for postnatal mothers in two selected health facilities in Lusaka, Zambia.

##### ➤ *Specific Objectives*

- To evaluate the level of knowledge about postnatal services among mothers attending the selected health facilities.
- To determine the extent of utilization of postnatal services among mothers attending the selected health facilities.
- To assess whether the selected facilities have rehabilitative services available for postnatal mothers.

#### *E. Research Question*

- What is your understanding of postnatal services, including their purpose and availability?
- To what extent have you utilized postnatal services and what factors influenced your use of these services?
- What specific rehabilitative services, if any, have you accessed and how do you perceive their availability and adequacy in meeting your postnatal needs?

#### *F. Scope of the Study*

##### ➤ *Content Scope*

This research focused on identifying the factors affecting access to and use of rehabilitative postnatal care services among mothers in selected health facilities to identify strategies that reduce complications, mitigate risks to maternal health, and promote maternal well-being.

##### ➤ *Geographical Scope*

The study was conducted at two selected health facilities in Lusaka District, Zambia.

##### ➤ *Target Population*

The research involved postnatal mothers who had given birth at the selected health facilities and healthcare providers who offered postnatal services.

##### ➤ *Time Scope*

The study was conducted over a six months period to allow the researcher to obtain adequate and realistic data.

##### ➤ *Summary of Chapter One*

Chapter One introduced the study by outlining its background, problem statement, justification, objectives, and scope. It highlighted the challenges of maternal mortality and limited access to rehabilitative postnatal care in Zambia. The study aimed at investigating factors affecting access to these services in Lusaka District to address gaps in knowledge, improve health outcomes, and inform targeted interventions.

## CHAPTER TWO LITERATURE REVIEW

This section of the study explored the existing research related to the factors that affect access to and availability of rehabilitative services for postnatal mothers, within the two selected health facilities in Lusaka, Zambia. It focused on key aspects such as knowledge of these services, utilization levels, and factors influencing access availability. The discussion was guided by the Health Belief Model (HBM), a widely used framework for understanding how people make certain decisions. The reviewed literature included studies conducted in a globe context with a focus on Sub-Saharan Africa, and South Asia regions facing similar challenges to Zambia.

### ➤ *Knowledge About Rehabilitative Postnatal Services*

Knowledge of rehabilitative postnatal care services plays a vital role in whether mothers actually access these services or not. When women are well informed, they are more likely to take charge of their own recovery and make decisions that support their physical and mental wellbeing after childbirth. For instance, a study conducted by Shah et al. (2021) in rural India found that women who were educated about postnatal care during their pregnancy were more likely to attend postnatal appointments. Similarly, Yonas et al. (2021) in Ethiopia conducted a study that showed that two-thirds of the women surveyed had heard of postnatal services, less than half knew about the full range of services available such as counseling and physiotherapy. This limited knowledge contributed to low uptake of these services.

The World Health Organization (WHO, 2022) recommends that women should be equipped with relevant information to help them in making informed health decisions. Unfortunately, many women in low- and middle-income countries remain unaware of the services available in their setting. Nkosi et al. (2020) acknowledged that this problem is especially pronounced in the rural settings, where informal sources of information often fill the gap, sometimes leading to misinformation.

### ➤ *Utilization Rates of Rehabilitative Postnatal Services*

The utilization of rehabilitative postnatal services by mothers varies greatly depending on the region where they live and their socioeconomic status. Van der Merwe et al. (2022) found that in Sub-Saharan Africa, usage rates can be as low as 30% in some countries and only slightly better in others. In contrast, urban parts of India, Chaturvedi et al. (2021) found that 65% of women attended at least one postnatal visit within six weeks of giving birth, but the number dropped for subsequent visits indicating challenges in long term engagement.

In Pakistan a study conducted Khan et al. (2021) indicated that 43% of women received postnatal care within six weeks, and 35% accessed the service immediately after childbirth. Access to care was closely related to income, education level, and whether the birth took place in a healthcare institution. These findings align with other studies that indicating that women with higher education and income are more likely to seek and continue using health services (Alemayehu et al., 2022).

In another study conducted in Uganda by Namirembe et al. (2020) found a big gap between antenatal care and postnatal care. While 78% of women attended antenatal visits, only 40% went back for postnatal check-ups. This suggests that while many women several women start receiving care during pregnancy, fewer continue after delivery especially if they live in areas with limited healthcare facilities.

### ➤ *Factors Affecting Access and Availability of Rehabilitative Postnatal Services*

Access to and availability of postnatal care encompasses a wide range of factors, it isn't just about what women know. A number of others factors come into play such as socioeconomic status, physical distance, healthcare infrastructure, and cultural beliefs. Makonnen et al. (2022) identified several barriers in rural Ethiopia such as long distance to health facilities, high transport costs and lack of money. In Kenya, Mwangangi et al. (2023) indicated that cultural norms and traditional beliefs were reasons women chose not to seek care, especially in the communities where home deliveries and traditional healers are the norm.

The role of healthcare workers can also be a barrier Omondi et al. (2021) found that women often felt ignored or judged by healthcare workers, which discouraged them from subsequent visits. A lack of trained professionals made things worse, as unskilled attendants were more likely to miss serious postnatal health complications (Mokaya et al., 2022).

Socioeconomic factors continue to be some of the most powerful determining aspect. Alam et al. (2021) reported that women from wealthier, urban household were more likely to use rehabilitative postnatal services mainly due to better access and affordability of the costs. Similarly, educated women were not only informed but also more likely to speak up for their own needs and seek care when necessary.

### ➤ *Theoretical Framework*

The study adopted the Health Belief Model (HBM) as the theoretical framework, to better understand the health seeking behaviors of postnatal mothers, The model emphasizes the role of perceived susceptibility, perceived severity, perceived benefits and

perceived barriers that influence health decisions (Becker and Janz, 1984). Applied to this study, the HBM suggested that a mother's decision to seek rehabilitative postnatal care depends on how they felt complications could arise, and how serious they believed they might be, how useful they thought care would be, and how easy or hard it would be to get that care.

#### ➤ *Conceptual Framework*

The conceptual framework for this study incorporated several factors that influenced access to rehabilitative postnatal services. These included demographic factors (e.g., Age, parity, education, marital status), perception (e.g., how women viewed the usefulness and quality of care, culture, values), and environmental factors (e.g., distance to the hospital, sources of information and whether PNC services were available).

As indicated in Figure 1, the framework suggested that when women have better perceptions of postnatal services and when barriers are minimized by improving access and increasing awareness, they are more likely to use these services. In return, this could help reduce maternal and infant mortality rates.

This section shows the specific variables, their relationships, and how they influence the outcome (utilization of postnatal services).

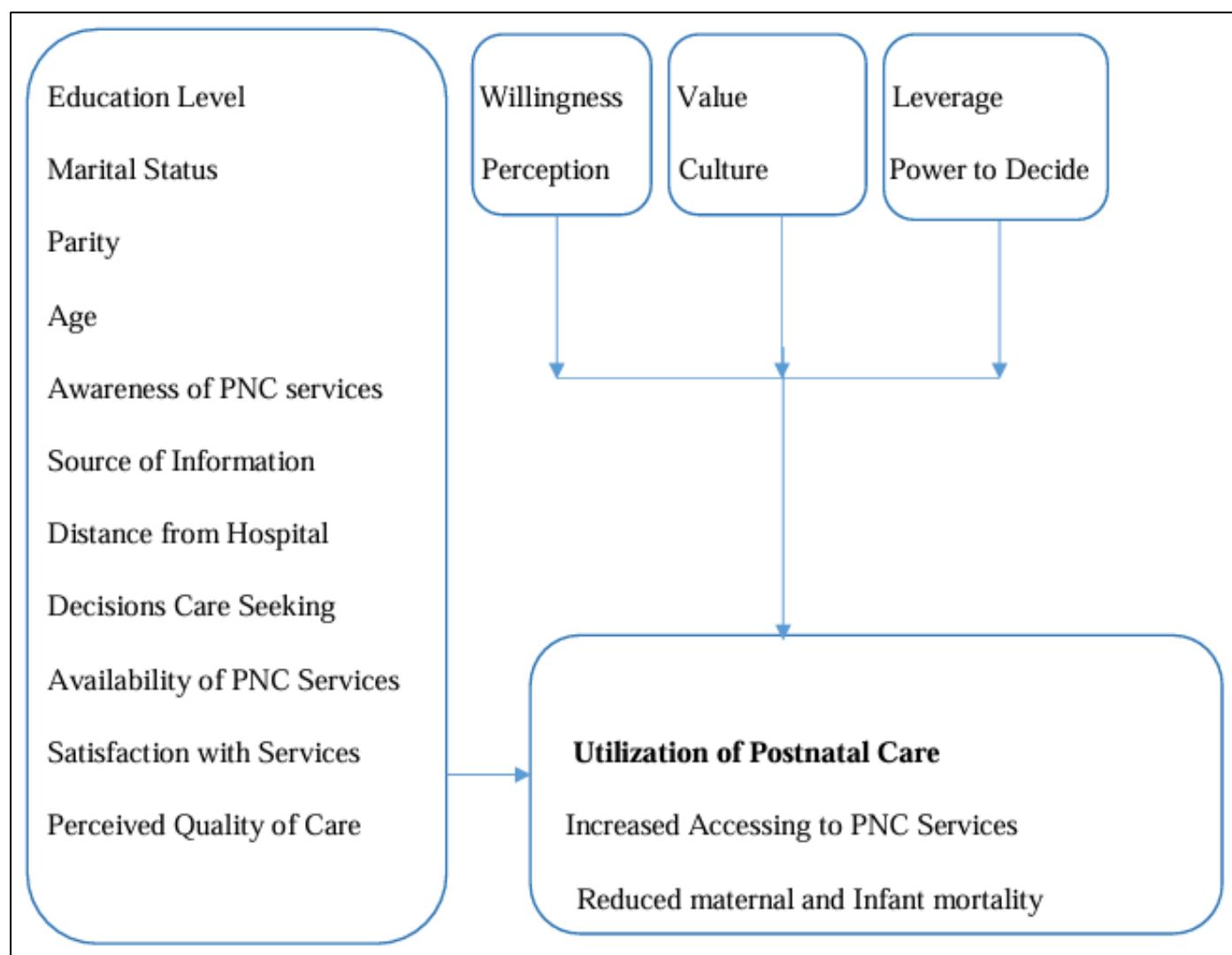


Fig 1 Conceptual Framework of the Study

#### ➤ *Research Gaps and Conclusion*

A substantial body of research has explored factors influencing access and availability of postnatal services, several importance gaps remain. Many studies look at individual factors in isolation like education level or household income without considering how these interact within the broader cultural and social norm. for example, a woman's level of education can influence her knowledge of postnatal care, this impact may be compounded by cultural expectations, family dynamics or the influence of traditional health beliefs.

There is also a noticeable lack of research on what actually works to overcome these barriers. While we understand the challenges, we know far less solutions when it comes to rural and underserved areas. There is a pressing need for research to examine the effectiveness of these strategies such as health education campaign, community-based support systems, and policies that can reduce structural inequalities. Understanding these interventions perform in real world settings was critical to improving access postnatal care and ultimately, maternal and infant outcomes.

➤ *Summary of Chapter Two*

This chapter has explored the existing literature on the various factors affecting access to and the availability of rehabilitative postnatal services. It highlighted that a mother's knowledge about these services, together with how often she uses them, is shaped by a complex network of influences from her socioeconomic background to the healthcare environment around her. Lack of awareness, high costs, long distances to facilities, and cultural beliefs all merged as key barriers, particularly in rural settings. Additionally, the chapter also emphasized that the quality and attitude of healthcare staff can affect whether women feel safe and respected enough to return for subsequent visits.

Using the Health Belief Model (HBM) as a guiding framework, the chapter examined how women's perception of risk, benefit, and barriers affect their choices. It concluded by identifying crucial gaps in current research and highlighting the need for interventions that are evidence-based to the needs of the community they aimed to serve.

## CHAPTER THREE METHODOLOGY

### ➤ *Study Design*

The adopted a descriptive cross-sectional mixed-methods design, combining both quantitative and qualitative approaches to explore the factors affecting access and availability of rehabilitative postnatal services. Numerical data was combined with personal narratives, this design allowed for a well-versed understanding of the challenges and experiences faced by postnatal mothers in two health facilities in Lusaka, Zambia.

#### • *Study Area*

The research was conducted at two health facilities in Lusaka: Mtendere Health Centre and Chawama Level 1 Hospital. These facilities were selected as a result of their established provision of postnatal care, their accessibility to the surrounding communities, and their reputation for handling a diverse range of maternal health cases. Their involvement provided meaningful insights into both routine and rehabilitative postnatal care.

#### ➤ *Study Population*

The study focused on postnatal mothers who had delivered within the past 6 weeks, and were receiving postnatal care at the selected health facilities. In addition, healthcare providers working in postnatal departments were included in to provide a professional perspective on the availability and accessibility of services.

#### • *Sample Size*

Using the Kish and Leslie (1995) formular for sample size determination:  $No = Z^2PQ/D^2$ , a sample size of 96 respondents was calculated. This figure assumed a 95% confidence interval, a 10% margin of error, and an estimation of 50% prevalence of access to postnatal rehabilitative services. Eventually, 96 respondents were successfully enrolled and participated in the study.

- ✓  $No = 1.96^2 \times 0.5 (1 - 0.5) / 0.1^2$   $No = 3.8416 \times 0.25 / 0.01$   $No = 96$  The sample size will be 96 respondents. A total of 96 women will be included in this study.

#### ➤ *Sampling Technique*

Purposive sampling was used to identify the participants who met the study inclusion criteria. The method ensured that only mothers who had recently delivered and had experience with postnatal care services were included, thereby enriching the data with firsthand experiences and appropriate insights.

#### ➤ *Inclusion Criteria*

- *For Quantitative Data:* Eligible participants were mothers who had delivered within the last 6 weeks and mothers who attended at least one postnatal care visit at the selected facilities.
- *For Qualitative Data:* In-depth interviews were conducted with a subset of postnatal women (approximately 20) who had used the services and healthcare providers (10) actively involved in postnatal care.

#### • *Exclusion Criteria*

Participants were excluded if:

- ✓ They had babies older than 6 months.
- ✓ They did not consent to participate or did not attend any antenatal sessions at the selected facilities.

#### ➤ *Data Collection*

##### • *Data Collection Instruments*

Quantitative data was collected using a structured questionnaire which included both open and closed ended questions to capture a range of responses.

For qualitative data, semi-structured interviews were conducted with the selected postnatal mothers and healthcare providers. The conversations delved into the mothers' experiences, decision making processes, and the systemic factors influencing access to rehabilitative services.

##### • *Data Management and Analysis*

The collected data was thoroughly checked for accuracy, and completeness. Quantitative data was first entered and cleaned using Microsoft Excel before being exported to SPSS for analytical analysis. This allowed for the generation of descriptive statistics and identification of key trends.

Qualitative data was transcribed, coded, and analyzed using NVivo software, which helped identify recurring themes and deeper insights into participants' experiences and perceptions.

➤ *Validity and Reliability*

A pilot study involving 10 mothers was conducted at Kalingalinga Clinic to test the validity and reliability of the questionnaire. Feedback from this pilot helped refine the tool before data collection began. Data was checked daily to ensure completeness, accuracy, and consistency.

➤ *Ethical Considerations*

Ethical approval was obtained from relevant ethics committee's prior to conducting the study. Participants received information sheet detailing the study's purpose, their rights, and how their data would be kept a secret. Written Informed consent was obtained from each participant before participation.

➤ *Limitations of the Study*

Despite its strengths, the study encountered some limitations. Financial constraints restricted the research to two health facilities within Lusaka, which also limited broader applicability. Additionally, reliance on self-reported data could introduce recall or social desirability bias. However, steps were taken such as assuring confidentiality to encourage honest and accurate responses.

➤ *Summary of Chapter Three: Methodology*

This chapter describes the methodology that was employed in investigating the factors affecting access and availability of rehabilitative postnatal care services in Lusaka. Using a mixed method approach, data was gathered from 96 respondents through structured questionnaires and interviews. The study used SPSS and NVivo for analysis and emphasized ethical standards, including informed consent and confidentiality. Despite some limitations, the study design enabled a thorough exploration of both quantitative trends and individual experiences that direct postnatal care utilization.

## CHAPTER FOUR PRESENTATION OF FINDINGS

### ➤ *Introduction*

This chapter presents findings from the study, drawn from the responses of 96 respondents who took part in the study. The data is organized in tables, pie charts, and bar charts reflecting key trends and relationships.

### ➤ *Biographic Characteristics*

To understand the context in which postnatal care was accessed, respondents had to state their age, parity, employment status, marital status, and their education level.

Table 1 Biographic Characteristics

Age of respondents	Frequency (n)	Percentage (%)	Received PNC Services	Not received PNC services
18-22	21	21.9	13 (61.9%)	8 (38.1%)
23-27	26	27.1	17 (65.4%)	9 (34.6%)
28-33	27	28.1	25 (92.6%)	2 (7.4%)
34-42	22	22.9	20 (90.9%)	2 (9.1%)
<b>Total</b>	<b>96</b>	<b>100</b>		
Parity	Frequency (n)	Percentage (%)		
1	35	36.5	23 (65.7%)	12 (34.3%)
2	24	25.0	21 (87.5%)	3 (12.5%)
3	16	16.7	14 (87.5%)	2 (12.5%)
4	12	12.5	12 (100%)	0 (0.0%)
5	6	6.3	4 (66.7%)	2 (33.3%)
6	3	3.1	1 (33.3%)	2 (66.7%)
<b>Total</b>	<b>96</b>	<b>100</b>		
Employment	Frequency (n)	Percentage (%)		
Employed	42	43.8	37 (88.1%)	5 (11.9%)
Unemployed	54	56.3	38 (70.4%)	16 (29.6%)
<b>Total</b>	<b>96</b>	<b>100</b>		
Marital Status	Frequency (n)	Percentage (%)		
Single	32	33.3	17 (53.1%)	15 (46.9%)
Married	62	64.6	56 (90.3%)	6 (9.7%)
Cohabiting	2	2.1	2 (100%)	0 (0.0%)
<b>Total</b>	<b>96</b>	<b>100</b>		
Education Level	Frequency (n)	Percentage (%)		
Primary	28	29.2	21 (75.0%)	7 (25.0%)
Secondary	34	35.1	20 (58.8%)	14 (41.2%)
Tertiary	34	35.1	34 (100%)	0 (0.0%)
<b>Total</b>	<b>96</b>	<b>100</b>		

As indicated in table 1, The majority of the respondents 53(55.2%) were aged between 23 and 33 years, of whom 79.2% had received postnatal care (PNC) services. Lower utilization was observed among younger respondents aged 18–22 years, where 38.1% had not accessed services. Most respondents 35(36.5%) had one child, and 34.3% of them had not utilized PNC services. Among the employed respondents 42(43.8%), 88.1% accessed PNC services, compared to 70.4% among the unemployed. In terms of marital status, 62(64.6%) were married, with 90.3% utilizing PNC services. Furthermore, all respondents with tertiary education 34(35.4%) reported having accessed postnatal care services.

➤ *Level of Awareness About Postnatal Services*

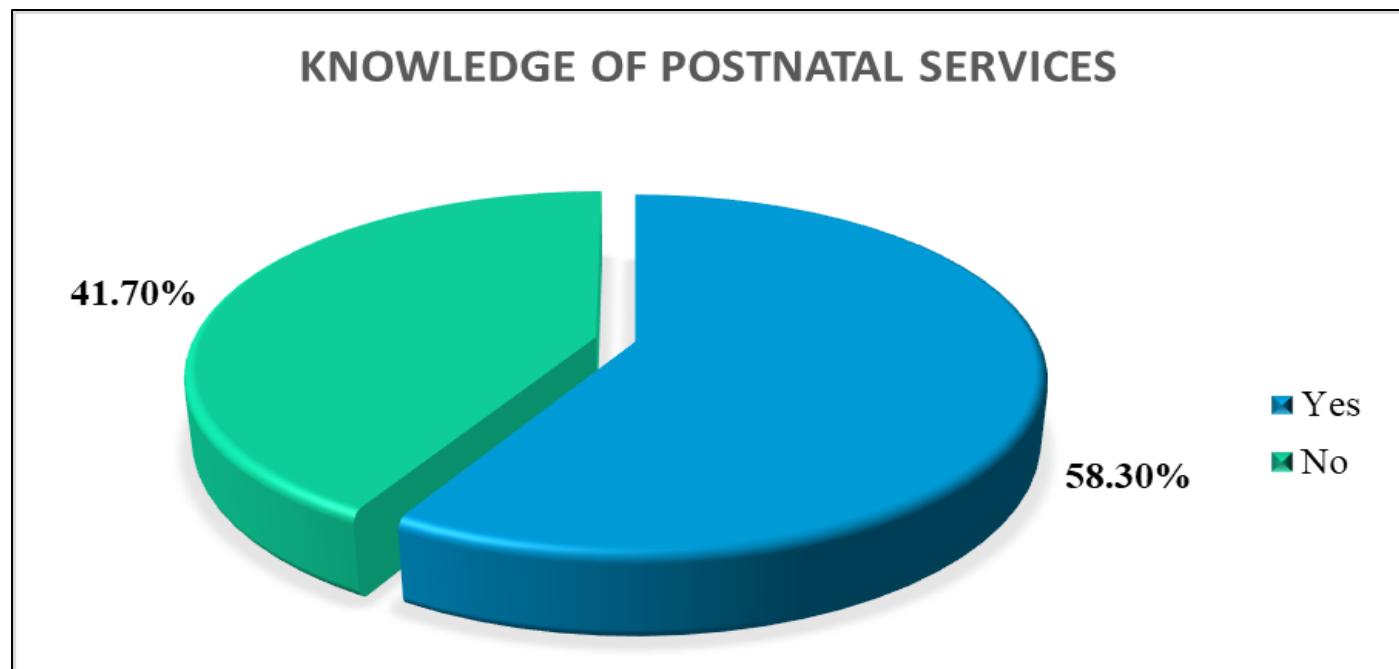


Fig 2 Level of Knowledge Regarding Postnatal Care Services

The findings indicated that over half of the respondents, 58.3% were aware of the existence postnatal services, whereas 41.7% reported having no knowledge about these services revealing a considerable information gap, which may contribute to low uptake of the services.

➤ *Understanding of Postnatal Care Services*

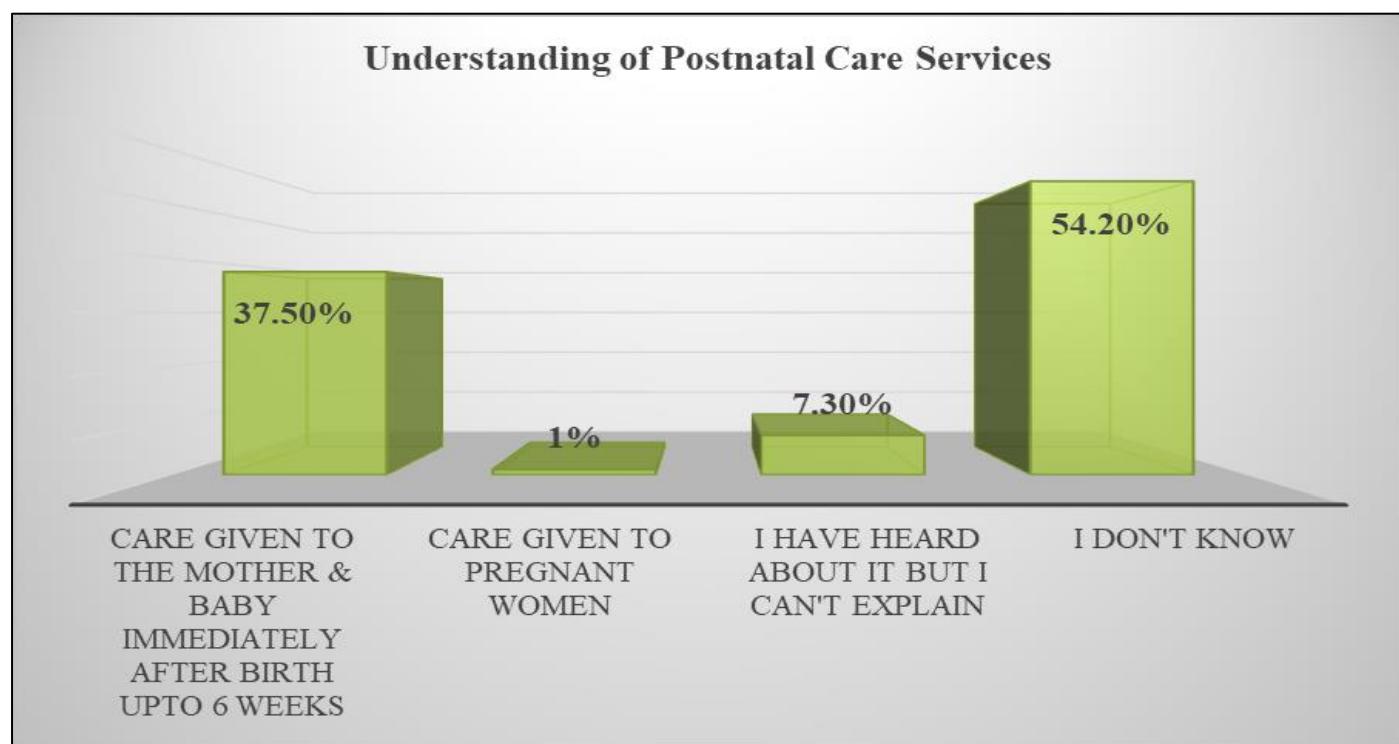


Fig 3 Respondents Understanding of Postnatal Care Services

Among the 96 respondents, 37.5% correctly defined postnatal care, 1% provided an incorrect definition, while 7.3% had heard of postnatal care but could not explain what it involves. A majority, 54.2%, reported they did not know what postnatal care services entail.

➤ *Level of Utilization of Postnatal Services*

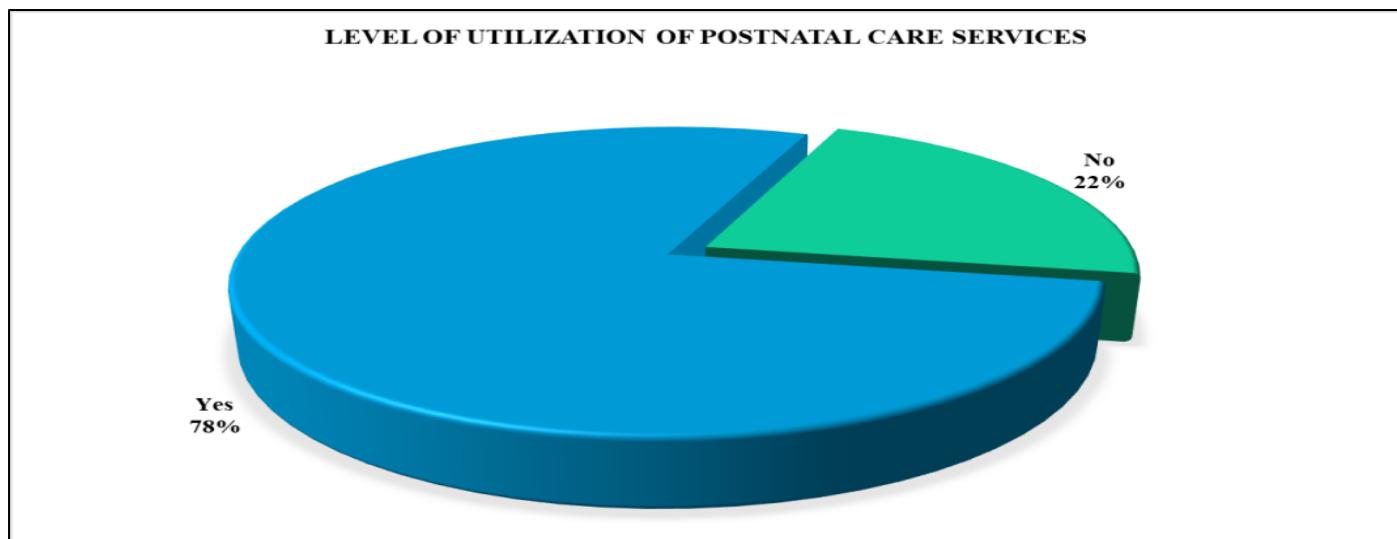


Fig 4 Receipt of Postnatal Care Services by Respondents

Out of the 96 respondents, 78.0% of the respondents indicated receiving postnatal services while 22.0% indicated that they had never received postnatal services suggesting a notable gap in utilization.

Table 2 Factors Affecting Utilization of Postnatal Services

Factors	Frequency	Percentage
Healthcare workers attitude	38	39.2
Distance to the health facility and lack of resources	16	16.7
Ignorance about the importance of the service	24	25
Long queues and waiting time	7	7.3
I do not know	10	10.4
<b>Total</b>	<b>96</b>	<b>100</b>

Table 2 shows several barriers to postnatal care service utilization as identified by respondents. 38(39.2%) indicated healthcare workers' attitude as a barrier. 24(25.0%) indicated non-utilization to ignorance about the importance of postnatal care. 16(16.7%) reported distance from the health facility and inadequate resources. 7(7.3%) cited long queues and waiting time. Additionally, 10(10.4%) indicated that they did not know any factors that could affect their use of postnatal care services.

➤ *Importance of Postnatal Services*

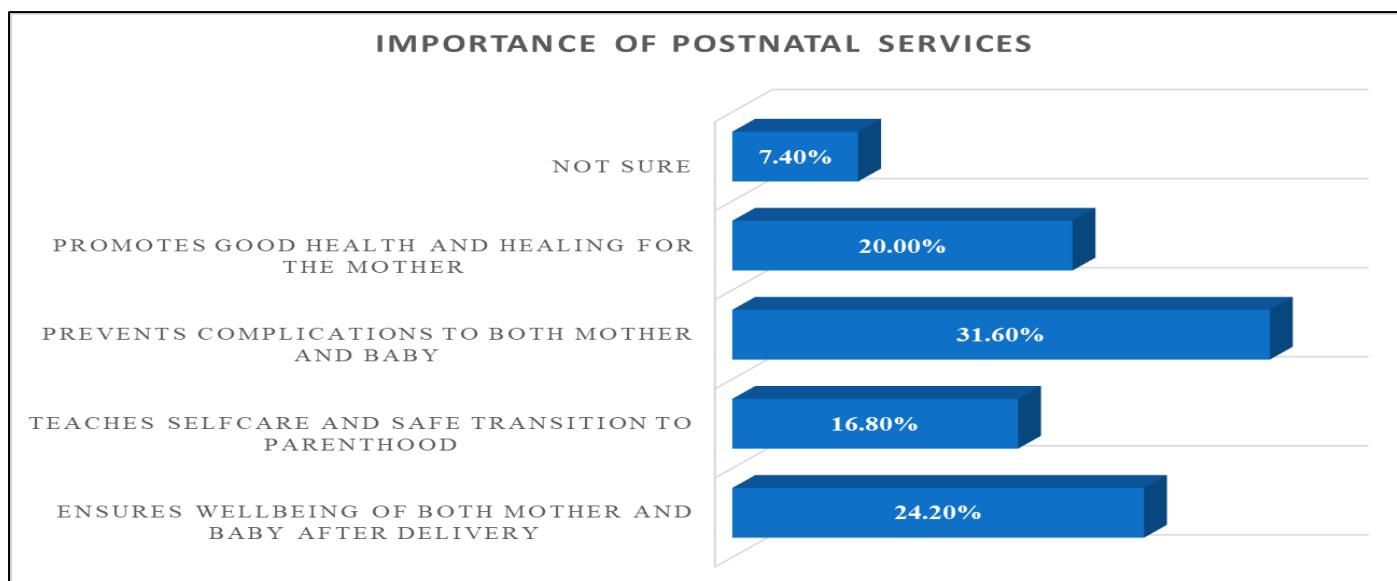


Fig 5 Respondents Perception of the Importance of Postnatal Care Services

Out of the 96 respondents, 30(31.6%) acknowledged that postnatal care prevents complications to both the mother and baby. 23 (24.2%) stated that these services are essential in ensuring the wellbeing of both mother and baby following delivery. While 16(16.8%) emphasized that postnatal care teaches self-care and baby care by ensuring a safe transition into parenthood. 19(20.0%) respondents reported that postnatal care promotes recovery and overall health for the mother. A small proportion, 7(7.4%), expressed uncertainty about the importance of postnatal services.

➤ *Complications During Postpartum Period*

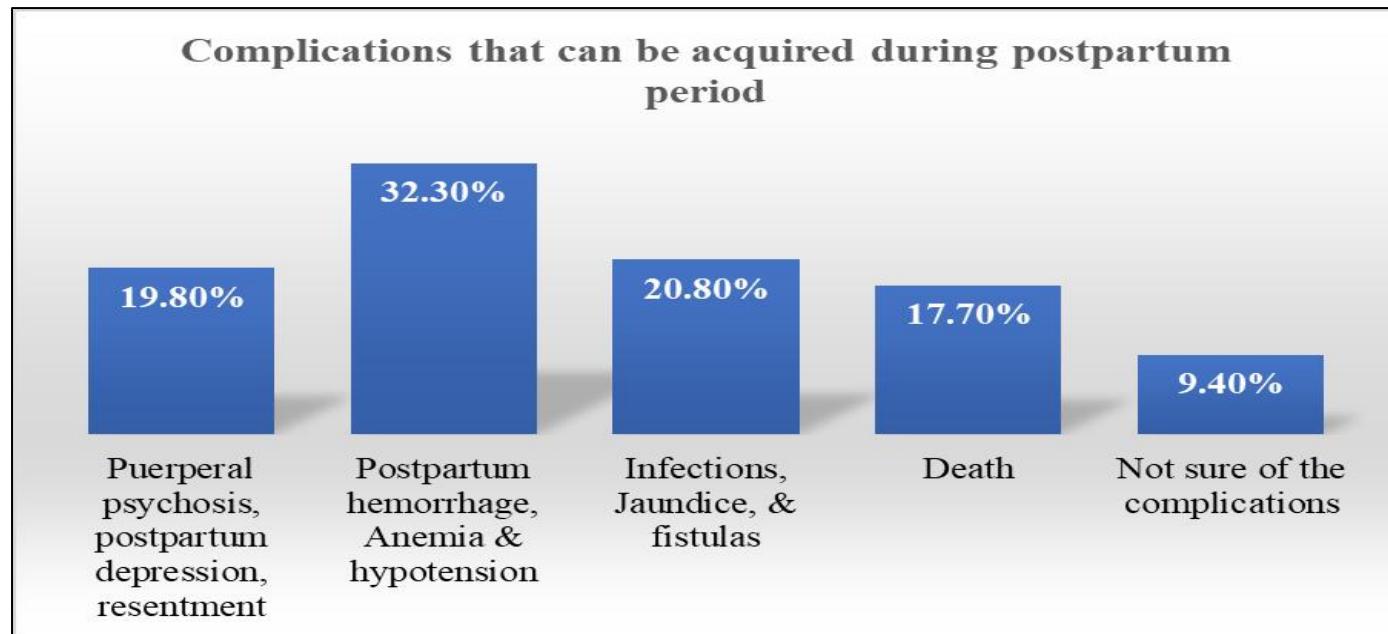


Fig 6 Complications that Can Occur During the Postpartum Period as Reported by Respondents

Among the 96 participants, 32.3% indicated postpartum hemorrhage, anemia, and hypotension as common complications. 20.8% indicated Infections, jaundice, and obstetric fistulas. While 19.8% reported puerperal psychosis, postpartum depression, and resentment. Furthermore, 17.7% of the respondents perceived maternal death as a possible complication, and 9.4% indicated uncertainty regarding the possible complications that may arise.

➤ *Strategies to Encourage uptake of Postnatal Services*

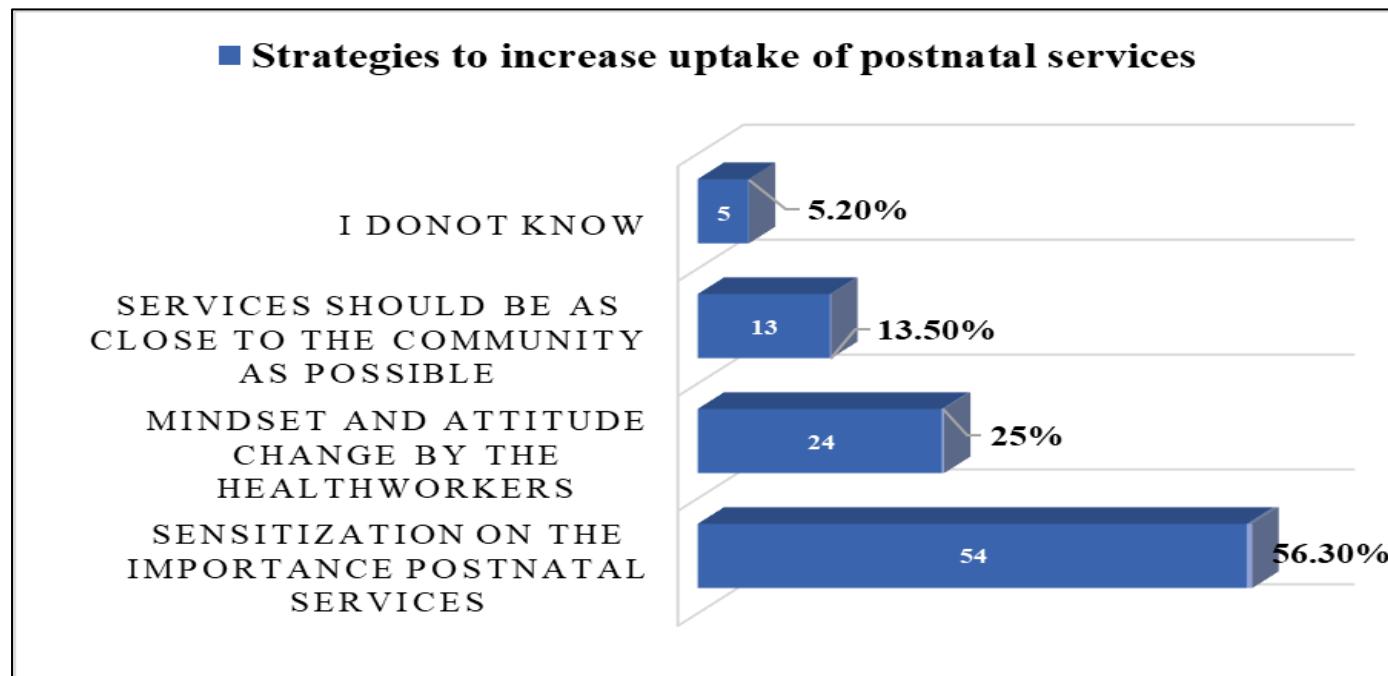


Fig 7 Presents Ways to Increase Postnatal Care Service Uptake

A majority of respondents (56.3%) suggested that increasing sensitization and awareness campaigns to educate mothers on the importance of postnatal services could increase uptake. 25.0% reported the need for healthcare workers' attitude change and interpersonal approaches noting a supportive environment could influence uptake. whereas 13.5% recommended decentralizing services closer to the community. A small proportion (5.2%) were unsure of what could be done.

➤ *Experiencing Feelings of Sadness or Anxiety After Giving Birth*

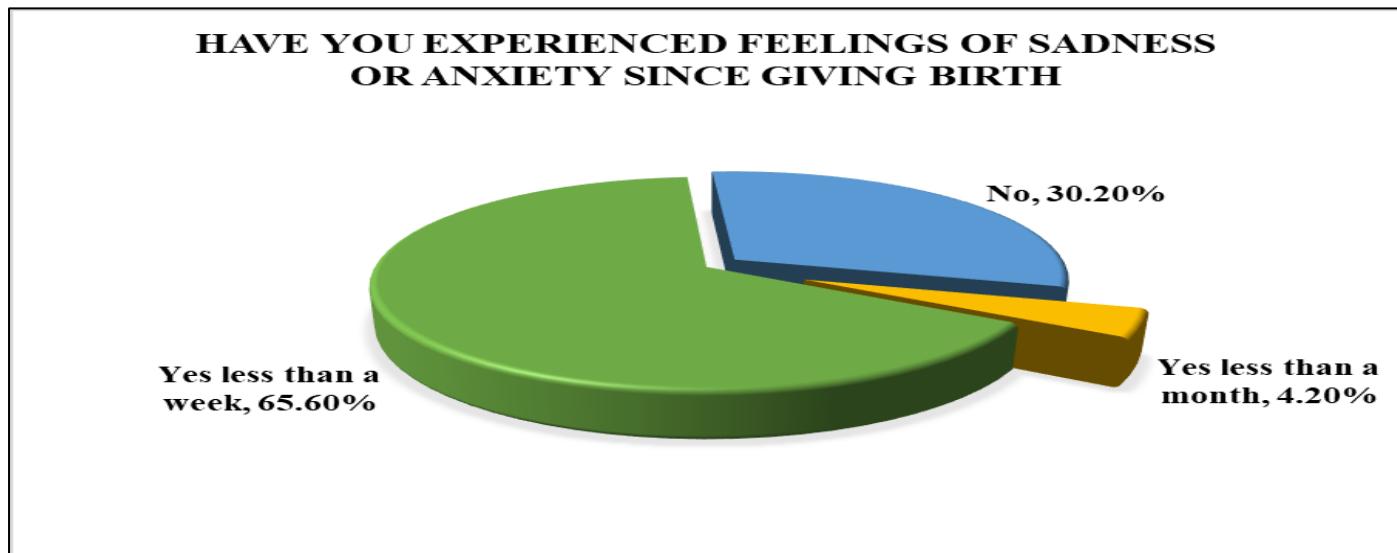


Fig 8 Respondents' Experiences of Sadness or Anxiety Following Childbirth.

Majority of the respondents 65.6% experienced feelings for less than a week after delivery. 30.2% of respondents reported that they did not experience any sadness or anxiety during the postpartum period. A small proportion 4.2% reported experiencing such feelings for a longer period, lasting up to a month child birth.

Table 3 Association Between Biographic Characteristics and Postnatal Service Utilization

Variables	Label Ever received the postnatal services	Yes	No	P-Value
Age ranges	18-22	13 (61.9%)	8 (38.1%)	<b>0.011</b>
	23-27	17 (65.4%)	9 (34.6%)	
	28-33	25 (92.6%)	2 (7.4%)	
	34-42	20 (90.9%)	2 (9.1%)	
Parity	1	23 (65.7%)	12 (34.3%)	<b>0.028</b>
	2	21 (87.5%)	3 (12.5%)	
	3	14 (87.5%)	2 (12.5%)	
	4	12 (100.0%)	0 (0.0%)	
	5	4 (66.7%)	2 (33.3%)	
	6	1 (33.3%)	2 (66.7%)	
Employment Status	Employed	37 (88.1%)	5 (11.9%)	<b>0.037</b>
	Unemployed	38 (70.4%)	16 (29.6%)	
Marital Status	Single	17 (53.1%)	15 (46.9%)	<b>&lt;0.001</b>
	Married	56 (90.3%)	6 (9.7%)	
	Cohabiting	2 (100.0%)	0 (0.0%)	
Education	Primary	21 (75.0%)	7 (25.0%)	<b>&lt;0.001</b>
	Secondary	20 (58.8%)	14 (41.2%)	
	Tertiary	34 (78.1%)	21 (21.9%)	

Table 3 indicates the relationship between respondents' demographic characteristics and their utilization of postnatal care services was examined using Chi-square tests. Statistically significant associations were observed for age ( $p = 0.011$ ), parity ( $p = 0.028$ ), employment status ( $p = 0.037$ ), marital status ( $p < 0.001$ ), and education level ( $p < 0.001$ ). These results indicate that demographic characteristics significantly influenced the likelihood of utilizing postnatal services among respondents.

Table 4 Association Between Biographic Characteristics and Knowledge of Postnatal Services.

Variables	Label Have you ever heard of postnatal services	Yes	No	P-Value
Age ranges	18-22	7 (33.3%)	14 (66.7%)	<b>0.013</b>
	23-27	13 (50.0%)	13 (50.0%)	
	28-33	20 (74.1%)	7 (25.9%)	
	34-42	16 (72.7%)	6 (27.3%)	
Marital Status	Single	17 (53.1%)	15 (46.9%)	<b>0.400</b>
	Married	37 (59.7%)	25 (40.3%)	
	Cohabiting	2 (100.0%)	0 (0.0%)	
Education	Primary	6 (21.4%)	22 (78.6%)	<b>&lt;0.001</b>
	Secondary	16 (47.1%)	18 (52.9%)	
	Tertiary	34 (100.0%)	0 (0.0%)	

Table 4 presents a statistically significant association between age ( $p = 0.013$ ) and education level ( $p < 0.001$ ) with knowledge of postnatal services, suggesting that older and more educated respondents were more likely to be informed about these services. However, no significant association was found between marital status and knowledge of postnatal services ( $p = 0.400$ ). All associations were evaluated at a 95% confidence level.

Table 5 Association Between Selected Demographic Characteristics and Postpartum Emotional Experience

Variables	Label Have you experienced feeling of sadness or anxiety after birth	Yes	No	Yes less than a month	P-Value
Age ranges	18-22	17 (81.0%)	4 (19.0%)	0 (0.0%)	<b>0.187</b>
	23-27	19 (73.1%)	7 (26.9%)	0 (0.0%)	
	28-33	15 (55.6%)	9 (33.3%)	3 (11.1%)	
	34-42	12 (54.5%)	9 (40.9%)	1 (4.5%)	
Parity	1	29 (82.9%)	5 (14.3%)	1 (2.9%)	<b>0.018</b>
	2	17 (70.8%)	5 (20.8%)	2 (8.3%)	
	3	6 (37.5%)	10 (62.5%)	0 (0.0%)	
	4	6 (50.0%)	5 (41.7%)	1 (8.3%)	
	5	2 (33.3%)	4 (66.7%)	0 (0.0%)	
	6	3 (100.0%)	0 (0.0%)	0 (0.0%)	
Education	Primary	21 (75.0%)	6 (21.4%)	1 (3.6%)	<b>0.272</b>
	Secondary	23 (67.6%)	11 (32.4%)	0 (0.0%)	
	Tertiary	19 (55.9%)	12 (35.3%)	3 (8.8%)	

Table 5 presents the relationship between selected demographic characteristics and the experience of sadness/anxiety after delivery. The results showed a statistically significant association between parity and the experience of feelings of such emotional responses ( $P=0.018$ ) indicating that the number of children a woman has may influence her emotions. However, no significant associations were found for age ( $P=0.187$ ) and education level ( $P=0.272$ ). The associations were examined using the Chi-square test at a 95% confidence level.

## CHAPTER FIVE

### DISCUSSION OF RESEARCH FINDINGS

#### ➤ *Introduction*

This chapter presents a discussion of the key research findings. Suggestions were made after careful analysis of the data to address the objectives and achieve the purpose of the study which was to assess factor affecting access and availability of rehabilitative services for postnatal mothers.

#### ➤ *Biographic Information of Respondents*

The majority of respondents were aged between 23 and 33, with 26 (27.1%) aged 23–27 and 27 (28.1%) falling within 28–33 years. Utilization of postnatal care services increased with age. Markedly, 92.6% of women aged 28–33 and 90.9% of those aged 34–42 indicated having accessed postnatal services, as compared to only 61.9% among the young mothers aged 18–22. This trend suggests that younger mothers are less likely to use the services. These findings are consistent with a study conducted by Adu et al. (2020), who found that older women in sub-Saharan Africa were more likely to utilize postnatal services, possibly due to increased experience and awareness of the importance of such care.

Parity played an important role in the utilization of PNC services. Women with two to four children presented the highest utilization rates, with 87.5% to 100% using the services. However, utilization decreased as parity increased, such as those with five (66.7%) or six children (33.3%). This trend is supported by Yaya et al. (2017), who observed that higher parity may reduce the likelihood of seeking maternal health services as a result of amassed caregiving burdens or perceived experience in childbearing.

Employment status as another determinant, indicated that 54 (56.3%) women were unemployed, and among them 29.6% had not accessed postnatal care services. While, 88.1% of the employed respondents reported utilizing PNC services. These findings suggests that employment significantly influenced postnatal care service utilization reflecting those of Bachani and Tenkorang (2020) who reported similar findings in Ghana where women had higher chances of accessing postnatal care, indicating that economic empowerment plays a vital role in facilitating access to maternal health services.

Marital status also had influence on uptake, among the 62 (64.6%) married women, 90.3% reported receiving postnatal services as compared to only 53.1% of single mothers who did so. These findings align with research conducted by Tura et al. (2018) in Ethiopia, where married women had better access to maternal health services, likely due to increased social and financial support.

Educational attainment had a prominent impact as well, 28 (29.2%) of the respondents only had primary education, 25.0% had not accessed PNC services. This contrasts with tertiary-educated women, all of whom (100%) accessed the service. This outcome is consistent with Ndugga et al. (2022) who found that higher education among Ugandan women increased the likelihood of utilizing maternal healthcare services, emphasizing the idea that education enhances health literacy and informed health seeking behavior.

#### ➤ *Knowledge of Postnatal Services*

The study findings revealed that 58.3% of respondents had heard of postnatal care services. This suggests that majority of mothers had some information about PNC, possibly acquired through antenatal care (ANC) visits. This observation is consistent with findings by Ekholuenetale et al. (2020), who indicated that ANC attendance significantly increased maternal knowledge on critical postnatal interventions and complications.

Despite this general awareness, profound understanding was limited. Only 37.5% of respondents could correctly define postnatal care, while a majority (54.2%) did not understand what PNC services entail. Most mothers associated PNC mainly with immunization and family planning, important health services, but not a complete representation of postnatal care. This points to a gap in maternal health literacy. Singh et al. (2021) reported that many women in low-resource settings had limited understanding of the full range of postnatal services beyond child-focused interventions, such as immunization.

On the perceived importance of PNC, 31.6% of respondents recognized its role in preventing complications for both mother and baby, and others acknowledged its role ensuring post-delivery wellbeing (24.2%), teaching baby care (16.8%), and supporting maternal healing (20.0%). This indicates a positive perception of PNC, however the presence of 7.4% of women who were not unsure of its importance indicates persistent knowledge gaps. Masaba and Mmusi-Phetoe (2020) reported that understanding the benefits of PNC is highly associated with service utilization, signifying that targeted education can improve uptake.

In terms of postpartum complications that may arise during the postpartum period, 57.3% of women demonstrated awareness. This level of knowledge could have been acquired during postnatal hospital stays or through community sensitization. These

findings are consistent with Jerome Kabakyenga et al. (2012), who found that knowledge of postpartum complications was a strong predictor of timely health-seeking behavior among Ugandan mothers.

➤ *Level of Utilization of Postnatal Services*

Study findings revealed that 78.0% of the respondents had utilized postnatal care (PNC) services, while 22.0% did not. The relatively high utilization may be attributed to improved awareness and better health infrastructure and increased advocacy for maternal healthcare. Nevertheless, 22% respondents did not access PNC services highlighting a gap that could be as a result of lack of knowledge, financial limitations, or distance to healthcare facilities.

Utilizing PNC services is critical for preventing maternal and neonatal complications, especially during the first week after childbirth. Absence of follow-up care after delivery exposes both mother and child to preventable complications. These findings align with Singh et al. (2021), who indicated that women with low education levels and limited access to information often result in reduced postnatal service uptake. Likewise, Firoz et al. (2022) emphasized that promoting mental health and full physical recovery among mothers is essential for improving overall health outcomes. Given these outcomes, efforts should therefore be strengthened at both community and health system levels to raise awareness and improve access to comprehensive postnatal care.

➤ *Factors Affecting Utilization of Postnatal Services*

The study revealed that the most commonly reported barrier to utilizing postnatal care (PNC) was healthcare workers' attitude, cited by 39.2% of the mothers. This shows that negative interpersonal experiences such as rudeness may discourage mothers from returning for postnatal services. These findings align with Tesfaye et al. (2021), who reported that disrespectful or inattentive treatment by health professionals significantly deterred women from utilizing maternal services. Creating a respectful, dignified, and client-friendly environment is essential for improving maternal health outcomes.

The second common cited barrier was lack of understanding about the importance of PNC, reported by 25% of respondents. This reflects a persistent gap in maternal health literacy. In the same manner, Bohren et al. (2021) reported that lack of knowledge about PNC's role in preventing complications and promoting recovery was a serious barrier in low-resource settings. This highlights the importance of continuous health education during both antenatal care and community outreach.

Accessibility issues were also noted, as 16.7% of respondents cited long distance to the health facilities and a lack of finances as major challenges. This shows how physical accessibility and infrastructural limitations continue to affect service utilization, particularly those living in rural or under-resourced areas. Worku et al. (2022) reported similar challenges in sub-Saharan, where limited transportation and distant health centres significantly reduced postnatal care follow-up.

A smaller proportion of mothers (7.3%) mentioned long queues and extended waiting times as deterrents. While seemingly like minor logistical inconveniences, they can have a meaningful impact on women's motivation to seek care, especially those balancing childcare and household responsibilities. Finally, 10.4% of mothers reported they were unaware of any factors affecting their utilization of postnatal care, which may reflect disengagement with health services or lack exposure to maternal health education.

➤ *Strategies to Increase Uptake of Postnatal Services*

The study highlighted several strategies proposed to improve the uptake of postnatal services. The most suggested approach supported by 56.3% of respondents, was the need to enhance sensitization and awareness about the importance of postnatal care. This aligns Liana et al. (2023), who found that health education significantly boosted the utilization of postnatal services, particularly in rural settings. Informing mothers on the importance of postnatal care, such as its role in preventing complications, supporting recovery, and promoting newborn health can empower mothers to seek and prioritize these lifesaving services.

Another prominent strategy was improving healthcare workers' attitudes as reported by 25% of respondents. Negative experiences such as disrespectful treatment or neglect, have been shown to deter women from utilizing maternal services, as reported by Tesfaye et al. (2021). Addressing these challenges through targeted training and attitude shifts among healthcare workers would help build trust and make mothers feel more comfortable accessing the service. Furthermore, 13.5% of respondents suggested that PNC services should be brought closer to communities. This is similar to Worku et al. (2022), who emphasized that geographic proximity and easier access to services are vital in improving service utilization, especially in rural communities. A small proportion (5.2%) of respondents were unsure of what measure could be used to improve uptake, indicating the need for further research to explore additional factors that influence postnatal service uptake.

➤ *Emotional Well-Being of Mothers Following Childbirth*

The study revealed that 65.6% of respondents experienced feelings of sadness/anxiety for less than a week after delivery, suggesting that brief feelings of sadness or anxiety are common in the immediate postpartum period. These short emotional responses could be attributed to the physical and hormonal imbalance that occur after childbirth. These findings align with Dennis et al. (2021), who found that many women experience mild emotional fluctuations after childbirth, a phenomenon often referred to as the "baby blues."

On the other hand, 30.2% of respondents reported not experiencing any sadness or anxiety following childbirth, indicating that a significant proportion of mothers may transition well into motherhood without major emotional distress. However, a small proportion 4.2% of respondents experienced feelings of sadness or anxiety persisted for up to a month postpartum, which could indicate early stage of more prolonged emotional challenges, which may indicate postpartum depression. These findings highlight the importance of healthcare systems to monitor and address the emotional health of mothers after childbirth.

➤ *Influence of Biographic Characteristics on Postnatal Service Use and Maternal Mental Health*

The study indicate that several biographic characteristics significantly influenced both the utilization and awareness of postnatal care (PNC) services. Notably, age ( $p = 0.011$ ), parity ( $p = 0.028$ ), employment status ( $p = 0.037$ ), marital status ( $p < 0.001$ ), and education level ( $p < 0.001$ ) were all found to as influential factors in determining whether mothers had access to PNC services. Women aged 28 to 42 were particularly likely to utilize PNC services compared to their younger counterparts. Likewise, mothers with higher parity especially those with four or more children demonstrated higher usage of these services. Gebeyehu et al. (2021), observed that older and more experienced mothers are generally more proactive in seeking maternal healthcare services. Additionally, employed and married women showed higher utilization of PNC services, which reflects advantages of financial security and spousal support, as reported by Wang et al. (2022). Education played a significant role, with tertiary educated mother indicating the highest levels of PNC utilization, underlining the positive influence of health literacy on service uptake.

In terms of awareness of postnatal services, age ( $p = 0.013$ ) and education level ( $p < 0.001$ ) emerged as key influencers. older Mothers and those with tertiary education demonstrated significant greater knowledge about PNC, while awareness among mothers with only primary education remained very low. Interestingly, marital status was not significantly association with knowledge of postnatal services ( $p = 0.400$ ), suggesting that individual exposure and education may be more vital than relationship status in determining awareness.

Regarding maternal mental health, statistically significant association was found between parity and the experience of sadness or anxiety after childbirth ( $p = 0.018$ ). First-time mothers were more likely to report such feelings due to emotional stress and uncertainty that accompany the transition into motherhood, aligning with the findings of Shorey et al. (2021). On the other hand, no statistically significant association was found between maternal mental health outcomes and age ( $p = 0.187$ ) or education level ( $p = 0.272$ ), suggesting that these factors may be less influential than previously assumed.

## CHAPTER SIX CONCLUSION AND RECOMMENDATIONS

### ➤ *Conclusion*

This study set out to assess the factors affecting access and availability of rehabilitative services for postnatal mothers at two selected health facilities in Lusaka, Zambia. The findings reveal a mixed picture that while the overall utilization of postnatal services was relatively high (78%), tangible gaps remain particularly in awareness, access to comprehensive rehabilitative care and emotional support. Biographic factors such as age, parity, employment status, marital status, and education level played a vital role influencing both awareness and utilization of services. Older, employed, married, and tertiary-educated mothers were likely to access and utilize PNC services. However, serious barriers such as negative attitudes from health workers, limited maternal health literacy, distance to facilities, and insufficient mental health support all emerged as challenges. Emotional health in particular emerged as an area requiring urgent support. A notable proportion of mothers experienced sadness or anxiety in the postpartum period, especially first-time mothers in the week following childbirth. The study highlights the urgent need for holistic, mother-centered postnatal care that integrates physical, emotional, and educational support to improve maternal and child health outcomes.

### ➤ *Study limitations*

The study was conducted in only two health facilities, which may limit the generalizability of its findings. Its cross-sectional design could not establish a causal and effect relationship between variables explored. Furthermore, emotional health was self-reported and not assessed using standardized diagnostic tools, which could have led to possibly underestimating postpartum mental health issues. Language and literacy barriers also may have affected the accuracy of responses for some participants.

### ➤ *Implications of the Study to Medical Science*

The study's findings underscore the importance of integrating mental health services into routine postnatal care. Many mothers experience emotional distress after childbirth that often goes unnoticed. Strengthening healthcare workers attitude particularly around respectful and empathetic care could influence PNC service uptake. The results also provide evidence to inform targeted interventions that take into account important sociodemographic factors such as age, education, and marital status to enhance postnatal service utilization. Expanding community outreach and sensitization programs could further bridge knowledge gaps and increase access to rehabilitative services, particularly in underserved areas.

### ➤ *Recommendations*

- The government should integrate comprehensive postnatal care, including routine mental health screening into national maternal health programs, with policies that improve access to rehabilitative services, especially for first-time mothers and those in underserved areas.
- Intensify health education efforts during antenatal visits and community outreach programs to improve understanding of the full spectrum of postnatal services, including rehabilitative and mental health components.
- Conduct regular customer care training for healthcare providers to foster respectful, empathetic, and supportive interactions with postnatal mothers, thereby increasing trust and service uptake.
- Ensure consistent availability of rehabilitative services in all postnatal care units by equipping selected health facilities with necessary resources and trained personnel, directly addressing service availability.

## REFERENCES

- [1]. Ababulgu, F. A., et al. (2020). "Educational attainment and maternal health service utilization in Ethiopia." *BMC Pregnancy and Childbirth*, 20(1), 358.
- [2]. Adu, J., Tenkorang, E. Y., Banchani, E., Allison, J., & Mulay, S. (2020). Correlates of antenatal care utilization among women of reproductive age in sub-Saharan Africa: evidence from multinomial analysis of demographic and health surveys (2010–2018) from 31 countries. *Archives of Public Health*, 78(1), 102. <https://doi.org/10.1186/s13690-020-00516-w>
- [3]. Alam, S. M., Shamsuddin, K., & Hafeez, M. (2021). Socio-economic determinants of postnatal care utilization in Pakistan: A cross-sectional study. *International Journal of Public Health*, 66(7), 810-819.
- [4]. Alemayehu, T., Abebaw, A., & Tsegaye, T. (2022). Factors influencing postnatal care utilization in rural Ethiopia: A community-based study. *BMC Health Services Research*, 22(1), 1-9.
- [5]. Banchani, E., & Tenkorang, E. Y. (2020). Postnatal care utilization among women in rural Ghana: analysis of 2014 Ghana demographic and health survey. *BMC Pregnancy and Childbirth*, 20(1), 15. <https://doi.org/10.1186/s12884-020-03497-4>
- [6]. Bohren, M. A., Javadi, D., & Vogel, J. P. (2021). Gender equity in health workforce: Policy insights from Uganda and India on the need for postnatal care. *Health Policy and Planning*, 36(2), 162–170. <https://doi.org/10.1093/heapol/czaa173>
- [7]. Chaturvedi, S., Singh, A., & Yadav, S. (2021). Utilization of postnatal care services in urban India: A cross-sectional study. *Journal of Maternal-Fetal & Neonatal Medicine*, 34(14), 2237-2243.
- [8]. Dennis, C. L., et al. (2021). "Prevalence of postpartum depressive symptoms in women: A meta-analysis." *Journal of Affective Disorders*, 45(3), 305-312.
- [9]. Ekholuene, M., Barrow, A., & Ekholuene, C. (2020). Women's enlightenment and early antenatal care initiation are determining factors for the use of eight or more antenatal visits in Benin. *Journal of Preventive Medicine and Public Health*, 53(5), 366–375. <https://doi.org/10.3961/jpmph.20.200>
- [10]. Gebeyehu, N. A., et al. (2021). "Determinants of postnatal care utilization among women in sub-Saharan Africa." *PLOS ONE*, 16(9), e0257678.
- [11]. Kabakyenga, J. K., Östergren, P. O., Turyakira, E., & Pettersson, K. O. (2012). Knowledge of obstetric danger signs and birth preparedness practices among women in rural Uganda. *Reproductive Health*, 8(1), 33. <https://doi.org/10.1186/1742-4755-8-33>
- [12]. Khan, M. S., Habib, S., & Shah, A. (2021). Socioeconomic determinants of postnatal care utilization in Pakistan: A national study. *International Journal of Health Policy and Management*, 10(8), 512-519.
- [13]. Liana, S., et al. (2023). "Impact of health education on postnatal care utilization in rural settings." *Journal of Maternal Health*, 32(1), 56-64.
- [14]. Makonnen, S. H., Abebe, L., & Birmeta, K. (2022). Barriers to postnatal care utilization in rural Ethiopia: A qualitative study. *Ethiopian Journal of Health Development*, 36(2), 112-120.
- [15]. Masaba, B. B., & Mmusi-Phetoe, R. M. (2020). Predictors of postnatal care satisfaction among women attending selected health facilities in Uganda. *International Journal of Environmental Research and Public Health*, 17(6), 2018. <https://doi.org/10.3390/ijerph17062018>
- [16]. Mokaya, G. M., Ochieng, D. A., & Wambua, L. (2022). Healthcare workforce challenges and postnatal care utilization in Kenya. *Global Health Action*, 15(1), 34-42.
- [17]. Mwangangi, M., Mutua, M., & Njeru, E. (2023). Cultural influences on postnatal care utilization among rural women in Kenya. *Health Policy and Planning*, 38(1), 45-52.
- [18]. Namirembe, S., Ssemugabo, C., & Mukasa, P. (2020). The utilization of postnatal care services in Uganda: A national survey. *Uganda Health Bulletin*, 12(4), 122-130.
- [19]. Ndugga, P., Namiyonga, N. K., & Sebuwufu, D. (2022). Female education and maternal health care utilization: evidence from Uganda. *Reproductive Health*, 19(1), 37. <https://doi.org/10.1186/s12978-022-01432-8>
- [20]. Nkosi, B., Phoko, M., & Simelane, S. (2020). Knowledge gaps and postnatal care service uptake in southern Africa: A systematic review. *African Journal of Primary Health Care & Family Medicine*, 12(1), 34-45.
- [21]. Omundi, J., Kimani, S., & Njeri, R. (2021). The role of healthcare providers in influencing postnatal care utilization in Kenya. *Journal of Health Communication*, 26(5), 434-441.
- [22]. Shah, S. R., Bhattacharai, S., & Kandel, K. (2021). The impact of antenatal education on postnatal care utilization in rural India. *Maternal and Child Health Journal*, 25(3), 213-220.
- [23]. Shaik A, Khan S, Shaik A, et al. (August 05, 2024) Advancements in Postpartum Rehabilitation: A Systematic Review. Cureus 16(8): e66165. DOI 10.7759/cureus.66165
- [24]. Shorey, S., et al. (2021). "Prevalence and factors associated with postpartum depression: A systematic review." *Archives of Women's Mental Health*, 24(6), 879–893.
- [25]. Singh, K., Story, W. T., & Moran, A. C. (2021). Assessing the impact of postnatal care training for healthcare workers on maternal and newborn health outcomes: A systematic review. *BMC Pregnancy and Childbirth*, 21(1), 67. <https://doi.org/10.1186/s12884-020-03554-y>
- [26]. Tesfaye, G., Oljira, L., & Tura, A. K. (2021). Women's experiences and perceptions of disrespect and abuse in maternal health care settings in southern Ethiopia. *BMC Pregnancy and Childbirth*, 21(1), 287. <https://doi.org/10.1186/s12884-021-03757-0>

- [27]. Tesfaye, R., et al. (2021). "Healthcare workers' attitudes towards maternal services and their effect on postnatal care utilization in Ethiopia." *BMC Health Services Research*, 21(1), 112.
- [28]. Tura, G., Fantahun, M., & Worku, A. (2018). Determinants of postnatal care utilization in urban community among women in Debre Birhan Town, Northern Shewa, Ethiopia. *Journal of Health, Population and Nutrition*, 37(1), 10. <https://doi.org/10.1186/s41043-018-0140-6>
- [29]. Van der Merwe, E., Niekerk, A., & Matthews, B. (2022). Global trends in postnatal care utilization: A review of 30 years of research. *International Journal of Maternal and Child Health*, 45(2), 78-92.
- [30]. Wang, W., et al. (2022). "Socioeconomic determinants of maternal health service use in developing countries." *International Journal of Health Planning and Management*, 37(2), 833-846.
- [31]. WHO maternal, newborn, child and adolescent health and ageing data portal:www.who.int/data/maternal-newborn-child-adolescent-ageing/maternal-and-newborn-data/maternal-and-newborn---coverage. (2022).
- [32]. WHO recommendations on maternal and newborn care for a positive postnatal experience. Geneva: World Health Organization; 2022. Licence: CC BY-NC-SA 3.0 IGO.
- [33]. WHO recommendations on postnatal care of the mother and newborn. Geneva: World Health Organization; 2014
- [34]. WHO. Focusing on postnatal care in low- and middle-income countries. 2017. Available at: <https://www.who.int/activities/focusing-on-postnatal-care-in-low-and-middle-income-countries>. Accessed on 12 December 2024.
- [35]. Worku, A., et al. (2022). "Barriers to postnatal care uptake in sub-Saharan Africa: A review of recent evidence." *The Lancet Global Health*, 10(3), 255-263.
- [36]. Worku, S. A., Alemayehu, A., & Mekonnen, F. A. (2022). Determinants of maternal health service utilization in rural Ethiopia: A cross-sectional study. *PLOS ONE*, 17(5), e0267830. <https://doi.org/10.1371/journal.pone.0267830>
- [37]. World Health Organization (2020). Trends in Maternal mortality: a global health observatory data. Trends in maternal mortality 2000 to 2020: estimates by WHO, UNICEF, UNFPA, World Bank Group and UNDESA/Population Division || <https://www.who.int/publications/i/item/9789240068759>
- [38]. Yaya, S., Uthman, O. A., Okonofua, F., & Bishwajit, G. (2017). Women's empowerment as an enabling factor of contraceptive use in sub-Saharan Africa: a multilevel analysis of cross-sectional surveys of 32 countries. *Reproductive Health*, 15(1), 214. <https://doi.org/10.1186/s12978-018-0658-5>
- [39]. Yonas, M., Ayele, M., & Zerihun, A. (2023). Knowledge and utilization of postnatal care services in rural Ethiopia: A cross-sectional study. *Journal of Global Health*, 10(3), 210-218.
- [40]. Zambia Demographic Health Survey (ZDHS) 2018.

**APPENDICES**  
**APPENDIX I – GANTT CHART**

ACTIVITY	DURATION	MONTH 1	MONTH 2	MONTH 3	MONTH 4	MONTH 5	MONTH 6
Proposal writing	1 Month	X					
Ethical approval	1 Month		X				
Data collection	2 months			X	X		
Data analysis	1 Month					X	
Report writing	1 Month						X
<b>Total</b>	<b>6 months</b>						

**APPENDIX II – PROPOSED RESEARCH BUDGET**

<b>Data Collection (Travel, stationary, etc.)</b>	<b>K1,276</b>
<b>Ethical clearance fee</b>	<b>K500</b>
<b>Miscellaneous Expenses</b>	<b>K250</b>
<b>Printing and binding of dissertation</b>	<b>K150</b>
<b>Total</b>	<b>K2,176</b>

### APPENDIX III - CONSENT FORM

I am Martin Sililo, a bachelor of Medicine and Surgery student at University of Lusaka and I am conducting a study to Assess Factors Affecting Access and Availability of Rehabilitative Services for Postnatal Mothers In Two Selected Health Facilities In Lusaka, Zambia.

You are requested to participate in this research study and this will take at least 20 minutes. You will be asked questions regarding the above topic. Your participation is purely voluntary, and you have the right to withdraw at any time. Your identity will not be revealed as names shall not be used. Any information given in this questionnaire shall remain confidential. If there is anything that is unclear or you need further information about, you are allowed to ask questions to your satisfaction. Thank you

➤ *Declaration by the Participant:*

I have read this consent form and I have understood the purpose of the study. I have had the opportunity to ask and have been answered to my satisfaction. I have understood that I have the right to withdraw from the study at any time without any effect on my future medical care. I voluntarily consent to participate in this study.

.....

Participant's Signature

.....

Date

I declare that I explained the information given in this document to ..... She was encouraged and given ample time to ask me any questions. This conversation was conducted in English.

.....

Researcher's Signature

.....

Date

## APPENDIX IV - QUESTIONNAIRE

Title: Factors Affecting Access and Availability of Rehabilitative Services for Postnatal Mothers In Two Selected Health Facilities In Lusaka, Zambia.

➤ *Interview Number:*

➤ *Date of Interview:*

--	--	--

• *Section A: Biographic data (Tick appropriately)*

1. Age:

2. Parity:

3. Employment Status?

Employed	1
Unemployed	2

4. Marital Status?

Single	1
Married	2
Divorced	3
Cohabiting	4

5. Education Level

Primary	1
Secondary	2
Tertiary	3
Never schooled	4

• *Section B: Factors Affecting Access and Availability of Rehabilitative Services for Postnatal Mothers*

1. **Have you ever heard about postnatal services?**

a) No

b) Yes

2. **If yes, what is your understanding of the term postnatal services?**

.....

3. **Have you ever received the postnatal services?**

a) No

b) Yes

4. **If no, why?**

.....

5. Are postnatal services readily available?

- a) No
- b) Yes

6. To what extent have you utilized postnatal services?

.....

7. What influenced you to use the service?

.....

8. What services did you receive?

.....

9. Were the services received adequate in addressing your postnatal needs, and were you satisfied?

.....

10. Is it important to receive postnatal services?

- a) Yes
- b) No

11. If no, why

.....

12. Can one acquire complications during postpartum period?

- a) No
- b) Yes

13. If yes, give examples

.....

➤ *Section C: Others*

11. what do you think affects the utilization of postnatal services?

.....

14. What do you think can be done to encourage use of postnatal services?

.....

• *Section D: Postpartum Depression*

15. Have you experienced feelings of sadness or anxiety since giving birth? If so, for how long?

- a) No
- b) Yes, less than a week
- c) Yes, 1–4 weeks
- d) Yes, more than 3 months

16. Have you discussed any mental health concerns (e.g., feelings of depression, anxiety) with a healthcare provider since giving birth?

- a) No
- b) Yes, with a midwife
- c) Yes, with a nurse
- d) Yes, with a doctor/mental health specialist

17. What do you believe are the primary barriers to seeking help for postpartum depression?

- a) Lack of awareness about mental health services
- b) Stigma surrounding mental health issues
- c) Limited access to mental health professionals
- d) Lack of support from family or community

## APPENDIX V-UNILLUS ETHICAL COMMITTEE



**UNIVERSITY of LUSAKA**

*Passion for Quality Education: Our Driving Force*

### **UNIVERSITY OF LUSAKA RESEARCH ETHICS COMMITTEE (UNILUS-REC)**

Plot No. 37413, Off Alick Nkhata Mass Media, P. O Box 36711, Lusaka.  
Phone: +260211258505, 258409 Fax: +260211233409; Cell +260976075850, 961917862.  
E-mail: [unilus@zamnet.zm](mailto:unilus@zamnet.zm), [rector@zamnet.zm](mailto:rector@zamnet.zm)

### **UNILUS-RESEARCH ETHICS COMMITTEE**

Ref no: FWA00033228-548(08)/(08)/(2024)

Date: 07 March 2025

STUDENT NAME: Mr. Martin Sillito

#### **FACTORS AFFECTING ACCESS AND AVAILABILITY OF REHABILITATIVE SERVICES FOR POSTNATAL MOTHERS.**

The above research was submitted to the research ethics committee for review. The study has no major ethical problems and is approved subject to the following:

1. The study cannot be changed without express permission of the UNILUS research ethics committee.
2. Approval from the necessary authority should be sought.

1 of 2

**Professor Kassonde Bowa**

MSc(Glasgow) M.Med(UNZA),FRCS(Glasgow),FACS,FCS,DPH(LSTMH),MPH(UCL)

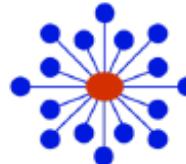
Chairman- UNILUS REC

Professor of Urology and Consultant Urologist

Deputy Vice-Chancellor – Research and Innovation

Executive Dean - School of Medicine and Health Sciences

## APPENDIX VI - GCP CERTIFICATE



### NIDA Clinical Trials Network

#### Certificate of Completion

is hereby granted to

**Martin Sililo**

to certify your completion of the six-hour required course on:

#### GOOD CLINICAL PRACTICE

**MODULE:**

Introduction  
Institutional Review Boards  
Informed Consent  
Confidentiality & Privacy  
Participant Safety & Adverse Events  
Quality Assurance  
The Research Protocol  
Documentation & Record-Keeping  
Research Misconduct  
Roles & Responsibilities  
Recruitment & Retention  
Investigational New Drugs

**STATUS:**

N/A  
Passed  
Passed  
Passed  
Passed  
Passed  
Passed  
Passed  
Passed  
Passed  
Passed

**Course Completion Date: 6 January 2025**

**CTN Expiration Date: 6 January 2028**

*Eve Jelstrom*

Eve Jelstrom, Principal Investigator  
NDAT CTN Clinical Coordinating Center

*Good Clinical Practice, Version 5, effective 03-Mar-2017*

*This training has been funded in whole or in part with Federal funds from the National Institute on Drug Abuse, National Institutes of Health, Department of Health and Human Services, under Contract No. HHSN27201201000024C.*

## APPENDIX VII - NATIONAL HEALTH RESEARCH AUTHORITY CLEARANCE



### NATIONAL HEALTH RESEARCH AUTHORITY

**Lot No. 18961/M, off Kasama Road, Chalala, P.O. Box 30075, LUSAKA**

Tell: +260211 250309 | Email: [znhrasec@nhra.org.zm](mailto:znhrasec@nhra.org.zm) | [www.nhra.org.zm](http://www.nhra.org.zm)

**NHRA8286/15/02/2025**

**14th March 2025**

The Principal Investigator,  
MARTIN SILILO,  
UNILUS,  
UNILUS

Dear MARTIN SILILO,

#### **Re: Request for Authority to Conduct Research**

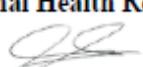
The National Health Research Authority Is in Receipt of Your Request for Authority to Conduct Research Titled **“FACTORS AFFECTING ACCESS AND AVAILABILITY OF REHABILITATIVE SERVICES FOR POSTNATAL MOTHERS IN TWO SELECTED HEALTH FACILITIES IN LUSAKA, ZAMBIA.”**

I wish to inform you that following submission of your request to the Authority, our review of the same and in view of the ethical clearance, this study has been approved on condition that:

1. The relevant Provincial and District Medical Officers where the study is being conducted are fully appraised.
2. Progress updates are provided to NHRA bi-annually from the date of commencement of the study.
3. The final study report is cleared by the NHRA before any publication or dissemination within or outside the country.
4. After clearance for publication or dissemination by the NHRA, the final study report is shared with all relevant Provincial and District Directors of Health where the study was being conducted, University leadership, and all key respondents.

Yours sincerely,

National Health Research Authority

  
Prof Victor Chalwe,  
Director and Chief Executive Officer

## APPENDIX VIII - AUTHORIZATION LETTER FROM LUSAKA DISTRICT HEALTH OFFICE TO CONDUCT THE STUDY.

All correspondences should be  
addressed to the District Health  
Director

Tel. +260-211-235554  
Fax: +260-211-236429



In reply please quote:

LDHQ/53/2/2

## MINISTRY OF HEALTH

25<sup>th</sup> March, 2025

LUSAKA DISTRICT HEALTH OFFICE  
P.O. BOX 50827  
LUSAKA

Principal Investigator  
Mr. Martin Silllo  
University of Lusaka  
LUSAKA

### REF: REQUEST FOR AUTHORITY TO CONDUCT STUDY

We are in receipt of your letter dated 21<sup>st</sup> March, 2025 over the above subject.

Please be informed that Lusaka District Health Office has no objection for you to conduct a study titled "**Factors affecting access and availability of rehabilitative services for postnatal mothers in two selected facilities in Lusaka, Zambia**".

Kindly ensure that your findings are shared with the health Facility on soft copy to [Astridah.maseka@moh.gov.zn](mailto:Astridah.maseka@moh.gov.zn), [cwsianchapa@gmail.com](mailto:cwsianchapa@gmail.com) and [lalisanambeye@gmail.com](mailto:lalisanambeye@gmail.com) and that while research is going on, operations must continue with no interruption. Furthermore, work hand in hand the planner, Clinical Care Specialist, Public Health Specialist and Medical Superintendent as you conduct your research and support them with accreditation.

By copy of this letter, the Medical Superintendent and Public Health Specialist is kindly requested to facilitate accordingly.

Dr. Astridah Kona Yihemba Maseka  
Director Health Services  
LUSAKA DISTRICT HEALTH OFFICE

cc: The Medical Superintendent - Chawama First Level Hospital  
cc: The Public Health Specialist – Munali Sub district