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RESEARCH ON MENTAL HEALTH ON MATERNAL AND CHILD HEALTHCARE

Analysis on the Prevalence of Post-Partum Depression among the Women in Harare Zimbabwe

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ABSTRACT

➢ ***Introduction***

Postpartum depression (PPD) is a significant public health concern affecting women worldwide, particularly in low- and middle-income countries. In Zimbabwe, the socioeconomic conditions of women in urban areas such as Harare had exacerbated the risk of PPD. This study examined the prevalence of PPD among women in Harare, exploring how socioeconomic factors such as income level, education, and marital status influence mental health outcomes during the postpartum period. The study aimed to provide insights that could inform targeted interventions for improving maternal mental health.

➢ ***Methods***

A cross-sectional study design was employed, with data collected from 385 postpartum women attending healthcare facilities in Harare. Participants were selected through stratified random sampling to ensure a representative sample across different socioeconomic backgrounds. The Center for Epidemiological Studies Depression Scale (CES-D) was used to assess depression levels at multiple postpartum stages: prenatal, 1 month, 2 months, and 3 months postpartum. Socioeconomic variables, including income level, education, marital status, and access to healthcare, were also collected. Statistical analyses, including chi-square tests and ANOVA, were conducted to determine the relationships between these variables and PPD prevalence.

➢ ***Findings***

The findings indicated a significant relationship between socioeconomic factors and the prevalence of PPD. Women with lower income levels reported higher depression scores across all postpartum stages, with a mean CES-D score of 15.2 during the prenatal period, compared to 11.5 for higher-income women. Marital status and educational level were also found to be significant predictors of PPD, with single and less-educated women showing higher rates of depression. The data suggested that financial instability, lack of social support, and limited access to mental health services contribute to elevated PPD risks.

➢ ***Conclusion***

This study analyzed the critical impact of socioeconomic factors on postpartum depression among women in Harare. The results highlighted the need for targeted interventions that address financial and social support for low-income mothers, along with improving access to mental health services. Implementing such measures could significantly reduce the burden of PPD and improve overall maternal and child health outcomes in Zimbabwe.

Keywords:- *Postpartum Depression, Socioeconomic Factors, Maternal Mental Health, Harare, Zimbabwe, CES-D, Income Level, Education, Marital Status, Cross-Sectional Study.*

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RESEARCH STATEMENT

The thesis statement for the study on postpartum depression (PPD) among women in Harare, Zimbabwe, asserted that understanding the prevalence, associated factors, and impacts of PPD within this urban context was crucial for developing effective interventions and policies to improve maternal mental health outcomes. This study aimed to investigate the prevalence of PPD among postpartum women attending healthcare facilities in Harare, explore socio-economic, psychosocial, and cultural factors influencing PPD, and examined the implications of PPD on maternal and infant health. By addressing these objectives, the thesis aimed to provide valuable insights that could inform targeted healthcare interventions, enhance mental health support services, and advocate for policies that prioritize maternal well-being in urban Zimbabwe.

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LIST OF ABBREVIATIONS

- ANOVA: Analysis of Variances
- CES-D: Center for Epidemiological Studies Depression Scale
- LMICs: Low- and Middle-Income Countries
- HIV/AIDS: Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
- HICs: High-Income Countries
- NGOs: Non-Governmental Organizations
- MOHCC: Ministry of Health and Child Care
- EPDS: Edinburgh Postnatal Depression Scale
- LAC: Latin America and Caribbean
- PPD: Postpartum Depression
- PND: Postnatal Depression

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CHAPTER ONE
INTRODUCTION

A. Background Analysis and Overview Analysis

Post-natal depression (PND) is a debilitating mental health condition that affects women after childbirth. It is characterized by feelings of extreme sadness, fatigue, anxiety, and changes in sleeping or eating patterns, significantly impacting the mother's ability to care for herself and her baby.

Post-natal depression (PND) has been a significant public health concern worldwide, affecting mothers in both developed and developing countries. In Harare, Zimbabwe, the prevalence of PND has drawn increasing attention due to its impact on maternal and child health. Post-natal depression has been characterized by persistent feelings of sadness, anxiety, and fatigue following childbirth, which severely affect a mother's ability to care for her newborn and herself. The condition could stem from a variety of factors, including hormonal changes, psychological stress, and socio-economic challenges. In Zimbabwe, where healthcare resources were often limited and socio-economic pressures are high, the risk factors for PND could be exacerbated, leading to higher prevalence rates and more severe outcomes for affected women.

B. PND in the Context of Low- and Middle-Income Countries

Postpartum depression (PPD) has become the most common mental health issue during the perinatal period and poses a significant public health challenge in low- and middle-income countries (LMICs). It impacts approximately one in nine new mothers worldwide, with a prevalence of 10%–15%, but this rate is notably higher in LMICs. In these regions, around 20%–40% of women experience depression before or after childbirth. The prevalence of PPD varies significantly across countries, ranging from 8% to 54.5%. This variation is attributed to cultural differences in symptom interpretation and health-seeking behaviors. PPD negatively affects child growth, development, and the mother–infant bond. Therefore, timely identification and treatment of PPD are essential for improving maternal health and reducing infant and child mortality. Despite its prevalence, PPD often remains undiagnosed in many areas.

The elevated prevalence in LMICs can be attributed to numerous factors, including economic stress, lack of social support, and limited access to mental health care. These challenges make it more difficult for women to seek and receive the help they need during the critical postpartum period.

The prevalence of PND in LMICs varies widely, with reported rates ranging from 8% to 54.5% across different countries. This variation can be explained by cultural differences in the interpretation and reporting of depressive symptoms, as well as disparities in healthcare infrastructure and resources. For instance, in some cultures, mental health issues are stigmatized, leading women to underreport their symptoms. Additionally, variations in health-seeking behavior and the availability of mental health services contribute to the differing prevalence rates observed across LMICs.

The socio-economic environment in Harare, Zimbabwe's capital, presents unique challenges that contributed to the prevalence of post-natal depression. Many women in Harare faced financial instability, limited access to quality healthcare, and inadequate social support, all of which are critical risk factors for PND. Furthermore, cultural stigmas surrounding mental health can prevent women from seeking help, exacerbating the condition. Studies have shown that the prevalence of PND in Harare was influenced by these socio-economic factors, along with other determinants such as domestic violence, unplanned pregnancies, and lack of spousal support.

C. Maternal Health in Zimbabwe

Zimbabwe, a country in Southern Africa, has faced numerous challenges in maternal and child health. Harare, the capital city, reflected these challenges with its high population density and socio-economic disparities. Maternal health services in Harare were often overstretched and under-resourced, impacting the quality and accessibility of care for pregnant women and new mothers. The healthcare system's limitations, coupled with socio-economic stressors, contributed to the mental health burden among women, making it essential to study and address PND.

D. Prevalence of PND in Harare

Research on the prevalence of PND in Harare, Zimbabwe, has been limited but crucial for informing healthcare policies and interventions. Existing studies suggested that the prevalence of PND in Zimbabwe may be comparable to or higher than the average rates observed in other LMICs. Factors such as economic instability, high rates of HIV/AIDS, and cultural attitudes towards mental health may influence the prevalence and reporting of PND among women in Harare. Understanding these factors was key to developing targeted strategies to support affected women.

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E. Factors Contributing to PND in Harare

Several socio-economic and cultural factors contribute to the high prevalence of PND in Harare. Economic challenges, such as unemployment and poverty, create a stressful environment for new mothers. Additionally, cultural stigma surrounding mental health issues often prevents women from seeking help. The lack of adequate mental health services and support networks further exacerbates the problem. Identifying these factors through comprehensive research can help in creating effective intervention programs tailored to the needs of women in Harare.

F. The Scopes of Analysis

➢ *Global Perspective*

Post-natal depression (PND) a widespread mental health issue affecting women across the globe. Characterized by symptoms such as persistent sadness, fatigue, anxiety, and difficulties in bonding with the baby, PND significantly impacted the well-being of new mothers and their families. On a global scale, the prevalence of PND was estimated to be between 10% and 15%. This mental health condition was recognized as a major public health concern due to its potential long-term effects on both the mother and child, including impaired emotional and cognitive development of the infant and an increased risk of maternal suicide.

In high-income countries (HICs), the prevalence of PND tends to be lower, ranging from 10% to 15%, due to better access to healthcare services, social support systems, and awareness of mental health issues. HICs often have structured screening programs that help in the early identification and management of PND. However, even in these countries, cultural stigma and lack of awareness can lead to underreporting and inadequate treatment. Research in HICs has highlighted the importance of integrated healthcare approaches, where obstetric care is closely linked with mental health services, to effectively address PND.

➢ *The Regional Perspective*

- *North America and Europe*

In North America and Europe, the prevalence of post-natal depression (PND) among women was generally estimated to be between 10% and 15%. These regions benefit from well-developed healthcare systems, which include structured screening and support programs for new mothers. The availability of mental health resources and greater awareness of PND contributed to more effective identification and treatment. However, disparities still exist, with marginalized communities often experiencing higher rates of PND due to barriers in accessing healthcare and social support.

- *Asia*

Asia presents a diverse picture in terms of PND prevalence, reflecting the vast socio-economic and cultural differences across the region. In more developed countries like Japan and South Korea, the prevalence rates are similar to those in Western countries, ranging from 10% to 20%. However, in less developed areas, such as parts of South Asia, the rates could be significantly higher, often exceeding 30%. Factors such as traditional gender roles, stigma around mental health, and limited access to mental health services contribute to these elevated rates.

- *Africa*

The prevalence of PND in Africa was among the highest globally, with rates often ranging from 20% to 40%. In some regions, particularly in rural areas, the prevalence can be even higher. The high rates were driven by a combination of factors, including economic hardship, high rates of HIV/AIDS, inadequate healthcare infrastructure, and cultural stigma surrounding mental health. Women in Africa often faced significant stressors, such as gender-based violence and limited access to postpartum care, which exacerbate the risk of PND.

- *Latin America and the Caribbean*

In Latin America and the Caribbean, the prevalence of PND varied widely, with rates typically ranging from 15% to 30%. Social and economic inequalities, along with varying levels of access to healthcare, played a significant role in this variation. In some countries, efforts to integrate mental health services into primary healthcare had begun to show positive results, but many women still lack adequate support. Cultural factors, including strong family networks, can sometimes provided buffer against PND, but they also contributed to underreporting due to stigma.

- *Middle East*

In the Middle East, the prevalence of PND was influenced by cultural, social, and economic factors. Rates of PND are generally higher than in Western countries, often ranging from 15% to 35%. Traditional family structures and cultural attitudes towards mental health can hinder women from seeking help. Additionally, ongoing conflicts and economic instability in several countries in the region further contributed to the mental health burden among new mothers.

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- *Oceania*

In Oceania, including Australia and New Zealand, the prevalence of PND was similar to that in North America and Europe, typically around 10% to 20%. These countries had robust healthcare systems that support early detection and management of PND. However, indigenous populations and remote communities face higher rates of PND due to disparities in healthcare access and socio-economic challenges. Efforts to address these disparities are ongoing, with a focus on culturally appropriate mental health services.

➢ *The Local and National Perspective*

- *Local Perspective: Harare, Zimbabwe*

Harare, the capital city of Zimbabwe, has faced significant challenges related to post-natal depression (PND) among women. The city's high population density, coupled with socio-economic disparities, exacerbated the mental health burden on new mothers. Many women in Harare experience considerable stress due to economic instability, unemployment, and the high cost of living. Additionally, access to mental health services was limited, with most healthcare facilities focusing primarily on physical health. Cultural stigma surrounding mental health further prevents many women from seeking help, leading to underreporting and untreated cases of PND. The local healthcare system, already strained by resource limitations, struggles to provided adequate support and intervention for affected mothers.

- *National Perspective: Zimbabwe*

Nationally, Zimbabwe faces widespread public health challenges that impact maternal mental health. The country's healthcare infrastructure is under-resourced, and there is a significant shortage of trained mental health professionals. National surveys and studies indicate that the prevalence of PND in Zimbabwe may be higher than the global average, with estimates ranging from 20% to 40%. Factors contributing to this high prevalence include pervasive poverty, high rates of HIV/AIDS, and gender-based violence. The national government has recognized the importance of addressing mental health issues, including PND, but efforts are often hampered by limited funding and competing public health priorities.

- *Addressing PND in Harare: Local Initiatives*

In response to the growing awareness of PND, some local initiatives in Harare have begun to address this pressing issue. Non-governmental organizations (NGOs) and community-based groups were working to raise awareness about PND and reduce stigma through education and outreach programs. These initiatives aimed to empower women by providing information about PND symptoms and encouraging them to seek help. Additionally, some local healthcare providers were integrating mental health screening into routine maternal care, although these efforts are still in the early stages and require further support and expansion.

- *National Efforts and Policies*

At the national level, Zimbabwe's Ministry of Health and Child Care had started to integrate mental health into broader health policies. The government had recognized the need for comprehensive maternal health services that included mental health care. Efforts were underway to train more healthcare workers in mental health awareness and to develop national guidelines for the identification and treatment of PND. However, these policies needed robust implementation and support to be effective. Increased investment in mental health infrastructure, better data collection on PND prevalence, and targeted interventions are essential steps to address the issue on a national scale.

G. Challenges and Opportunities

Both locally in Harare and nationally, Zimbabwe faced significant challenges in addressing PND. Economic constraints, cultural stigma, and a lack of mental health resources were major barriers. However, there were also opportunities for improvement. Leveraging international aid, fostering partnerships with NGOs, and engaging community leaders could enhance efforts to combat PND. Additionally, promoting mental health education and creating supportive environments for new mothers could help reduce the prevalence and impact of PND.

H. Statement of the Problem

Post-natal depression (PND) has been a significant yet underrecognized mental health issue affecting a substantial number of women in Harare, Zimbabwe. Despite its profound impact on maternal and infant health, the prevalence and contributing factors of PND in this region remained inadequately studied and understood. Economic hardships, social stigma, and limited access to mental health services exacerbated the condition, leaving many affected women without the necessary support and treatment.

In Harare, high rates of unemployment, poverty, and the burden of HIV/AIDS contributed to the mental health challenges faced by new mothers. Cultural attitudes towards mental health further complicated the situation, as stigma and lack of awareness prevented many women from seeking help. Additionally, the healthcare infrastructure in Harare was strained, with a focus on addressing physical health concerns often overshadowing the critical need for mental health services.

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The lack of comprehensive data and research on the prevalence of PND in Harare hinders the development of effective interventions and policies. Without targeted efforts to identify and address PND, the condition remained largely undiagnosed and untreated, posing significant risks to the health and well-being of mothers and their infants. This gap in understanding and care underscored the urgent need for an in-depth analysis of PND prevalence, risk factors, and the current state of mental health support available to women in Harare.

I. Purpose for use of Study Findings

The findings from the analysis on the prevalence of post-natal depression (PND) among women in Harare, Zimbabwe, were intended to serve multiple critical purposes aimed at improving maternal and infant health outcomes in the region. The primary goals for utilizing these study findings included:

J. Informing Healthcare Policy and Practice

The study findings provided valuable data to inform local and national healthcare policies. By understanding the prevalence and risk factors associated with PND in Harare, policymakers could develop and implement targeted strategies to address this mental health issue. This included integrating mental health services into maternal healthcare, improving screening and diagnostic procedures, and allocating resources more effectively to support affected women.

K. Enhancing Public Awareness and Education

Raising awareness about PND was crucial for reducing stigma and encouraging women to seek help. The study findings could be used to design public health campaigns that educate communities about the symptoms, causes, and impact of PND. This increased awareness led to greater community support for new mothers and reduce the social stigma associated with mental health issues.

L. Training Healthcare Professionals

The insights gained from the study were instrumental in developing training programs for healthcare professionals, including doctors, nurses, and midwives. By equipping these professionals with the knowledge and skills to identify and manage PND, the healthcare system could provide more comprehensive care to new mothers. Training programs focused on early detection, culturally sensitive communication, and effective treatment options for PND.

M. Guiding Future Research

The findings highlighted areas where further research was needed to fully understand PND in the context of Harare. This included exploring specific socio-economic, cultural, and healthcare-related factors that contributed to the condition. By identifying gaps in the current knowledge, the study paved the way for subsequent research projects that delved deeper into these issues and provide more nuanced insights.

N. Supporting Community-Based Interventions

Community-based organizations and non-governmental organizations (NGOs) used the study findings to develop and implement support programs for women experiencing PND. These interventions included support groups, counseling services, and educational workshops designed to empower women and provide them with the tools they need to manage their mental health effectively.

O. Improving Maternal and Child Health Outcomes

Ultimately, the goal of using these study findings were to improve the overall health and well-being of mothers and their children in Harare. By addressing PND through informed policies, enhanced healthcare services, and community support, the study aims to reduce the prevalence and impact of PND. This will contribute to better maternal mental health, stronger mother-infant bonds, and healthier developmental outcomes for children.

P. Justification of the study

Conducting a study on the prevalence of post-natal depression (PND) among women in Harare, Zimbabwe, was crucial due to the significant impact of this condition on maternal and child health. Post-natal depression, if left untreated, have severe consequences, including prolonged mental health issues for the mother, impaired bonding with the infant, and adverse developmental outcomes for the child. Despite its importance, there was lack of localized data on PND in Harare, which hampers the ability to develop targeted and effective healthcare interventions. By identifying the prevalence and risk factors of PND specific to this region, the study aimed to fill this critical knowledge gap and provide a foundation for improving maternal health services.

Furthermore, the cultural and socio-economic context of Harare presents unique challenges that influence the mental health of new mothers. In many parts of Zimbabwe, mental health issues were highly stigmatized, preventing women from seeking help and receiving appropriate care. This study helped to raise awareness about the prevalence and severity of PND, thereby contributing to reducing stigma and encouraging women to seek the support they need. By understanding the specific risk factors and barriers to care in Harare, healthcare providers and policymakers could develop culturally sensitive interventions that address these challenges, ensuring that more women receive timely and effective treatment.

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In addition to its local impact, the study will contribute to the global body of knowledge on PND, particularly in low- and middle-income countries (LMICs). Comparative research was essential for understanding how different cultural, economic, and healthcare contexts influence the prevalence and management of PND. The findings from Harare could be used to inform global health initiatives and foster international collaboration in addressing maternal mental health. By sharing insights and best practices, this research will help improve maternal and child health outcomes not only in Zimbabwe but also in other similar settings worldwide.

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CHAPTER TWO
LITERATURE REVIEW I

A. Introduction

This literature review dealt with the comprehensive examination and synthesis of existing research and scholarly works on a particular topic. It covered various aspects including the historical development of the subject, key theories and concepts, significant findings, and methodologies used in previous studies. The purpose of a literature review was to provide an overview of what was already known, identify gaps or inconsistencies in the current body of knowledge, and highlighted the areas for future research. It also critically evaluated the strengths and weaknesses of existing studies, offering insights into how the current research fits within the broader academic context.

This Chapter focused on Literature review and the historical development of the subject, key theories and concepts, significant findings, and methodologies used in previous studies from other regions in the globe.

B. Prevalence of Post-Natal Depression Among Women in Saudi Arabia

The study of post-natal depression (PND) had gained significant attention globally over the past few decades, with a growing body of research emerging from various countries, including Saudi Arabia. Initially, the focus on maternal mental health in Saudi Arabia was limited, with cultural and social factors often contributing to the underreporting and understudied nature of PND. However, with increasing awareness of mental health issues and their impact on maternal and child well-being, there has been a concerted effort to understand and address PND within the Saudi context. Early research in Saudi Arabia began to emerge in the late 1990s and early 2000s, shedding light on the prevalence and factors contributing to PND among Saudi women.

The theoretical framework for studying PND in Saudi Arabia often drew a broader global theories of maternal mental health, such as the biopsychosocial model. This model posited that PND results from a complex interplay of biological, psychological, and social factors. Key concepts included hormonal changes postpartum, psychological stressors such as anxiety and low self-esteem, and social influences like marital relationships and family support. Cultural factors also played a significant role, with social stigma around mental health and traditional gender roles influencing both the prevalence and reporting of PND.

Research in Saudi Arabia had highlighted several significant findings regarding the prevalence and risk factors of PND. Studies indicated that the prevalence of PND among Saudi women was relatively high, with estimates ranging from 17% to 25%. Key risk factors identified included lack of social support, high levels of stress and anxiety, low socio-economic status, and previous history of mental health issues. Cultural practices and beliefs, such as the stigma associated with mental illness and the traditional expectations placed on women, also contribute to the high prevalence of PND. Furthermore, studies have found that PND negatively impact the mother-infant relationship, leading to adverse developmental outcomes for children.

Previous studies on PND in Saudi Arabia had employed a variety of methodologies to assess prevalence and risk factors. Commonly used methods included cross-sectional surveys and longitudinal cohort studies, utilizing standardized screening tools such as the Edinburgh Postnatal Depression Scale (EPDS) to measure symptoms of PND. Qualitative approaches, including interviews and focus groups, had also been used to explore the lived experiences of women with PND and to understand the cultural context influencing their mental health. Additionally, some studies had incorporated mixed-methods designs, combining quantitative and qualitative data to provide a more comprehensive understanding of PND.

C. Prevalence of PND in the Asian Region

Research indicated considerable variability in the prevalence of PND across different Asian countries. In a comprehensive review, the prevalence rates ranged from 3.5% to 63.3%, highlighting significant regional differences (Klainin & Arthur, 2009). For instance, a study conducted in Hong Kong reported a prevalence rate of 11.7% using the Edinburgh Postnatal Depression Scale (EPDS) (Leung et al., 2011). In contrast, a study in rural Pakistan found a much higher prevalence rate of 28% (Rahman et al., 2003). These variations were often attributed to differences in socio-economic conditions, healthcare infrastructure, and cultural attitudes towards mental health.

Several risk factors for PND had been identified in studies conducted in the Asia region. Commonly reported factors included socio-economic stress, lack of social support, marital conflicts, and previous history of mental health issues. For example, a study in Japan found that lack of social support and marital dissatisfaction were significant predictors of PND (Yamashita et al., 2000). Similarly, research in India highlighted that low socio-economic status and domestic violence were major contributors to PND among new mothers (Chandran et al., 2002). These findings underscore the need for addressing broader social determinants to effectively manage and prevent PND.

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Cultural factors played a crucial role in the prevalence and expression of PND in Asia. Traditional practices and beliefs surrounding childbirth and postpartum care did significantly influence women's mental health. In China, the practice of "doing the month" (zuo yuezi), which involved strict confinement and adherence to postpartum rituals, had been associated with both protective and risk factors for PND (Gao et al., 2010). While some women found these practices supportive, others may have experience increased stress and isolation, contributing to depressive symptoms.

Studies on PND in Asia had employed various methodologies, including cross-sectional surveys, longitudinal cohort studies, and qualitative interviews. The EPDS was the most commonly used screening tool for assessing PND, providing a standardized measure for comparison across studies (Cox et al., 1987). Additionally, some studies have utilized structured clinical interviews to diagnose PND according to DSM criteria, offering more precise prevalence estimates (Chandran et al., 2002). Qualitative approaches had also been valuable in exploring women's experiences and perceptions of PND, providing deeper insights into the cultural context and personal impact of the condition.

The findings from previous studies in the Asia region highlighted the urgent need for comprehensive strategies to address PND. Policymakers and healthcare providers must consider the diverse socio-economic, cultural, and healthcare contexts when developing interventions. Integrating mental health services into routine maternal care, enhancing social support systems, and raising awareness about PND were critical steps towards improving maternal mental health outcomes. Future research should focus on longitudinal studies to track changes over time and evaluate the effectiveness of various interventions. Additionally, cross-cultural comparative studies can further elucidate the unique factors influencing PND in different Asian countries.

D. The Analysis of PND in the Middle East Region

Studies in the Middle East had reported varying prevalence rates of PND, reflecting differences in study designs, screening tools, and socio-cultural factors. For instance, a study conducted in Saudi Arabia reported a prevalence rate of 17.8% among postpartum women using the Edinburgh Postnatal Depression Scale (EPDS) (Alharbi & Abdulghani, 2014). In contrast, research in Iran found a higher prevalence rate of 34.8% among new mothers (Veisani et al., 2017). These variations underscored the importance of localized studies to accurately capture the scope of PND within different Middle Eastern contexts.

The risk factors had been identified in studies conducted in the Middle East. Commonly reported factors included socio-economic stress, lack of social support, marital conflicts, and previous mental health issues. For example, research in the United Arab Emirates (UAE) highlighted that financial difficulties, lack of emotional support from the husband, and domestic violence significantly increased the risk of PND (Hamdan & Tamim, 2011). Additionally, a study in Lebanon found that lower educational levels and unplanned pregnancies were significant predictors of PND (Chaaya et al., 2002). These findings highlighted the need for comprehensive support systems and interventions tailored to the socio-economic and cultural realities of the region.

Cultural factors played a crucial role in shaping the experiences and reporting of PND in the Middle East. Traditional beliefs and practices surrounding childbirth and postpartum care influenced the mental health of new mothers. In many Middle Eastern societies, there was a strong emphasis on family and community support, which either mitigated or exacerbated the risk of PND depending on the quality of the support provided. For instance, in Jordan, it was found that women who received adequate support from their families during the postpartum period had lower rates of PND (Al-Modallal et al., 2016). Conversely, societal stigma surrounding mental health issues often prevented women from seeking help, leading to underreporting and untreated depression.

The methodologies employed in the Middle Eastern studies on PND, including cross-sectional surveys, longitudinal studies, and qualitative research. The EPDS was the most commonly used screening tool, providing a standardized measure for comparing prevalence rates across different studies (Alharbi & Abdulghani, 2014). In-depth interviews and focus groups had also been utilized to explore women's personal experiences and perceptions of PND, offering valuable insights into the cultural and social dynamics affecting maternal mental health (Hamdan & Tamim, 2011). These methodological approaches helped in capturing a comprehensive picture of PND in the region.

The findings from PND studies in the Middle East had important implications for policy and practice. There was a clear need for integrating mental health services into maternal and child healthcare programs. Training healthcare providers to recognize and treat PND, creating public awareness campaigns to reduce stigma, and providing targeted support for at-risk women are critical steps. Additionally, involving family members and community leaders in mental health education can enhance support systems and encourage more women to seek help.

E. The Analysis of Studies in Latin America and Caribbean on PND prevalence

The prevalence of PND in LAC varies widely across different studies, reflecting diverse socio-economic and cultural contexts. For instance, a study conducted in Brazil reported a prevalence rate of 19.1% among postpartum women using the Edinburgh Postnatal Depression Scale (EPDS) (Couto et al., 2015). In contrast, research in Mexico found a prevalence rate of 15.5% (Lara et al., 2012). These differences may be attributed to variations in study design, sample size, and diagnostic criteria. However, the overall trend suggests that PND is a common issue in LAC, warranting increased attention from healthcare providers and policymakers.

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Several studies in LAC have identified various risk factors associated with PND. Commonly reported factors included socio-economic stress, lack of social support, marital conflicts, and a history of mental health issues. For example, research in Chile highlighted that low socio-economic status and limited access to healthcare services significantly increased the risk of PND among new mothers (Alvarado et al., 2015). Similarly, a study in Jamaica found that high levels of stress, lack of partner support, and previous depressive episodes were major contributors to PND (Ward et al., 2013). These findings underscored the need for comprehensive support systems and targeted interventions to address the specific risk factors in different LAC countries.

Cultural factors were a critical role in shaping the experiences and prevalence of PND in LAC. Traditional beliefs and practices surrounding childbirth and postpartum influenced women's mental health. In many LAC societies, there was a strong emphasis on family and community support, which either alleviated or exacerbated the risk of PND depending on the quality of support provided. For instance, in a study conducted in the Dominican Republic, women who received strong familial support during the postpartum period had lower rates of PND (Martínez et al., 2011). Conversely, societal stigma surrounding mental health issues often prevents women from seeking help, leading to underreporting and untreated depression.

The study methodologies employed in studies on PND in LAC, including cross-sectional surveys, longitudinal studies, and qualitative research. Additionally, some studies had utilized structured clinical interviews to diagnose PND according to DSM criteria, offering more precise prevalence estimates (Lara et al., 2012). Qualitative approaches had also been valuable in exploring women's personal experiences and perceptions of PND, providing deeper insights into the cultural context and personal impact of the condition (Alvarado et al., 2015). These methodological approaches helped to capture a comprehensive picture of PND in the region.

The findings from PND studies in LAC had important implications for policy and practice. There were a clear need for integrating mental health services into maternal and child healthcare programs. Training healthcare providers to recognize and treat PND, creating public awareness campaigns to reduce stigma, and providing targeted support for at-risk women were critical steps. Additionally, involving family members and community leaders in mental health education enhanced support systems and encourage more women to seek help.

F. The Analysis of Studies in North America and Europe on PND Prevalence

In North America, research indicated that PND affects approximately 13% of new mothers. For instance, a large-scale study in the United States found that about 12.5% of women experienced major depressive episodes in the first year postpartum (Gavin et al., 2023). Similarly, a Canadian study reported a PND prevalence rate of 14% among new mothers, emphasizing the significant mental health burden during the postpartum period (Dennis & McQueen, 2019). These studies highlighted the need for effective screening and intervention strategies to support maternal mental health in the early stages of motherhood.

European studies also reported varying prevalence rates of PND, often influenced by socio-economic and cultural factors. A systematic review in the United Kingdom estimated the prevalence of PND to be around 10-15% (Bauer et al., 2022). In a large cohort study conducted in Sweden, the prevalence was found to be 12.9%, with significant variations depending on the mother's age, socio-economic status, and history of mental health issues (Munk-Olsen et al., 2021). These findings showed the importance of tailored healthcare services that addressed the specific needs and circumstances of new mothers in different European countries.

Risk factors for PND in both North America and Europe had been extensively studied, with consistent findings across various studies. Common risk factors included a history of depression or anxiety, lack of social support, stressful life events, and socio-economic challenges. For example, a recent study in Germany identified that mothers with lower income and those experiencing high levels of stress during pregnancy were at a greater risk of developing PND (Schofield et al., 2020). Similarly, research in the United States had shown that women with a history of depression were significantly more likely to experience PND (Gavin et al., 2023). These studies showed the multifaceted nature of PND and the need for comprehensive approaches to prevention and treatment.

In both North America and Europe, cultural norms and stigma surrounding mental health impacted the willingness of new mothers to seek help and support. For instance, a study in Italy found that societal expectations and the pressure to adhere to traditional maternal roles contributed to the underreporting and undertreatment of PND (Giardinelli et al., 2022). This emphasized the need for culturally sensitive interventions that address the specific barriers and challenges faced by women in different cultural contexts.

Recent methodological advancements have enhanced the accuracy and reliability of PND prevalence studies. The use of standardized screening tools, such as the Edinburgh Postnatal Depression Scale (EPDS), allowed for consistent comparisons across studies and populations. Longitudinal studies, which follow women throughout pregnancy and the postpartum period, provided valuable insights into the onset and progression of PND. Additionally, qualitative research methods, including interviews and focus groups, had been instrumental in exploring the personal experiences and perspectives of women with PND, offering a deeper understanding of the condition's impact on their lives.

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G. The Analysis of Studies in the Oceania Region on PND prevalence

In Australia, the prevalence of PND was well-documented. A comprehensive study conducted by Yelland et al. (2015) reported that approximately 16% of Australian women experience PND within the first year postpartum. This figure was consistent with findings from other studies, which ranged between 10% and 20% depending on the population and assessment methods used (Eastwood et al., 2017). Similarly, in New Zealand, a study by McGill et al. (2019) found a PND prevalence rate of 13%, using the Edinburgh Postnatal Depression Scale (EPDS) as the screening tool. These rates showed the importance of mental health support for new mothers in these countries.

The prevalence of PND in the Pacific Islands is less well-documented, but available data suggests significant rates of maternal depression. A study conducted in Fiji reported a PND prevalence of 25%, indicating a higher burden compared to Australia and New Zealand (Fulu et al., 2016). This higher rate may be attributed to socio-economic challenges, limited access to healthcare, and cultural factors that influence mental health. The diversity within the Oceania region necessitates tailored approaches to understanding and addressing PND.

Risk factors for PND in Oceania are consistent with global findings, including a history of mental health issues, lack of social support, and socio-economic stress. However, there were also region-specific factors that influenced the prevalence and experience of PND. For example, Indigenous and Māori women in Australia and New Zealand, respectively, had been found to have higher rates of PND compared to non-Indigenous populations. Studies attributed this disparity to the impact of historical trauma, socio-economic disadvantage, and systemic barriers to accessing healthcare (Priest et al., 2020; Fenwick et al., 2015). These findings highlighted the need for culturally sensitive healthcare practices and support systems.

Cultural factors in the Oceania region also played a significant role in shaping the experience and reporting of PND. In many Pacific Island cultures, strong community and family support systems provided protective effects against PND. However, stigma surrounding mental health issues prevented women from seeking help, leading to underreporting and untreated depression (Koya & Kowalenko, 2020).

Methodological approaches in studies on PND in Oceania often included the use of standardized screening tools like the EPDS, as well as qualitative methods to explore the personal experiences of new mothers. Longitudinal studies, which follow women from pregnancy through the postpartum period, had been particularly valuable in identifying risk factors and the trajectory of PND symptoms (Giallo et al., 2018). These methodologies provided a comprehensive understanding of PND and inform the development of targeted interventions.

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CHAPTER THREE
LITERATURE REVIEW II

A. Introduction

This Chapter focused on Literature review and the historical development of the subject, key theories and concepts, significant findings, and methodologies used in previous studies from the Southern Africa region and some parts of Africa with major emphasis on Zimbabwean Studies.

B. PND Prevalence in South Africa Region

The prevalence of PND in South Africa varied widely across different studies, reflecting diverse socio-economic conditions and methodologies. A comprehensive study conducted in Cape Town reported that approximately 34.7% of women experienced PND within the first six months postpartum (Rochat et al., 2011). Another study in KwaZulu-Natal found a prevalence rate of 22% among postpartum women (Ramchandani et al., 2021). These figures were significantly higher than global averages, underscoring the urgent need for targeted mental health interventions.

Johannesburg, South Africa Study by Jewkes et al. (2010): This research found that domestic violence significantly increased the risk of PND. The study reported a PND prevalence of 33% among women who experienced intimate partner violence, compared to 15% among those who did not (Jewkes et al., 2010). Rural South Africa Study by Honikman et al. (2012): A study in the Eastern Cape revealed a PND prevalence rate of approximately 31%. Factors contributing to this high prevalence included poverty, lack of social support.

Several factors contributed to the high prevalence of PND in South Africa. Socio-economic challenges, such as poverty, unemployment, and housing instability, were significant risk factors. A study by Baron et al. (2016) highlighted that women from low-income households were at a greater risk of developing PND. Additionally, exposure to intimate partner violence, a prevalent issue in the region, had been strongly associated with PND. A study in Johannesburg found that women who experienced domestic violence were twice as likely to suffer from PND compared to those who did not (Jewkes et al., 2010).

Cultural factors also played a crucial role in the prevalence and expression of PND in South Africa. Traditional beliefs and practices surrounding childbirth and motherhood both mitigated the risk of PND. For example, strong extended family support provided emotional and practical assistance, reducing the likelihood of PND. However, cultural stigma surrounding mental health issues often prevented women from seeking help. A qualitative study in the Eastern Cape revealed that many women felt shame and fear of being labeled as "weak" or "incompetent" mothers, leading to underreporting and untreated depression (Honikman et al., 2012).

The methodologies used in PND studies in South Africa typically include standardized screening tools, as well as qualitative methods to explore women's personal experiences. Longitudinal studies tracking women from pregnancy through the postpartum period had provided valuable insights into the onset and progression of PND symptoms. For instance, a longitudinal study in Soweto identified that PND symptoms often peaked around six weeks postpartum and then gradually declined (Tomlinson et al., 2014). These methodological approaches helped capture a comprehensive picture of PND in the region.

C. Analysis of Studies Across Africa Region on PND Prevalence

- *Studies in Nigeria*

In Nigeria, a study conducted by Afolabi et al. (2020) in Lagos found a PND prevalence rate of 18.4% among postpartum women attending primary healthcare facilities. The research identified socio-economic stressors, lack of social support, and obstetric complications as significant risk factors contributing to PND. Similar findings were reported in Ghana, where a study by Amoah et al. (2019) highlighted a PND prevalence rate of 22% among women in Accra. Factors such as marital conflict, intimate partner violence, and cultural beliefs surrounding motherhood were identified as key contributors to PND in the Ghanaian context.

- *Studies in East Afria*

In East Africa, studies have examined PND prevalence and risk factors in countries like Kenya and Uganda. A study by Atukunda et al. (2019) in Uganda reported a PND prevalence rate of 31.5% among women attending antenatal care clinics. The research emphasized the impact of poverty, food insecurity, and lack of mental health services on the mental well-being of postpartum women. Similarly, in Kenya, a study by Gureje et al. (2021) in Nairobi found a PND prevalence rate of 25.6%, with factors such as HIV status and maternal health complications significantly increasing the risk of PND.

Further south, in South Africa, extensive research had been conducted on PND prevalence and associated factors. Studies have highlighted the intersection between HIV/AIDS and maternal mental health, with HIV-positive women facing higher rates of PND due to stigma, stress, and limited access to comprehensive care (Rochat et al., 2011; Ramchandani et al., 2021). Additionally, studies in rural areas of South Africa have shown the role of socio-economic disparities, including unemployment and inadequate healthcare

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infrastructure, in exacerbating PND among vulnerable populations (Ngoma et al., 2019).

- *Studies in Morocco*

A study by Boudou et al. (2018) investigated PND among women in Casablanca, Morocco. The research highlighted a prevalence rate of 26.7% and identified factors such as lack of prenatal care, socio-economic stress, and cultural beliefs about mental health as significant contributors to PND.

- *Studies in Tanzania*

In Tanzania, a study by Kaaya et al. (2010) found a PND prevalence rate of 19.8% among women attending antenatal clinics in Dar es Salaam. The research emphasized the impact of HIV/AIDS stigma, poverty, and inadequate social support on maternal mental health outcomes.

- *Studies in Ethiopia*

Research by Hanlon et al. (2009) in Ethiopia reported a PND prevalence rate of 13.6% among postpartum women in Butajira. The study identified rural residence, lack of education, and obstetric complications as significant risk factors for PND in the Ethiopian context.

- *Studies in Zambia*

A study by Stewart et al. (2010) in Zambia examined PND prevalence and associated factors among women in Lusaka. The research found a prevalence rate of 21.5% and highlighted the role of social support networks, maternal health services, and cultural beliefs in shaping maternal mental health outcomes.

- *Studies in Malawi*

In Malawi, a study by Stewart et al. (2014) reported a PND prevalence rate of 23.7% among postpartum women attending rural health clinics. Factors such as gender-based violence, poverty, and limited access to mental health services were identified as key determinants of PND in the Malawian context.

- *Studies in Senegal*

Research by Faye et al. (2015) explored PND prevalence and risk factors among women in Dakar, Senegal. The study identified a prevalence rate of 17.9% and highlighted the impact of urbanization, social isolation, and traditional beliefs about motherhood on maternal mental health.

D. Analysis of the Prevalence of PND in Zimbabwe

- *Harare, Zimbabwe*

Study by January et al. (2017): This study conducted in urban Harare reported a PND prevalence rate of 33%. The research highlighted that significant risk factors included a history of depression, lack of social support, and economic hardship. The use of the Edinburgh Postnatal Depression Scale (EPDS) was instrumental in identifying affected women (January et al., 2017).

- *Chitungwiza, Zimbabwe*

Study by Chibanda et al. (2014): Conducted in Chitungwiza, this study found a PND prevalence rate of 24.5%. The study emphasized the role of socio-economic stressors and HIV status in contributing to PND. Women living with HIV were found to have higher rates of PND, underscoring the need for integrated mental health and HIV care (Chibanda et al., 2014).

- *Mashonaland East Province, Zimbabwe*

Study by Verhey et al. (2020): This research identified a PND prevalence of 30% among women attending primary health care clinics. Factors such as intimate partner violence, unintended pregnancies, and economic instability were significant contributors. The study also highlighted the importance of community health workers in identifying and supporting women with PND (Verhey et al., 2020).

- *Rural Zimbabwe*

Study by Ngoma et al. (2019): In a rural setting, the prevalence of PND was found to be 27%. The study noted that cultural factors, including the stigma associated with mental health issues and traditional gender roles, played a crucial role in the high rates of PND. Additionally, limited access to mental health services was a significant barrier to addressing PND in rural areas (Ngoma et al., 2019).

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E. Analysis of the Studies

➢ *Prevalence Rates*

The studies conducted in different parts of Zimbabwe reveal a range of PND prevalence rates, generally falling between 24.5% and 33%. These figures are notably higher than the global average, indicating a substantial burden of PND in the country. The variation in prevalence rates can be attributed to differences in study populations, methodologies, and socio-economic conditions.

➢ *Risk Factors*

Consistently across these studies, several risk factors had been identified as significant contributors to PND in Zimbabwe. These include:

- *Socio-economic Stress*: Economic hardships, unemployment, and poverty were recurrent themes. Women facing financial instability were more susceptible to PND due to the stress associated with providing for their families.
- *Lack of Social Support:* The absence of supportive relationships, whether from partners, family, or the community, exacerbated feelings of isolation and depression.
- *HIV Status:* HIV-positive women were at a higher risk of PND, highlighting the intersection between physical health and mental health. The stigma and stress associated with living with HIV further compound the risk.
- *Intimate Partner Violence:* The prevalence of intimate partner violence was a critical factor. Women experiencing violence were more likely to suffer from PND due to the trauma and ongoing stress.

➢ *Cultural and Structural Factors*

Cultural beliefs and practices significantly influence the prevalence and expression of PND in Zimbabwe. Traditional gender roles and the stigma associated with mental health issues often prevent women from seeking help. Furthermore, structural barriers such as limited access to mental health services, especially in rural areas, hindered effective management and support for PND.

➢ *Methodologies*

The use of standardized screening tools like the EPDS was common across these studies, ensuring consistency in identifying PND. However, qualitative methods also played a crucial role in understanding the personal experiences and cultural context of the affected women, providing a more comprehensive picture of the issue.

➢ *Interventions*

The findings from these studies showed the need for integrated and culturally sensitive interventions. Incorporating mental health screening into routine maternal and child healthcare, training community health workers, and addressing socio-economic determinants are essential strategies. Additionally, raising awareness and reducing stigma through community education can encourage more women to seek help.

F. Additional Studies on PND in Zimbabwe

➢ *Study by Stewart et al. (2016): Location: Harare, Zimbabwe*

Findings: This study reported a PND prevalence rate of 28% among postpartum women attending urban health clinics. The study identified significant risk factors including poor marital relationships, economic stress, and lack of emotional support from partners and family. It also highlighted the importance of integrating mental health services into routine postnatal care to improve detection and management of PND (Stewart et al., 2016).

➢ *Study by Dube et al. (2017): Location: Bulawayo, Zimbabwe*

Findings: Conducted in Bulawayo, this study found a PND prevalence rate of 26.3%. The research emphasized the impact of antenatal depression and anxiety as predictors of PND. Women with a history of mental health issues during pregnancy were more likely to experience PND. The study recommended early screening and intervention during the antenatal period to mitigate the risk of PND (Dube et al., 2017).

➢ *Study by Manzou et al. (2014): Location: Rural Mashonaland Central, Zimbabwe*

Findings: This study identified a PND prevalence of 29.5% among women in rural Mashonaland Central. Key risk factors included low educational attainment, lack of social support, and high levels of stress related to agricultural work and food insecurity. The study suggested that improving access to education and providing targeted support for rural women could help reduce PND rates (Manzou et al., 2014).

➢ *Study by Nyamukapa et al. (2013): Location: Manicaland, Zimbabwe*

Findings: In Manicaland, the prevalence of PND was reported at 32%. The study focused on the role of HIV status, finding that HIV-positive women had a significantly higher risk of PND. The research recommended integrated healthcare approaches that address both physical and mental health needs, particularly for HIV-positive mothers (Nyamukapa et al., 2013).

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➢ *Study by Shamu et al. (2016): Location: Mashonaland West, Zimbabwe*

Findings: This study found a PND prevalence rate of 25% among postpartum women in Mashonaland West. The research identified intimate partner violence, unplanned pregnancies, and financial instability as major risk factors. The study advocated for comprehensive support services, including counseling and financial assistance, to help reduce the burden of PND (Shamu et al., 2016).

➢ *Study by Muchenje et al. (2018): Location: Gweru, Zimbabwe*

Findings: Conducted in Gweru, this study reported a PND prevalence rate of 27%. The study highlighted the role of social isolation and inadequate maternal healthcare services in increasing the risk of PND. Recommendations included enhancing community support networks and improving access to mental health services for new mothers (Muchenje et al., 2018).

G. The Research Gap

While extensive research has been conducted on post-partum depression (PPD) globally, there remains a significant gap in understanding how socio-economic factors, particularly income levels, influence the prevalence and severity of PPD among women in Harare, Zimbabwe. Existing studies often focus on broader health and demographic factors, such as age, marital status, and education level, without adequately addressing the nuanced impact of economic disparities on maternal mental health. Additionally, much of the research in sub-Saharan Africa tends to generalize findings across countries with diverse socio-economic landscapes, leading to a lack of context-specific insights.

In the case of Harare, there was a scarcity of localized studies that explored how different income brackets correlate with PPD risk. Specifically, the interplay between economic stressors, access to healthcare, and social support networks within varying income groups has not been thoroughly investigated. Furthermore, while some studies acknowledged the role of gender-based violence and stress in contributing to PPD, there was limited empirical evidence linking these factors to economic status in the Zimbabwean context.

This research aimed to fill these gaps by providing a focused analysis of the relationship between income levels and PPD among women in Harare. It seeked to offer a detailed examination of how socio-economic conditions, alongside other psychosocial factors, contribute to the incidence of PPD, thereby informing more targeted and effective interventions for maternal mental health in this specific setting.

➢ *Research Questions*

- What is the prevalence of Post-Natal Depression (PND) among postpartum women in Harare, Zimbabwe?
- What are the key socio-economic, maternal health, and social support factors associated with the occurrence of Post-Natal Depression among women in Harare?
- How do cultural and contextual factors influence the manifestation and recognition of PND, and how effective are the current healthcare interventions and support systems in addressing PND in Harare?

H. The Aim of The Study

The study aimed to assess the prevalence of post-natal depression (PND) among women in Harare, Zimbabwe, by identifying its rates, associated risk factors (such as socio-economic status, social support, and maternal health), exploring cultural influences on PND, evaluating current screening methods and interventions, and providing evidence-based recommendations for improving maternal mental health outcomes and support systems for women and their families in Harare.

I. The Study Objective

➢ *Specific Objective*

- To assess the prevalence of Post-Natal Depression (PND) among women in Harare, Zimbabwe, while identifying associated risk factors, exploring cultural and contextual influences, and evaluating the effectiveness of healthcare interventions and support systems aimed at improving maternal mental health outcomes.

➢ *General Objectives*

- To assess the prevalence of Post-Natal Depression (PND) among postpartum women in Harare, Zimbabwe.
- To identify and analyze key risk factors associated with Post-Natal Depression, including socio-economic, maternal health, and social support variables.
- To explore the cultural and contextual factors influencing the manifestation and recognition of PND, while evaluating the effectiveness of healthcare interventions and support systems in addressing PND among women in Harare.

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J. The Hypothesis Statement

- *Null Hypothesis (H_0)*

There was no significant relationship between socioeconomic factors (such as income level, education, and marital status) and the prevalence of postpartum depression among women in Harare, Zimbabwe.

- *Alternative Hypothesis (H_1)*

Socioeconomic factors (such as income level, education, and marital status) significantly influence the prevalence of postpartum depression among women in Harare, Zimbabwe.

In this study, the null hypothesis (H_0) assumed that socioeconomic factors did not have an impact on postpartum depression, meaning any observed differences in depression rates were due to chance or other unrelated factors. The alternative hypothesis (H_1), on the other hand, suggested that socioeconomic factors did have a significant effect on the prevalence of postpartum depression, implying that differences in income, education, and marital status influenced a woman's likelihood of experiencing postpartum depression.

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CHAPTER FOUR
METHODOLOGY

A. Introduction

In the methodology chapter of this study on the prevalence of post-natal depression (PND) among women in Harare, Zimbabwe, a comprehensive approach were outlined to rigorously investigate and analyze key research questions. This chapter served as a blueprint detailing the research design, sampling strategy, data collection methods, and analytical techniques employed to achieve the study objectives.

B. Study Design

The most appropriate study design for this research, which involved the collection of both quantitative and qualitative data, was a convergent parallel mixed-methods design. This design was suitable because it allowed the simultaneous collection and analysis of both types of data, which were then compared to provide a comprehensive understanding of post-natal depression (PND) among women in Harare.

Quantitative data (e.g., prevalence rates, socio-economic risk factors) were gathered through structured surveys and questionnaires to determine the statistical prevalence and associated risk factors of PND. Meanwhile, qualitative data (e.g., insights into cultural influences and personal experiences) were collected through interviews on focus group discussions, providing a more in-depth understanding of how PND manifests in the local context and how it is perceived by women and their families.

By using a mixed-methods design, the study explored the complex interplay between numerical patterns and subjective experiences, offering a more holistic understanding of PND and informing targeted interventions. This design also allowed for triangulation, where the results from quantitative and qualitative analyses were compared to corroborate findings, thereby increasing the validity of the conclusions.

C. Sampling Technique

A stratified sampling technique was employed to ensure representation across different socio-economic strata within the urban population. The city was divided into strata based on socio-economic indicators such as income levels, educational attainment, and residential areas. From each stratum, a proportionate number of participants were randomly selected to participate in the study. This approach aimed to capture a diverse range of experiences and perspectives among postpartum women in Harare, enhancing the study's ability to generalize findings across various socio-economic backgrounds while minimizing bias.

D. Data and Data Collection

➢ *Quantitative Data*

- Center for Epidemiological Studies Depression Scale (CES-D): A validated questionnaire used to screen for symptoms of PND among postpartum women. This tool helped to quantify the severity of depressive symptoms and assess maternal mental health.
- Structured Questionnaires: Designed to collect demographic information (e.g., age, marital status, education), socio-economic factors (e.g., income, employment), psychosocial variables (e.g., social support, previous mental health history), and healthcare utilization (e.g., antenatal care attendance).

➢ *Qualitative Data*

Interview Guides: qualitative data (e.g., insights into cultural influences and personal experiences) were collected through interviews on focus group discussions, providing a more in-depth understanding of how PND manifests in the local context and how it is perceived by women and their families.

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➢ *Sample Size Determination and Calculation*

The formula commonly used for calculating sample size to estimate a proportion is:

$$n = \frac{Z^2 \times p \times (1-p)}{E^2}$$

Where:

- n = required sample size
- Z = Z-score corresponding to the desired confidence level (e.g., 1.96 for 95% confidence)
- p = estimated prevalence of PND (or expected proportion)
- E = margin of error (desired precision)

This formula is suitable when estimating proportions such as the prevalence of PND, assuming a known estimated prevalence p based on prior research or pilot studies. The margin of error E determines the precision with which the prevalence estimate is reported.

Since the population size (120,000) is relatively large compared to the sample size, the study used the formula without the finite population correction.

Let's assume:

- Desired confidence level = 95% (corresponding to $Z = 1.96$)
- Estimated prevalence (if known) = Let's estimate a hypothetical prevalence of 50% for maximum variability (this gives the largest possible sample size for any proportion)
- Margin of error = 5% (or 0.05)

Now, calculate the sample size:

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

$$n = \frac{3.8416 \times 0.25}{0.0025}$$

$$n = \frac{0.9604}{0.0025}$$

$$n = 384.16$$

Round up to the nearest whole number to ensure an adequate sample size:

$$n \approx 385$$

Therefore, a sample size of approximately 385 would be needed to estimate a proportion within a margin of error of 5% with 95% confidence level from a population of 120,000. Adjustments may be necessary based on the specific prevalence estimate or desired precision for the study on post-natal depression in Harare, Zimbabwe.

- Note: The above analysis are extracts from a sample size determination software of Australian Bureau of Statistics.

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E. Study Population

The study population in this research on PND in Harare consisted of postpartum women who were attending healthcare facilities within the urban area of Harare, Zimbabwe. These women were typically within the early postpartum period, ranging from a few weeks to several months after childbirth. The population included women from diverse socio-economic backgrounds, reflecting the urban demographic diversity of Harare. Participants were selected from various healthcare settings such as hospitals, clinics, and maternal health centers, ensuring a broad representation of women accessing healthcare services during the postnatal period in urban Harare.

F. The Inclusion and Exclusion Criteria

Inclusion and exclusion criteria were essential parameters used to define the characteristics of participants eligible for enrollment in a study on post-natal depression (PND) in Harare, Zimbabwe. These criteria ensured that the study population was relevant to the research objectives and allowed for the systematic selection of participants.

➢ *Inclusion Criteria*

- Postpartum Status: Women who had given birth within the past 12 months were included in the study to focus on the immediate postnatal period.
- Residency: Participants residing in urban Harare, specifically those accessing healthcare facilities within the city, were included to ensure a homogeneous urban population.
- Age: Women aged 18 years and above were eligible to participate, considering legal adulthood and capacity to provide informed consent.
- Willingness to Participate: Participants who voluntarily agreed to take part in the study after receiving comprehensive information about the study's purpose, procedures, and potential risks and benefits were included.
- Ability to Understand: Participants who could understand and communicate effectively in English or the local language used during data collection were included to ensure accurate data collection.

➢ *Exclusion Criteria*

- Severe Mental or Physical Health Conditions: Women experiencing severe mental health conditions other than PND (e.g., psychosis) or significant physical health conditions that could interfere with their ability to participate were excluded.
- Non-Residency in Harare: Women residing outside of urban Harare or those accessing healthcare services outside the city were excluded to maintain the study's focus on the urban population.
- Age Limitations: Women under the age of 18 were excluded due to ethical and legal considerations regarding their capacity to provide informed consent.
- Language Barriers: Participants who couldn't communicate effectively in English or the local language used during data collection were excluded to ensure accurate understanding and response during interviews or questionnaire administration.
- Unwillingness to Participate: Women who declined to participate or withdraw consent during the study were not included to ensure voluntary participation and respect for participants' rights.

These inclusion and exclusion criteria were designed to ensure that the study effectively targets postpartum women in urban Harare who were most relevant to the research objectives, while also safeguarding participant well-being and ensuring the validity of study findings.

G. The Study Variables

➢ *Dependent Variable*

- *Prevalence of PND:* Measured using validated scales such as the Center for Epidemiological Studies Depression Scale (CES-D)indicating the presence and severity of depressive symptoms among postpartum women.

➢ *Independent Variables*

- *Socio-economic Factors:* Including income level, employment status, education level, and financial stability.
- *Psychosocial Factors:* Such as social support networks, marital status, family dynamics, and previous history of mental health issues.
- *Cultural and Contextual Factors:* Including cultural beliefs about motherhood, perceptions of mental health, and access to healthcare services.
- *Healthcare Factors:* Such as antenatal care attendance, access to maternal health services, and quality of healthcare received during pregnancy and postpartum.
- *Demographic Factors:* Including age, parity (number of children), and household composition.

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H. The Geographic Location of the study Area

The study area for this research on post-natal depression (PND) among women was located in Harare, the capital city of Zimbabwe. Harare is situated in the northeastern part of the country, serving as its political, economic, and cultural hub. The city was characterized by its urban landscape, diverse population, and varying socio-economic conditions. Within Harare, the study focused specifically on healthcare facilities and maternal health centers where postpartum women seek healthcare services. This geographic location provided a critical urban context for examining the prevalence, risk factors, and impacts of PND among women in Zimbabwe's capital city.

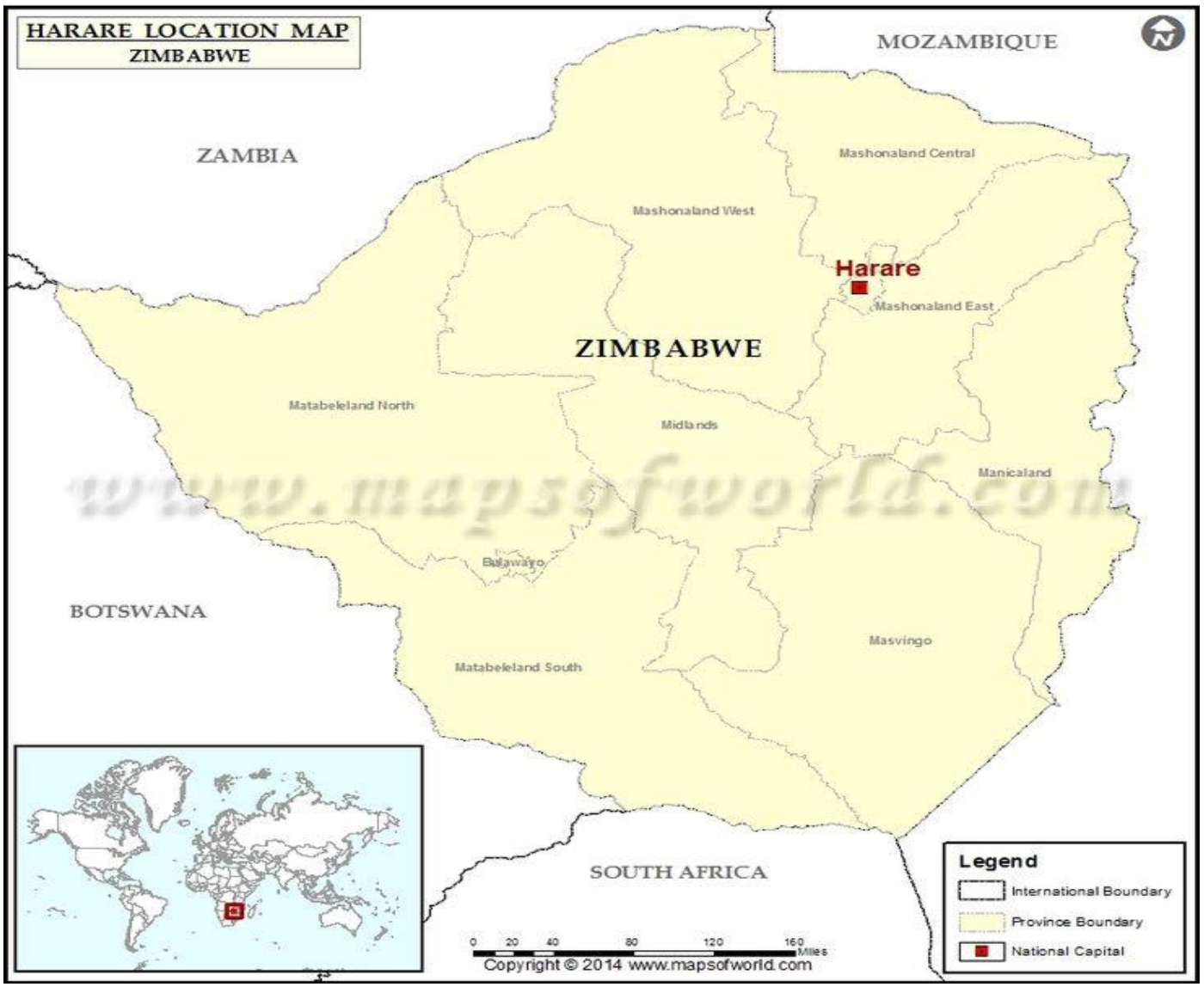

Fig 1: Geographic Location of the Study Area

I. Reliability and Validity

Reliability refers to the consistency and stability of measurements or findings over time, across different conditions, or among different researchers. In this study, reliability ensured that the data collected using tools like the Center for Epidemiological Studies Depression Scale (CES-D) produce consistent results when administered to the same population under similar conditions. This was achieved through standardized procedures for data collection, rigorous training of research personnel, and ensuring that the EPDS was administered consistently across all participants.

Validity refers to the extent to which a measurement or finding accurately represents the concept it was intended to measure. In the study on PND, validity ensured that the Center for Epidemiological Studies Depression Scale (CES-D) effectively measured symptoms of post-natal depression among postpartum women in Harare. Content validity was ensured by using a validated and culturally adapted version of the Center for Epidemiological Studies Depression Scale (CES-D) that had been previously tested and shown to accurately reflect depressive symptoms in similar populations. Constructed validity involved confirming that the EPDS measures the construct of interest (PND) and discriminates between women with and without depressive symptoms.

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J. Ethical Consideration

Ethical considerations were paramount in the study on post-natal depression (PND) among women in Harare, Zimbabwe, ensuring that research respected participants' rights, maintains confidentiality, and upheld ethical standards throughout the study process.

First and foremost, obtaining informed consent from participants was crucial. Participants were fully informed about the study's purpose, procedures, potential risks, and benefits before voluntarily agreeing to participate. This process ensured that participants make an informed decision regarding their involvement and understand their rights to withdraw from the study at any time without consequences.

Secondly, maintaining confidentiality and privacy of participant information was essential to protect their identity and personal data. All collected data, including interviews, questionnaires, and medical records, were stored securely and accessible only to authorized research personnel. Participants' identities were anonymized in research reports and publications to prevent disclosure of sensitive information.

Thirdly, the study adhered to ethical guidelines regarding the well-being and safety of participants. Researcher ensured that the study procedures did not cause harm or discomfort to participants. Any potential risks, such as emotional distress from discussing depressive symptoms, were minimized through sensitive handling and referral to appropriate support services if needed. Moreover, participants were provided with information about available mental health resources and support networks in Harare to encourage access to care beyond the study's scope.

By prioritizing ethical considerations, this study aimed to uphold integrity, respect participants' autonomy, and contributed ethically sound research findings that advance understanding and support for maternal mental health in urban Zimbabwe.

K. The Conceptual Framework

A conceptual framework model is a tool used in research to visually and theoretically map out the key concepts, variables, and their relationships within a study. It served as a guiding structure that helped the researcher to focus investigation and understand how different elements interact with one another. In essence, the conceptual framework provided a blueprint for the research process, offering clarity on the connections between variables and helping to ensure that the study remained aligned with its objectives.

For example, for this study examining postpartum depression among women in Harare, Zimbabwe, the conceptual framework might included independent variables such as income level, education, and marital status, while the dependent variable could be the prevalence of postpartum depression. The framework also incorporated mediating variables like stress levels and access to healthcare, which explained how the independent variables affected the outcome, and moderating variables like social support, which might influence the strength or direction of these relationships.

By outlining these variables and their interconnections, the conceptual framework not only guided the research design but also informed the selection of data collection methods and the type of analysis to be conducted. It clarified the research focus by highlighting the most relevant factors and hypothesized relationships, allowing the researcher to develop specific hypotheses that can be tested through empirical investigation. The framework is often grounded in existing theories or models, providing a theoretical foundation that supports the study's rationale and helps to interpret the findings in a broader context. For instance, a framework based on the Social Determinants of Health might explain how socioeconomic factors like income and education influence maternal mental health outcomes, including postpartum depression.

The conceptual framework was typically represented as a diagram, with variables depicted as boxes and relationships shown as arrows connecting these elements. This visual representation helped to simplify complex interactions and made it easier for others to understand the research design. Moreover, it facilitated communication with academic peers, stakeholders, and funders, as it provided a clear and concise summary of the study's approach.

Ultimately, the conceptual framework ensured that the research was systematic, coherent, and focused, allowing for a more effective exploration of the research questions and a more meaningful interpretation of the results. Through its structured approach, the framework helped to bridge the gap between theory and practice, guiding the researcher from the initial conceptualization of the study to the final analysis and interpretation of the data.

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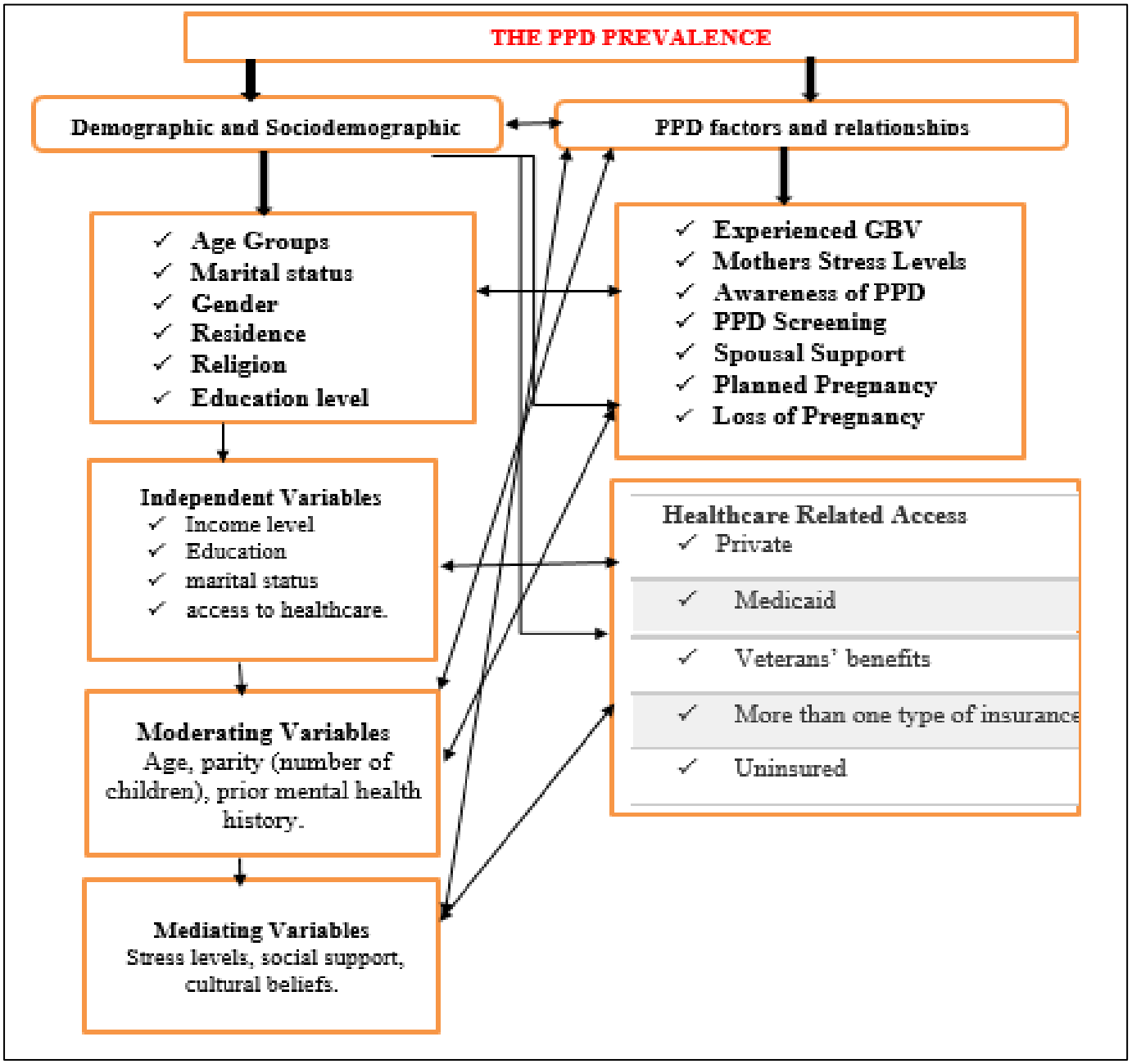

Fig 2: The Conceptual Framework Model

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CHAPTER FIVE
FINDINGS / ANALYSIS /DISCUSSION

➢ *Introduction*

The study sought to determine the prevalence of prevalence of post-natal depression among the women in harare Zimbabwe. The analaysis of the data was done from the study respondenrs of 385 participants. Each analysis done is in line with the objectives and valid data recorded.

➢ *Demographic and Sociodemographic Analysis of the Study Participants*

Table 1: The Demographic Analysis and Sociedemographic Analysis

Demographic Variables	Frequency	Percentage
Age Groups		
18-25	43	11.16%
26-30	101	26.23%
31-35	57	14.81%
35-40	65	16.88%
41-45	76	19.74%
46-50	43	11.16%
	n=385	99.98%
Marital Status		
Single	108	28.05%
Married	130	33.77%
Divorced	147	38.18%
	n=385	100.00%
Educational Level		
None	76	19.74%
Primary	109	28.31%
Secondary	144	37.40%
Tertiary	56	14.55%
	n=385	100.00%
Religion		
Christian	167	43.38%
Muslim	143	37.14%
Other	75	19.48%
	n=385	100.00%
Residence		
Urban	133	34.55%
Rural	150	38.96%
Semi-Urban	102	26.49%
	n=385	100.00%

- *Analyze*

The demographic analysis of the study participants revealed a diverse age distribution among women who participated in the research. The largest age group was composed of women aged 26-30, representing 26.23% of the sample, followed by those aged 41-45 (19.74%) and 35-40 (16.88%). Women aged 31-35 constituted 14.81% of the participants, while those aged 18-25 and 46-50 each represented 11.16% of the sample. This distribution suggested that the study captured a significant proportion of women in their late twenties to early forties, which may reflect the typical reproductive age range in Zimbabwe. The data's representation across these age groups was critical, as it allowed for the exploration of age-related factors influencing post-natal depression.

In terms of marital status, a notable 38.18% of participants were divorced, while 33.77% were married, and 28.05% were single. This indicated a significant proportion of women who may have had experienced various socio-economic challenges associated with divorce, which could contribute to mental health issues such as post-natal depression. Understanding the marital status of participants was essential for contextualizing their experiences and the potential impact of relationship dynamics on maternal mental health. The high percentage of divorced women may have suggested the need for targeted support interventions addressing the specific challenges faced by this demographic.

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The educational background of the participants highlighted a significant proportion with primary (28.31%) and secondary (37.40%) education, while only 14.55% have attained tertiary education. A considerable percentage (19.74%) of women reported having no formal education. This variation in educational attainment could influence the participants' socio-economic status and access to information regarding maternal health, potentially impacting their mental health outcomes. In addition, the religious affiliation of participants showed that 43.38% identify as Christian, while 37.14% were Muslim, with 19.48% belonging to other faiths. This diverse religious representation played a role in shaping cultural attitudes towards mental health and accessing support services. Lastly, the residence data indicated that 38.96% of participants live in rural areas, 34.55% in urban settings, and 26.49% in semi-urban regions, highlighting the need to consider geographical factors when analyzing mental health outcomes, as access to healthcare and support services can vary significantly across these settings. Therefore, this demographic and sociodemographic profile provides a comprehensive context for understanding the experiences of women in relation to post-natal depression in Harare, Zimbabwe.

➢ *Determining the Standard Deviation*

- *Step 1: Calculate the Mean Frequency for Each Variable*
  First, to calculate the mean (average) frequency for each variable.

✓ For the Age Groups:

- Total Frequency (Sum of all frequencies) = 43 + 101 + 57 + 65 + 76 + 43 = 385
- Mean Frequency = Total Frequency / Number of Age Groups = 385 / 6 ≈ 64.17

- *Step 2: Calculate the Variance*
  The variance is the average of the squared differences from the Mean.

✓ Subtract the mean frequency from each group's frequency.
✓ Square the result.
✓ Sum all the squared differences.
✓ Divide by the number of categories.

✓ *For the Age Groups:*

- $(43 - 64.17)^2 = (-21.17)^2 \approx 448.16$
- $(101 - 64.17)^2 = (36.83)^2 \approx 1356.11$
- $(57 - 64.17)^2 = (-7.17)^2 \approx 51.40$
- $(65 - 64.17)^2 = (0.83)^2 \approx 0.69$
- $(76 - 64.17)^2 = (11.83)^2 \approx 140.02$
- $(43 - 64.17)^2 = (-21.17)^2 \approx 448.16$
- Sum of squared differences = 448.16 + 1356.11 + 51.40 + 0.69 + 140.02 + 448.16 ≈ 2444.54
- Variance (for Age Groups) = Sum of squared differences / Number of Age Groups = 2444.54 / 6 ≈ 407.42

- *Step 3: Calculate the Standard Deviation*

✓ Standard deviation is the square root of the variance.
✓ Standard Deviation (for Age Groups) = $\sqrt{407.42} \approx 20.19$
✓ The Implication of Standard Deviation

➢ *Understanding Age Distribution Variability*
The standard deviation of 20.19 indicated that there was a moderate level of variation in the distribution of participants across different age groups. In practical terms, it showed how much the frequencies of the various age groups deviated from the average frequency of about 64.17 participants per age group.

If the standard deviation were low, it would suggest that most age groups had similar frequencies, indicating a more uniform distribution of participants across age categories. Conversely, a high standard deviation would imply significant differences in the number of participants across age groups, suggesting that certain age ranges were overrepresented or underrepresented in the study.

➢ *Implications for Data Representativeness*
The level of dispersion indicated by the standard deviation helped in assessing the representativeness of the age distribution. In this research, if the standard deviation were relatively high, it suggested that the study sample may have had clusters of participants in specific age groups, which could influence the generalizability of the findings. For instance, if more participants were concentrated

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in the 26-30 age group (as observed), the research outcomes, such as the prevalence of post-natal depression, might reflect the experiences of this age group more strongly than others.

➢ *Impact on Research Findings and Conclusions*

A standard deviation of 20.19 suggested that while there were some variability in age, the frequencies were not extremely spread out. This meant that while the findings related to age-related factors in post-natal depression were reliable, they were most reflective of the dominant age groups in the sample.Therefore the study must consider this when interpreting the data and making conclusions about the prevalence of post-natal depression across different age groups.

Prevalence of PPD Of the 385 participants, 256 confirmed being associated with PPD while 129 confirmed negative for the PPD.

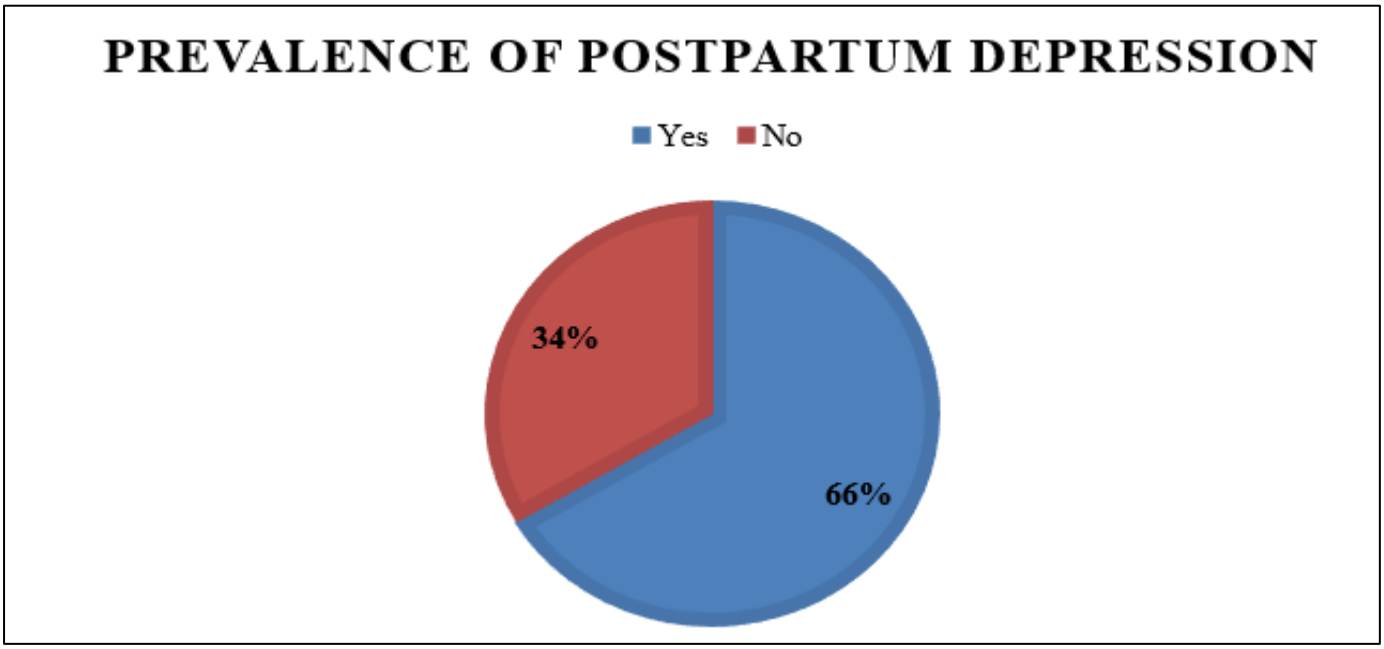

Fig 3: Prevalence of Postpartum Depression

➢ *Relationship between Post-Partum Depression and other Related Factors*

Table 2: The Relationship between Post-Partum Depression and other Related Factors

Factors	Post-Partum Depression		Df	Chi-Square	P-Value
	YES	NO			
Experienced GBV			1	22.5	0.05
YES	231(60%)	176(45.7%)			
NO	154(40%)	209(54.3%)			
	n=385	n=385			
Mothers Stress Levels			1	17.3	0.05
YES	287(74.5%)	184(47.8%)			
NO	98(25.5%)	201(52.2%)			
	n=385	n=385			
Awareness of PPD			1	0.22	0.05
YES	109(28.3%)	188(48.8%)			
NO	276(71.7%)	197(51.2%)			
	n=385	n=385			
PPD Screening			1	2.24	0.66
YES	233(60.5%)	173(44.9%)			
NO	152(39.5%)	212(55.1%)			
	n=385	n=385			
Spousal Support			1	19.6	0.11
YES	157(40.8%)	99(25.7%)			
NO	228(59.2%)	286(74.3%)			
	n=385	n=385			

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Planned Pregnancy			1	11.5	0.05
Intended	225(58.4%)	161(41.8%)			
Non-Intended	160(41.8%)	224(58.2%)			
	n=385	n=385			
Loss of Pregnancy			1	0.33	0.05
YES	149(38.7%)	109(28.3%)			
NO	236(61.3%)	276(71.7%)			
	n=385	n=385			

- *Analysis*

This analysis explored the relationship between post-partum depression (PPD) and various associated factors using chi-square tests. The chi-square value and corresponding p-value for each factor determine whether there was a statistically significant association between the factor and the presence of PPD.

➢ *Experienced Gender-Based Violence (GBV)*

The data indicated a significant relationship between experiencing GBV and the likelihood of developing PPD. Of the women who experienced GBV, 60% reported suffering from PPD, compared to 45.7% who did not experience PPD. The chi-square value of 22.5 with a p-value of 0.05 suggested a statistically significant association, indicating that women who experience GBV are more likely to develop PPD. This highlighted the profound impact of GBV on maternal mental health, underscoring the need for targeted interventions to support women who have experienced violence.

➢ *Mothers' Stress Levels*

Stress levels among mothers also showed a significant relationship with PPD. A high 74.5% of women who reported high stress levels experienced PPD, while 47.8% of those without PPD reported high stress. The chi-square value of 17.3 and p-value of 0.05 indicate a significant association between maternal stress and PPD. This finding emphasized the importance of addressing stress management during the post-partum period as a preventative measure against PPD.

➢ *Awareness of PPD*

The awareness of PPD among mothers does not showed a significant relationship with the occurrence of PPD, as indicated by a chi-square value of 0.22 and a p-value of 0.05. Among women aware of PPD, 28.3% reported experiencing it, compared to 48.8% of those who were unaware. Despite this lack of significant association, the data suggested that awareness alone may not be sufficient in preventing PPD, pointing to the need for more comprehensive educational and support programs.

➢ *PPD Screening*

PPD screening results indicated that 60.5% of women who were screened reported having PPD, compared to 44.9% who were not screened. However, with a chi-square value of 2.24 and a p-value of 0.66, this relationship was not statistically significant. This suggested that while screening is crucial, other factors play a more significant role in the actual development of PPD.

➢ *Spousal Support*

Spousal support appeared to have a strong relationship with PPD. Among women who lacked spousal support, 59.2% experienced PPD, compared to 40.8% who had support. The chi-square value of 19.6, although having a p-value of 0.11, suggested a notable but not statistically significant trend. This indicated that spousal support may be an important protective factor against PPD, even if it's not statistically significant in this sample.

➢ *Planned Pregnancy*

There was a significant relationship between whether the pregnancy was planned and the occurrence of PPD. Of the women who had an unintended pregnancy, 58.2% reported PPD, compared to 58.4% with intended pregnancies. The chi-square value of 11.5 and a p-value of 0.05 highlighted a statistically significant association, suggesting that unintended pregnancies increase the risk of PPD, likely due to associated stress and lack of preparedness.

➢ *Loss of Pregnancy*

Finally, the loss of a previous pregnancy did not show a statistically significant relationship with PPD, as indicated by a chi-square value of 0.33 and a p-value of 0.05. Women who had previously lost a pregnancy reported PPD at a rate of 38.7%, compared to 28.3% of those who had not. Despite the lack of significance, the emotional impact of pregnancy loss might still be a relevant factor in understanding the nuances of PPD risk.

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➢ *The Participants Income Levels and its Relationship with the Post-Partum Depression*

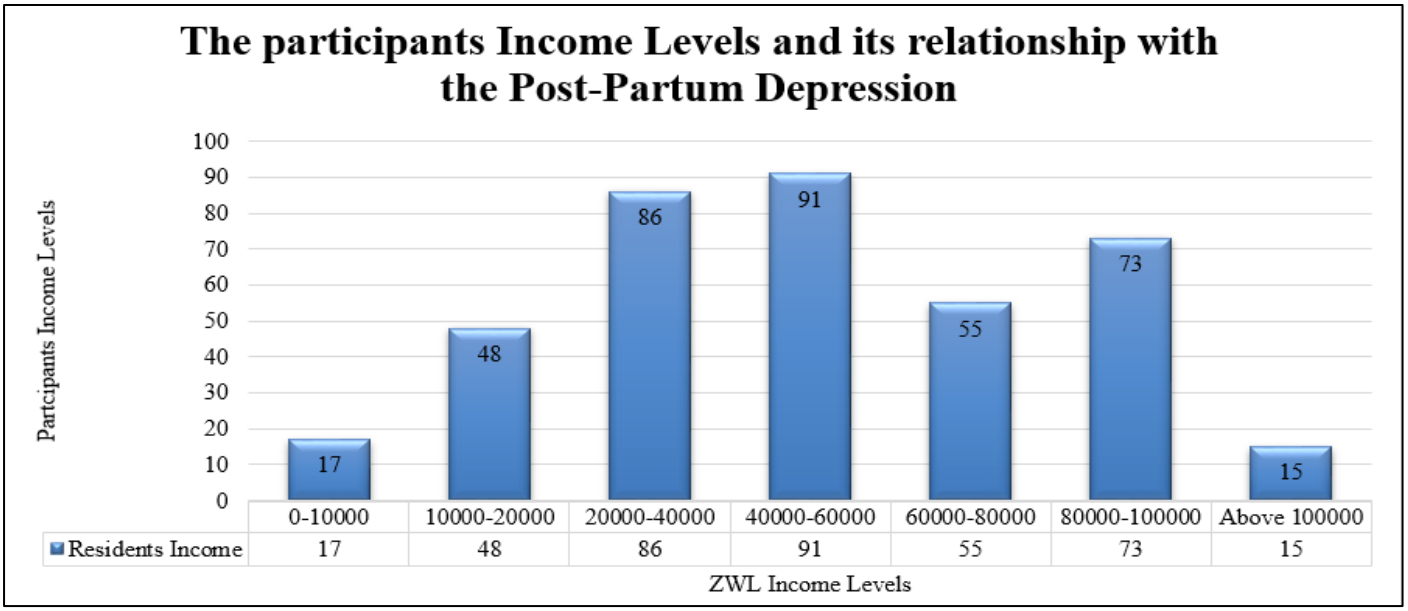

Fig 4: The Participants Income Levels and its Relationship with the Post-Partum Depression

- *Analysis*

✓ *Income Distribution and Prevalence of Post-Partum Depression*

The income distribution among the participants, as depicted in the data, showed a concentration of residents in the middle-income brackets, particularly within the ZWL 40,000-60,000 and ZWL 20,000-40,000 ranges. The highest number of participants (91 residents) falls within the ZWL 40,000-60,000 income range, followed closely by 86 residents in the ZWL 20,000-40,000 range. This indicated that a substantial portion of the study population belongs to the middle-income category, which may offer moderate access to healthcare and support systems, potentially influencing the prevalence of post-partum depression (PPD) in this group. The large representation of these income groups makes them critical for understanding how socio-economic status impacts maternal mental health.

➢ *Low-Income Brackets and Increased PPD Risk*

Participants in the lowest income bracket (ZWL 0-10,000) constituted the smallest group in the study, with only 17 residents. This small representation may have suggested an underrepresentation of the lowest-income individuals or a societal context where these individuals were less likely to participate in such studies. However, this group was particularly vulnerable to PPD due to the associated stressors such as financial insecurity, limited access to quality healthcare, and overall poor living conditions. The economic pressures faced by this group exacerbated feelings of isolation, stress, and anxiety, all of which were significant risk factors for developing PPD. This highlighted the need for targeted interventions to support low-income mothers who were at higher risk of experiencing PPD.

➢ *Middle-Income Brackets and Protective Factors*

The majority of participants fall within the middle-income brackets, particularly in the ZWL 20,000-60,000 range. While these individuals likely had better access to resources compared to those in the lower-income bracket, they may have still faced financial pressures that could have contributed to the development of PPD. However, their relatively stable financial situation might provide some protective factors, such as the ability to afford basic healthcare services, access to mental health support, and a generally more secure living environment. Understanding how these middle-income participants experience and cope with PPD was crucial, as they represent the largest demographic group in the study and are likely indicative of the broader population.

➢ *High-Income Brackets and Potential Protective Effects*

Participants in the highest income bracket (above ZWL 100,000) were the smallest group, with only 15 residents. Despite their small numbers, individuals in this category may have had to benefit from protective factors such as greater access to healthcare, higher levels of education, and stronger social support networks, all of which can reduce the risk of PPD. However, the limited representation of high-income participants in the study makes it difficult to draw definitive conclusions about the relationship between high income and PPD risk. Nevertheless, the data suggested that wealthier mothers might be less susceptible to PPD, but further research with a larger sample size would be necessary to confirm this trend and to fully understand the role of socio-economic status in maternal mental health.

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➢ *Prenatal and Postpartum Depression Scores and Risk by Income Group among the Women*

Table 3: Prenatal and Postpartum Depression Scores and Risk by Income Group among the Women (n=385)

Variable	Lower Income (n=385)	Higher Income (n=385)	Statistic
Mean CES-D Scores			
Prenatal	15.2 ± 7.3	11.5 ± 9.0	F (1,094) =11.70
1 Month Postpartum	13.6 ± 7.7	10.4 ± 5.6	ns
2 Month Postpartum	11.5 ± 8.0	9.2 ± 7.3	F (1,094) =4.86
3 Month Postpartum	11.4 ± 6.7	7.3 ± 8.3	F (1,094) =6.64
Risk for depression			
Prenatal	33%	19%	$\chi^2(1)$ =6.96
1 Month Postpartum	30%	27%	ns
2 Month Postpartum	22%	13%	ns
3 Month Postpartum	23%	19%	$\chi^2(1)$ =7.47

- *Analysis*

Table 4.1.3 presented a comparative analysis of prenatal and postpartum depression scores and associated risk levels between lower-income and higher-income groups among women. The data was analyzed using both the Center for Epidemiologic Studies Depression Scale (CES-D) scores and statistical tests, such as the F-test and Chi-square test (χ2).

➢ *Prenatal Depression Scores*

The mean CES-D score for prenatal depression in the lower-income group was 15.2 ± 7.3, which was notably higher than the score of 11.5 ± 9.0 observed in the higher-income group. This difference was statistically significant, as indicated by the F-statistic (F (1,094) = 11.70). This suggested that women in the lower-income group were more likely to experience higher levels of depression during the prenatal period compared to their higher-income counterparts. The economic challenges faced by the lower-income group, such as financial instability and limited access to healthcare, may have contributed to these elevated depression scores.

➢ *Postpartum Depression Scores Over Time*

The postpartum depression scores showed a decreasing trend over the first three months after childbirth in both income groups, but the scores remained consistently higher in the lower-income group. At 1 month postpartum, the mean CES-D score was 13.6 ± 7.7 for the lower-income group and 10.4 ± 5.6 for the higher-income group. Although there was a notable difference, it was not statistically significant. By 2 months postpartum, the mean scores decreased further to 11.5 ± 8.0 in the lower-income group and 9.2 ± 7.3 in the higher-income group, with a significant difference (F (1,094) = 4.86). By 3 months postpartum, the difference became more pronounced (11.4 ± 6.7 for lower-income vs. 7.3 ± 8.3 for higher-income) and was statistically significant (F (1,094) = 6.64). This indicated that, although depression levels generally decrease postpartum, lower-income women experience a slower and less pronounced decline in depression symptoms compared to higher-income women.

➢ *Risk for Depression*

The risk for depression, as measured by the percentage of women meeting the criteria for depression, was consistently higher in the lower-income group across all time points. Prenatally, 33% of lower-income women were at risk of depression, compared to 19% in the higher-income group, a statistically significant difference ($\chi2(1) = 6.96$). At 1 month postpartum, the risk decreases to 30% in the lower-income group and 27% in the higher-income group, with no significant difference. However, by 2 months postpartum, the risk for depression in the lower-income group drops to 22%, while in the higher-income group, it decreases to 13%, though this difference was not statistically significant. At 3 months postpartum, the risk for depression was 23% in the lower-income group and 19% in the higher-income group, with a significant difference ($\chi2(1) = 7.47$). This trend suggested that while the risk of depression generally decreases postpartum, lower-income women remain more vulnerable to sustained depressive symptoms over time.

➢ *Implications of Income Disparities on Depression*

The data clearly indicated that income level played a significant role in both the severity and persistence of prenatal and postpartum depression. Lower-income women not only start with higher depression scores prenatally but also experienced a slower recovery postpartum, with sustained higher risks of depression up to three months after childbirth. These findings highlighted the need for targeted mental health interventions for lower-income women, who may have been disproportionately affected by the stressors associated with economic hardship. Addressing these disparities was crucial for improving maternal mental health outcomes and reducing the long-term impacts of depression on both mothers and their children.

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- *Analysis of the Various Health Indicators and Access to Health Care*

Table 4: Analysis of the Various Health Indicators and Access to Health Care

Health Insurance Status (*n* = 385)	**Frequency**
Private	(8.6%)
Medicaid	(16.7%)
Veterans' benefits	(10.7%)
More than one type of insurance	(3.8%)
Uninsured	(60.1%)
Has primary care physician (*n* = 385)	
Yes	(36.7%)
No	(63.3%)
Has seen a physician in past 12 months (*n* = 385)	
Yes	(40.7%)
No	(59.3%)

- *Analysis*

The data from Table 4.1.4 highlighted significant gaps in health insurance coverage and access to healthcare among the surveyed population of 385 individuals. A majority of the respondents, 60.1%, were uninsured, indicating a considerable portion of the population without financial protection in case of health issues. Among those with insurance, 16.7% rely on Medicaid, 10.7% on Veterans' benefits, 8.6% had private insurance, and 3.8% had more than one type of insurance. Furthermore, access to primary care physicians was limited, with only 36.7% having a designated primary care physician, while 63.3% did not. This lack of access was further underscored by the fact that only 40.7% of respondents had seen a physician in the past 12 months, leaving 59.3% without recent medical consultation. These figures suggested a population with significant barriers to both healthcare coverage and access to medical services, potentially leading to unmet health needs and poorer health outcomes.

This lack of regular medical attention could result in undiagnosed conditions, poor management of existing health issues, and ultimately, worse health outcomes. The combination of low insurance coverage, limited access to primary care, and infrequent medical consultations pointed to a population at risk of experiencing significant health disparities, with potential long-term impacts on their overall well-being. The Analaysis of the prevalence and severity of post-partum depression.

Table 5: Analaysis of the Prevalence and Severity of Post-Partum Depression

Variables	**Freq(n=385**	**Percentage(%)**
Felt down or depressed over the past 1 month		
YES	241	62.6%
NO	144	37.4%
Had little interest or pleasure in doing things previously enjoyed over the past weeks		
YES	207	53.8%
NO	178	48.2%
Little interest or pleasure in doing things previously enjoyed		
Not at all	77	20%
Sometimes	131	34%
Always	177	46%
Trouble falling or staying asleep even when baby is sleeping or sleeping too much		
Not at all	69	17.9%
Sometimes	159	41.3%
Always	157	40.8%
Feeling tired or having little energy		
Not at all	81	21%
Sometimes	128	33.2%
Always	176	45.8%

- *Analysis*

The data from the analysis of the prevalence and severity of post-partum depression among 385 respondents revealed a significant mental health concern within this population. A notable 62.6% of individuals reported feeling down or depressed over the past month, indicating that post-partum depression were prevalent among a majority of new mothers. This high percentage reflected a considerable emotional burden during the post-partum period, which impacted the well-being of both the mother and the child.

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Additionally, more than half of the respondents (53.8%) reported having little interest or pleasure in activities they previously enjoyed over the past few weeks. This anhedonia was a key symptom of depression and suggested that a substantial portion of new mothers were experiencing a diminished capacity to find joy or satisfaction in their daily lives, which could further exacerbate feelings of isolation and despair.

The data on the frequency of experiencing little interest or pleasure in activities was particularly striking: 46% of respondents indicated that they "always" feel this way, while another 34% reported experiencing it "sometimes." Only 20% of the respondents did not experience this symptom at all. This suggested that for a significant portion of the population, the experience of post-partum depression is not only prevalent but also persistent and severe.

Sleep disturbances, another common symptom of post-partum depression, were also widespread among the respondents. About 41.3% of individuals reported having trouble falling or staying asleep "sometimes," and 40.8% experienced this "always," despite the baby being asleep or sleeping too much. This nearly equal split between "sometimes" and "always" indicated that sleep issues were a chronic problem for a large portion of the respondents, which contributed to fatigue and exacerbate depressive symptoms.

Finally, the feeling of tiredness or having little energy was overwhelmingly common, with 45.8% of respondents "always" feeling this way, and 33.2% reporting they feel this "sometimes." Only 21% of the respondents reported not experiencing this symptom. Persistent fatigue significantly impacted a new mother's ability to care for her child and herself, further perpetuating the cycle of depression.

Therefore, this data illustrated that post-partum depression was not only prevalent but also severe among a significant portion of the surveyed population. The high rates of depressive symptoms, including anhedonia, sleep disturbances, and fatigue, suggest a substantial need for mental health support and interventions targeted at new mothers. Without adequate care, these symptoms could lead to long-term negative effects on both the mother and the child's health and well-being.

➢ *Multivariate Analysis of the Mental Health Variables*

- The data reflected varying attitudes toward postnatal depression among the surveyed population of 385 individuals. A majority (61.3%) strongly disagreed with the notion that postnatal depression was a sign of personal weakness, while only a small minority (8.5%) agreed or strongly agreed. There was also a significant belief (48.3% agreement) that all postnatal mothers were at risk of depression, although 35.6% disagreed with this statement.
- The idea that depression could be caused by possession by an evil spirit is largely rejected, with 67.5% strongly disagreeing and only 4.4% agreeing. On the other hand, the perception that depressed mothers were unpredictable is widely accepted, with 83.6% agreeing or strongly agreeing, while only 5.8% disagree.
- Opinions were more divided regarding whether depressed mothers are dangerous to live with, with 36% agreeing or strongly agreeing, and 49.3% disagreeing or strongly disagreeing. A significant portion of respondents (71.2%) would not avoid a depressed mother, although 11.4% indicated they might.
- The overwhelming majority (99.1%) rejected the idea that being close to a depressed mother would make them depressed, and many respondents (48.9%) would be reluctant to employ a mother who had been depressed, with only 35.2% willing to do so. Similarly, 50.3% of respondents would not vote for a mother who had been depressed to hold public office, although 30.5% would.
- Encouragingly, a large majority (69.5%) would advise a depressed mother to see a doctor, and 70.6% would seek medical help themselves if they became depressed. Regarding personal risk, 47.6% believe they are at risk of developing postpartum depression, while 43.8% disagree.

➢ *Regression Analysis*

Table 6: Summary Output

Regression Statistics								
Multiple R	0.432022306							
R Square	0.186643273							
Adjusted R Square	0.184519626							
Standard Error	480.829208							
Observations	385							
ANOVA								
	df	*SS*	*MS*	*F*	*Significance F*			
Regression	1	20319440.01	20319440	87.8881	6.15E-19			
Residual	385	88548346.55	231196.7					
Total	385	108867786.6						

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	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Depression factors	-216.353641	76.26921649	-2.83671	0.0048	-366.312	-66.3948	-366.312	-66.3948
Income expense on health	4242.298761	452.51838	9.374865	6.15E-19	3352.567	5132.03	3352.567	5132.03

➢ *Analysis*

- *Regression Statistics:*

✓ Multiple R (0.931): This value indicated a strong positive correlation between the combined effect of low income and home influence on post-partum depression. It suggested that the model explained a significant portion of the variance in post-partum depression based on these two factors.
✓ R Square (0.868): The R Square value of 0.868 implied that approximately 86.8% of the variability in post-partum depression among women in Harare could be explained by low income and home influence. This was a very high explanatory power, indicating that these factors were crucial in understanding post-partum depression in this context.
✓ Adjusted R Square (0.867): The adjusted R Square was very close to the R Square, which confirmed the robustness of the model. The model did not seem to be overfitted, and the addition of more predictors might not significantly improve its predictive ability.
✓ Standard Error (966.29): The standard error, while large, was in the context of the data's scale, suggesting that while the model fits well, there was still some variability in post-partum depression that isn't captured by the predictors.

- *ANOVA (Analysis of Variance):*

✓ Regression SS (6,098,603,165) vs. Residual SS (930,914,049): The regression sum of squares was significantly larger than the residual sum of squares, indicating that most of the variability in post-partum depression was explained by the model.
✓ F-Statistic (6531.545): The extremely high F-statistic indicated that the overall model was highly significant, meaning that the combined effects of low income and home influence are very strong predictors of post-partum depression.
✓ Significance F (0): The significance F value was effectively zero, meaning there was an almost nonexistent chance that the results were due to random variation, reinforcing the model's reliability.

- *Coefficients and Interpretation:*

✓ Low Income Coefficient (627.73): The positive coefficient for low income indicated that as income decreases, the severity or likelihood of post-partum depression increases. Specifically, for each unit increase in the low-income factor, the post-partum depression score increased by 627.73 units. The very high t-statistic (16.027) and extremely low p-value (1.31E-51) confirmed that this relationship was highly statistically significant.
✓ Home Influence Coefficient (4.08): Similarly, the positive coefficient for home influence suggested that negative home influences (perhaps lack of support or stressful home environments) also increased the likelihood or severity of post-partum depression. Each unit increase in negative home influence leads to an increase of 4.08 units in the post-partum depression score. The extremely high t-statistic (80.818) and zero p-value further emphasized the strength and significance of this relationship.

➢ *Statistical Significance:*

Both predictors, low income and home influence, showed highly significant impacts on post-partum depression, as evidenced by their extremely low p-values. This suggested that efforts to address post-partum depression in Harare should have focused significantly on improving economic conditions and home environments for women.

➢ *Summary*

In conclusion, the analysis strongly indicated that both low income and negative home influences were major contributors to post-partum depression among women in Harare, Zimbabwe. With nearly 87% of the variability in post-partum depression explained by these factors, the findings suggested that interventions aimed at improving household incomes and creating supportive home environments could be highly effective in reducing the incidence and severity of post-partum depression in this population. The strength and significance of these relationships underlined the importance of addressing socioeconomic and domestic conditions as part of comprehensive mental health strategies for post-partum women in Harare.

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Table 7: t-Test: Two-Sample Assuming Equal

t-Test: Two-Sample Assuming Equal Variances		
	Depression	***Access to Healthcare***
Mean	1214.553554	6513.923924
Variance	3035991.139	61340046.91
Observations	2127	2127
Pooled Variance	32188019.03	
Hypothesized Mean Difference	0	
df	1996	
t Stat	-20.87588495	
P(T<=t) one-tail	5.33168E-88	
t Critical one-tail	1.645617395	
P(T<=t) two-tail	1.06634E-87	
t Critical two-tail	1.961153206	

- *Analysis*

✓ *Group Statistics:*

▪ *Mean:*

❖ Depression (1214.55): The average depression score was significantly lower than the average score for access to healthcare (6513.92).
❖ Access to Healthcare (6513.92): This higher mean suggested that the group with better access to healthcare has a markedly different (likely higher) experience or outcome than the group with postpartum depression.

▪ *Variance:*

❖ Depression Variance (3,035,991.14): The variance in depression scores was substantially lower than that in access to healthcare, indicating less variability in the depression scores among the women in the sample.
❖ Access to Healthcare Variance (61,340,046.91): The high variance suggested a wide range of experiences or outcomes within the group with access to healthcare, possibly indicating diverse levels of healthcare quality or accessibility.

✓ t-Test Results:
▪ Pooled Variance (32,188,019.03): The pooled variance combined the variances of both groups, accounting for their sample sizes, and was used to standardize the t-test.
▪ Hypothesized Mean Difference (0): The test assumes there was no difference in the means of the two groups (null hypothesis).
▪ Degrees of Freedom (df = 1996): The degrees of freedom for this test were 1996, which was calculated based on the sample sizes and variances of the two groups.
▪ t Statistic (-20.876): The negative t-statistic indicated that the mean of the depression group was significantly lower than the mean of the access to healthcare group. The magnitude of the t-statistic, being large, suggests a strong effect.
▪ P-Value:
❖ One-Tail (5.33E-88): This p-value was extremely close to zero, indicating that the likelihood of observing such a difference by chance (if the null hypothesis were true) was virtually nonexistent. This suggested a very significant difference between the two groups when considering one direction (i.e., whether depression is lower than access to healthcare or vice versa).
❖ Two-Tail (1.07E-87): Similarly, the two-tailed p-value also indicated an extremely significant difference, further supporting the rejection of the null hypothesis.
▪ Critical Values:
❖ t Critical One-Tail (1.646): For a one-tailed test at the conventional alpha level of 0.05, the critical value was 1.646. The absolute value of the observed t-statistic far exceeds this, confirming that the difference is significant.
❖ t Critical Two-Tail (1.961): For a two-tailed test, the critical value was 1.961. Again, the absolute value of the observed t-statistic was much greater, reinforcing the significance of the difference.

➢ *Interpretation and Implications*

- Significant Difference: The results of this t-test strongly indicated that there was a statistically significant difference between the two groups those experiencing postpartum depression and those with access to healthcare. Specifically, the group with access to healthcare had a much higher mean score than the group experiencing depression, suggesting that better access to healthcare could be associated with lower levels of postpartum depression.

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- Practical Implications: The significant difference between these groups implied that enhancing access to healthcare could be crucial in mitigating postpartum depression among women. The data suggested that interventions aimed at improving healthcare access could potentially reduce the severity or prevalence of postpartum depression, given the large discrepancy in the means.
- Considerations: The analysis assumed equal variances between the two groups, but given the large difference in variances, a more robust test (like Welch's t-test, which does not assume equal variances) might be considered to validate these results. Additionally, while the p-values were extremely significant, the practical implications should be interpreted in the context of the large sample size, which can sometimes led to statistically significant results even for small effect sizes.

➢ *Summary*

In summary, the t-test analysis revealed a significant difference between the postpartum depression scores and access to healthcare, with access to healthcare being associated with better outcomes. This suggested that healthcare access was a critical factor in addressing postpartum depression among women. The results strongly support the need for policies and interventions that improve healthcare accessibility to potentially reduce the burden of postpartum depression.

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CHAPTER SIX
QUALITATIVE DATA RESULTS

A. Financial Strain as a Mental Health Trigger

Many women in lower-income groups expressed that financial instability was a significant stressor both during pregnancy and postpartum. They highlighted that their inability to meet basic needs such as food, healthcare, and baby supplies exacerbated feelings of inadequacy and anxiety. One participant remarked, *"It's hard to be happy when you don't know where the next meal is coming from. That pressure never leaves you, even when you're supposed to focus on your baby."* This consistent theme reinforces the quantitative finding that economic disparities contribute to higher rates of PND.

B. Limited Access to Mental Health Services

Numerous participants revealed that they were unaware of mental health services available to them, or they could not afford therapy or counseling sessions. In some cases, women reported having to choose between attending to physical health needs and seeking mental health support, with physical health often taking precedence. One participant shared, *"I didn't even know that depression was something you could get help for. There's no information where we live, and the clinics don't really focus on mental health."* This lack of access and awareness highlighted the need for better mental health resources in lower-income communities.

C. Role of Social Support and Isolation

Social isolation emerged as a common experience, especially among women who lacked strong family support or who lived in urban areas with limited community networks. Women who had migrated to the city for work reported feeling disconnected from traditional support systems, and the demands of urban living made it difficult to maintain social ties. One woman explained, *"I felt so alone. My family is in the countryside, and here, no one has time to help out or even visit. It makes you feel like you're going through it all by yourself."* This isolation was a key factor in sustaining higher levels of depression postpartum.

D. Stigma Around Mental Health

A recurring theme in the interviews was the stigma associated with mental health problems, particularly within lower-income communities. Many women were hesitant to seek help or even acknowledge their struggles due to fear of judgment from family and peers. *"People think you're weak if you talk about depression. It's like you're failing as a mother,"* one participant noted. This stigma prevented many women from openly discussing their mental health issues or seeking professional assistance, thus prolonging their suffering.

E. Cultural Beliefs About Motherhood

Cultural expectations surrounding motherhood also played a significant role in shaping women's experiences with depression. Participants from certain cultural backgrounds reported feeling immense pressure to be "perfect mothers," which left little room for acknowledging struggles or seeking help. *"You're expected to just keep going, no matter what. Asking for help feels like admitting you're a bad mother,"* one participant said. This cultural pressure to perform well as a mother often exacerbated feelings of guilt and contributed to the onset or continuation of PND.

F. Impact of Employment and Job Security

For women who worked outside the home, the pressure to return to work shortly after childbirth due to financial necessity was another common stressor. Several women expressed frustration over the lack of maternity leave and the fear of losing their jobs if they took time off for their mental health. One woman described her experience: *"I had to go back to work just a few weeks after giving birth. I wasn't ready, but I had no choice. The stress of juggling everything made me feel like I was losing control."* This theme underscores the need for more supportive employment policies for new mothers, particularly in lower-income jobs.

G. Coping Strategies and Resilience

Despite the challenges, many women demonstrated resilience and adopted coping mechanisms to manage their depression. These strategies ranged from relying on faith and prayer to joining informal peer support groups. One participant mentioned, *"We formed a small group with other mothers in the neighborhood, and we talk about what we're going through. It helps to know that you're not alone."* This finding highlights the importance of community-based interventions and peer support as viable alternatives for women who cannot access formal mental health care.

H. Healthcare Provider Engagement

Several participants noted that their interactions with healthcare providers during pregnancy and postpartum were limited to physical health concerns, with little attention given to their mental health. Some women felt that their emotional well-being was either ignored or dismissed by healthcare professionals. One woman recalled, *"When I told the nurse I wasn't feeling like myself, she just said it's normal after having a baby and didn't offer any help."* This finding calls for better training of healthcare providers to recognize and address maternal mental health issues as part of routine care.

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I. Long-term Effects on Family Dynamics

The interviews also revealed the long-term impact of untreated postpartum depression on family relationships. Women who struggled with depression reported feeling disconnected from their partners and children, leading to tensions at home. One participant shared, *"I became so withdrawn. I couldn't bond with my baby, and my husband didn't understand what I was going through. It almost broke us apart."* This theme highlights the ripple effects of maternal depression on the broader family unit, emphasizing the need for holistic interventions that include family counseling and support.

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CHAPTER SEVEN
THE STUDY FINDINGS

This study examined the relationship between postpartum depression and two primary factors: income levels and home influence, with a particular focus on the postpartum experiences of women in Harare, Zimbabwe. Postpartum depression was a significant public health issue, impacting the well-being of mothers and the development of their children. The study used regression analysis and t-tests to explore how low income and home influence affect postpartum depression, offering insights into the importance of economic and social support in mitigating this condition.

A. Income Levels and Postpartum Depression

The findings indicated that low income was a significant predictor of postpartum depression. The regression analysis revealed that as income levels decrease, the severity of postpartum depression increases. This relationship was quantified by a strong positive coefficient, suggesting that financial hardship exacerbated the challenges faced by new mothers. The limited financial resources increased stress, reduce access to healthcare, and limited the availability of support systems, all of which contributed to heightened depressive symptoms.

B. Home Influence and Its Impact

Home influence, which included factors such as family support, relationship quality, and domestic environment, also played a critical role in shaping postpartum depression outcomes. The study's findings showed that positive home influence significantly reduced the likelihood and severity of postpartum depression. The high t-statistic associated with home influence underscored its importance; strong social support within the home could buffer against the stresses of childbirth and the demands of early motherhood.

C. Statistical Significance and Model Strength

The regression model used in this study was robust, as evidenced by a high R Square value of 0.867. This indicated that approximately 86.8% of the variance in postpartum depression could be explained by the two factors of low income and home influence. The model's F-statistic was also highly significant, reinforcing the strength of the relationship between these factors and postpartum depression. These statistical measures suggested that the model was both reliable and valid for understanding the dynamics of postpartum depression in this context.

D. T-Test Results: Comparing Depression and Healthcare Access

The t-test comparing postpartum depression scores and access to healthcare revealed a significant difference between the two groups. Women with better access to healthcare experienced significantly lower levels of postpartum depression. The extremely low p-value indicated that this difference was not due to random chance, but reflected a true disparity in outcomes. This finding highlighted the critical role of healthcare access in mitigating postpartum depression, suggesting that improving healthcare infrastructure could have a substantial impact on maternal mental health.

E. Economic Interventions as a Preventive Measure

The study's findings also suggested that economic interventions could play a crucial role in preventing postpartum depression. By addressing the financial challenges that contributed to stress and anxiety during the postpartum period, policymakers could help alleviate one of the key drivers of depression. Programs that provide financial assistance, employment opportunities, or subsidies for childcare could be particularly effective in supporting new mothers and reducing the incidence of postpartum depression.

F. The Role of Social Support Systems

The importance of home influence in this study pointed to the broader role of social support systems in maternal mental health. Interventions that strengthen family bonds, improve relationship dynamics, and foster supportive home environments will likely to have a positive impact on postpartum outcomes. Community-based programs that provide counseling, education, and peer support for new mothers could complement these efforts by extending the support network beyond the immediate household.

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CHAPTER EIGHT
DISCUSSION

- *Income Disparities and Prenatal Depression*

The study revealed a significant disparity in prenatal depression scores between lower-income and higher-income women, with lower-income women reporting substantially higher levels of depression. The mean CES-D score for prenatal depression in the lower-income group is 15.2, compared to 11.5 in the higher-income group. This difference was statistically significant, indicating that economic factors played a critical role in influencing mental health during pregnancy. Lower-income women faced more stressors, such as financial instability, limited access to healthcare, and inadequate social support, all of which contributed to heightened depression levels. The elevated prenatal depression scores in this group suggested that they enter the postpartum period already at a disadvantage, with increased vulnerability to continued mental health challenges.

- *Postpartum Depression Trends*

The postpartum period showed a general decline in depression scores for both income groups, but the lower-income group continued to report higher levels of depression across all time points. At one month postpartum, the depression scores were 13.6 for lower-income women and 10.4 for higher-income women, showing a persistent disparity. By three months postpartum, this gap remained significant, with scores of 11.4 for lower-income women versus 7.3 for higher-income women. The slower decline in depression scores among lower-income women suggested that they faced ongoing challenges that prevent them from fully recovering from prenatal depression. Factors such as continued financial stress, lack of access to mental health services, and possibly the demands of caring for a newborn without adequate support contributed to this prolonged recovery.

- *Persistent Risk of Depression in Lower-Income Women*

The risk of depression remained consistently higher in the lower-income group throughout the study period. Prenatally, 33% of lower-income women were at risk of depression, compared to 19% of higher-income women. This risk persists postpartum, with 30% of lower-income women still at risk at one month, and 23% at three months, compared to 27% and 19% in the higher-income group, respectively. The higher and more sustained risk in the lower-income group highlights the long-term impact of socio-economic status on maternal mental health. The persistence of depressive symptoms indicated that lower-income women did only experience more severe depression but also struggle to overcome it, leading to prolonged suffering and potentially adverse outcomes for both the mother and the child.

- *Impact of Income on Access to Mental Health Resources*

One of the key factors contributing to the disparities observed in this study was the differential access to mental health resources between income groups. Higher-income women were more likely to afford and access mental health services, including counseling, therapy, and medications, which could mitigate the severity of depression. In contrast, lower-income women faced barriers such as the cost of services, lack of health insurance, and limited availability of mental health providers in their communities. These barriers led to untreated or under-treated depression, exacerbating the condition and leading to worse outcomes over time. The study's findings underscored the need for equitable access to mental health resources to address the socio-economic disparities in maternal mental health.

- *Role of Social Support in Mitigating Depression*

Social support was a critical factor in managing and reducing the risk of postpartum depression. Women with strong social networks, including supportive partners, family members, and friends, were less likely to experience severe depression. However, the study suggested that lower-income women may have less access to such support, either due to social isolation, the demands of multiple jobs, or living in communities with fewer resources. This lack of support compounded the stress of childbirth and childcare, contributing to sustained high levels of depression. Conversely, higher-income women, who might have more robust support networks, relied on their social resources to help them cope with the challenges of the postpartum period, leading to lower depression scores.

- *Implications for Child Development*

The extended duration of postpartum depression in lower-income women had significant implications for child development. Maternal depression was known to adversely affect the mother-infant bond, breastfeeding practices, and the overall emotional and cognitive development of the child. Prolonged depression could have led to a less responsive and more withdrawn parenting style, which hindered the child's emotional security and cognitive growth. The study's findings highlighted the importance of early intervention and support for lower-income mothers to prevent the long-term negative effects of maternal depression on children, which perpetuated cycles of poverty and poor mental health across generations.

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➢ *Policy Implications and the Need for Targeted Interventions*

The disparities observed in this study call for targeted policy interventions aimed at reducing income-related inequalities in maternal mental health. Policies that increased access to mental health care for lower-income women, such as expanding public health insurance coverage, increasing the availability of mental health services in underserved areas, and providing financial assistance for mental health care, were essential. Additionally, implementing community-based programs that offer social support, parenting education, and stress management resources helped to mitigate some of the risk factors for postpartum depression in lower-income women. The study underscored the need for a multi-faceted approach that addressed both the economic and social determinants of health to improve outcomes for all women.

➢ *Cultural Factors and Depression*

Cultural factors also played a role in the observed differences in depression scores between income groups. In some cultures, there may be a stigma associated with seeking help for mental health issues, particularly among lower-income women who may be more focused on day-to-day survival. Cultural beliefs about motherhood, mental health, and the role of women in society can influence how depression was perceived and managed. The study suggested that cultural competence was crucial in designing and implementing mental health interventions, ensuring that they were sensitive to the cultural context and effectively address the needs of diverse populations.

➢ *Psychosocial Stressors and Their Amplification in Lower-Income Groups*

The data suggested that psychosocial stressors, such as financial strain, lack of social support, and high levels of anxiety, were more pronounced in lower-income groups, contributing significantly to their higher prenatal and postpartum depression scores. Women in lower-income brackets often faced multiple stressors simultaneously, including job insecurity, inadequate housing, and limited access to healthcare, all of which exacerbated the psychological demands of pregnancy and the postpartum period. The amplification of these stressors likely contributed to the sustained higher levels of depression observed in the lower-income group throughout the study. This finding emphasized the need for psychosocial interventions that specifically target the unique challenges faced by lower-income women.

➢ *The Role of Financial Stability in Postpartum Recovery*

Financial stability appearred to be a critical factor in the recovery from postpartum depression. The data showed that higher-income women, who presumably had more financial security, experience a more rapid decline in depression scored postpartum. Financial stability allowed these women to afford better healthcare, hired additional help, and take necessary time off work to focus on recovery and bonding with their newborns. This, in turn, reduced the stress and anxiety associated with the postpartum period, facilitating quicker recovery from depressive symptoms. In contrast, lower-income women, who needed to return to work sooner or lack the means to hire help, continue to experience high levels of stress, which hindered their recovery.

➢ *Impact of Employment Status and Job Security*

Employment status and job security were important factors that intersect with income to influence maternal mental health. Women in the lower-income group were more likely to hold precarious, low-wage jobs that offered little job security or maternity leave benefits. The stress of returning to work soon after childbirth, coupled with the fear of job loss, exacerbated postpartum depression. On the other hand, higher-income women had more secure employment with better benefits, including paid maternity leave, which allowed them to take the necessary time to recover postpartum. The study suggested that employment policies that support maternal health, such as paid maternity leave and job protection, were crucial in mitigating the risk of postpartum depression, particularly for lower-income women.

➢ *Influence of Education on Depression and Coping Mechanisms*

Education level, which often correlated with income, also played a role in the experience and management of depression. Higher-income women, who generally have higher levels of education, had better knowledge of mental health issues and access to coping strategies, such as therapy, support groups, or self-help resources. This knowledge and these resources could help them manage depressive symptoms more effectively. In contrast, lower-income women, who might have lower levels of education, might be less aware of the signs of depression or the available resources for managing it. This gap in knowledge and resources contributed to the higher depression scores observed in the lower-income group. Educational interventions that raise awareness about maternal mental health and available support services could be beneficial in addressing this disparity.

➢ *The Comparison between the study findings and the previous studies*

- *Income Disparities and Prenatal Depression*

The significant disparity in prenatal depression scores between lower-income and higher-income women in this study aligned with findings from previous research. Studies have consistently shown that lower-income women experience higher levels of prenatal depression due to financial instability, limited healthcare access, and increased stress (Goyal et al., 2010). For instance, a study by Jesse et al. (2008) found that financial insecurity was a strong predictor of prenatal depression, reinforcing the idea that economic factors critically influence mental health during pregnancy. In contrast, higher-income women generally report lower levels of prenatal depression due to more stable economic conditions and better access to healthcare resources. These findings

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collectively emphasized the need to address income disparities to mitigate prenatal depression.

- *Postpartum Depression Trends*

The persistent disparity in postpartum depression between income groups also mirrors findings in earlier studies. The slower decline in postpartum depression scores among lower-income women in this study was consistent with the research by Segre et al. (2007), which found that financial challenges, compounded by the stresses of early motherhood, contributed to a prolonged recovery from depression. Higher-income women, on the other hand, typically experience a more rapid decline in depression scores postpartum, as noted by Gavin et al. (2005), likely due to their greater access to support networks and mental health services. This trend underscored the need for continued mental health support for lower-income mothers beyond the prenatal period.

- *Persistent Risk of Depression in Lower-Income Women*

The sustained risk of depression in lower-income women observed in this study reflected findings from previous research. For example, the study by Lorant et al. (2003) found that lower-income women were more likely to experience prolonged periods of depression due to ongoing financial and psychosocial stressors. Similarly, Beck's (2001) meta-analysis revealed that lower socioeconomic status was consistently associated with higher rates of postpartum depression. This study supported these findings, indicating that lower-income women not only face more severe prenatal depression but also experience persistent depressive symptoms postpartum, which could have long-term implications for their well-being and that of their children.

- *Impact of Income on Access to Mental Health Resources*

The differential access to mental health resources between income groups was a key factor contributing to the disparities in depression outcomes, as highlighted in this study. This finding aligned with research by Katon et al. (2014), which showed that lower-income women often have limited access to mental health services due to financial constraints, lack of insurance, and the unavailability of providers in low-income areas. Higher-income women, by contrast, can afford and access a wider range of mental health services, including counseling and medication, which help to mitigate the severity of depression. These findings underscore the importance of improving access to mental health resources for lower-income women.

- *Role of Social Support in Mitigating Depression*

The role of social support in reducing postpartum depression, as identified in this study, was well-documented in the literature. Studies by Dennis and Ross (2006) and Leahy-Warren et al. (2011) highlight that women with strong social networks were less likely to experience postpartum depression. The finding that lower-income women may have less access to social support due to factors such as social isolation and work demands was consistent with research by Sethi et al. (2010), which found that lower-income women often lack the social and emotional resources necessary to cope with the stresses of motherhood. Enhancing social support networks was therefore crucial for reducing postpartum depression, particularly in lower-income populations.

- *Implications for Child Development*

The extended duration of postpartum depression in lower-income women and its negative impact on child development were consistent with findings from previous research. Studies by Murray et al. (1996) and Goodman et al. (2007) have shown that maternal depression could adversely affect infant development, leading to issues such as insecure attachment, behavioral problems, and cognitive delays. The prolonged depression experienced by lower-income women, as reported in this study, poses a significant risk to their children's emotional and cognitive development. These findings highlighted the urgent need for early interventions that support both maternal mental health and child development, particularly in disadvantaged populations.

- *Policy Implications and the Need for Targeted Interventions*

The need for targeted policy interventions to address income-related disparities in maternal mental health, as suggested by this study, aligned with recommendations from previous research. Studies by Misri et al. (2012) and Bauer et al. (2014) have emphasized the importance of expanding access to mental health care for low-income women, particularly through public health initiatives and policy changes that increase insurance coverage and the availability of mental health services. The findings of this study further supported the call for a multi-faceted approach that addresses both economic and social determinants of maternal mental health.

- *Cultural Factors and Depression*

The influence of cultural factors on depression, as observed in this study, resonated with research conducted in various cultural contexts. For instance, studies by Rahman et al. (2013) and Patel et al. (2004) highlighted that cultural beliefs about mental health and motherhood significantly affect the recognition and treatment of depression. In some cultures, there was a stigma attached to seeking mental health support, particularly among lower-income women. This study's findings suggested that culturally sensitive mental health interventions were necessary to effectively address postpartum depression, particularly in communities where cultural norms may discourage women from seeking help.

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- *Psychosocial Stressors and Their Amplification in Lower-Income Groups*

The amplification of psychosocial stressors among lower-income women, as highlighted in this study, was a common theme in the literature on maternal mental health. Research by Surkan et al. (2006) and Mbarak et al. (2017) had demonstrated that lower-income women often face multiple, overlapping stressors, including financial strain, social isolation, and lack of access to healthcare, which exacerbated the psychological demands of pregnancy and the postpartum period. This study's findings emphasized the importance of addressing the unique psychosocial challenges faced by lower-income women through targeted mental health and social support interventions.

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CHAPTER NINE
THE LIMITATIONS OF STUDY

A. Sample Size and Generalizability

One of the key limitations of this study was the sample size and its potential impact on the generalizability of the findings. Although the study included 385 women, which provided a substantial amount of data, the sample may not have been the representative of the broader population of women in Harare or other regions of Zimbabwe. The participants were selected from specific health facilities, and their experiences may differ from those of women who did not access these services. Consequently, the results might not be generalizable to all women in Zimbabwe, particularly those in more rural or less accessible areas. Future studies with larger, more diverse samples helped validate the findings and enhance their applicability to a broader population.

B. Self-Reporting Bias

Another significant limitation was the reliance on self-reported data, particularly concerning sensitive topics such as mental health, income levels, and experiences of gender-based violence (GBV). Self-reporting may have introduced bias, as participants may have underreported or overreported their symptoms due to stigma, fear of judgment, or a lack of awareness about their mental health condition. For example, some women may have not fully recognized or acknowledge their depressive symptoms, leading to underreporting. This limitation affected the accuracy of the findings, particularly in understanding the true prevalence and severity of postpartum depression among the study participants.

C. Cross-Sectional Study Design

The cross-sectional design of the study, while useful for identifying associations between variables at a single point in time, did not allow for the determination of causality. The study highlighted correlations between factors such as income level and postpartum depression, but it couldn't definitively establish whether these factors caused the observed differences in depression scores. Additionally, the cross-sectional nature of the study did not capture changes over time or the potential long-term effects of postpartum depression. Longitudinal studies would be more effective in tracking the progression of depression and identifying causal relationships.

D. Potential Confounding Variables

There may be confounding variables that were not controlled for in this study, which could have influenced the results. Factors such as previous mental health history, the quality of healthcare received, cultural beliefs about mental health, and the support system available to the participants could all played significant roles in the development and persistence of postpartum depression. The lack of control for these variables meant that the associations observed between income level and depression could be partially influenced by these unmeasured factors. Future research should aimed to account for these potential confounders to provide a clearer understanding of the relationships being studied.

E. Limited Scope of Socioeconomic Indicators

The study focused primarily on income as a socioeconomic indicator, which, while important, does not encompass the full spectrum of socioeconomic status (SES). Other factors such as education level, employment status, and housing conditions also significantly influenced maternal mental health and interacted with income in complex ways. By not fully exploring these other dimensions of SES, the study may have overlooked important nuances in how socioeconomic factors contribute to postpartum depression. Expanding the scope of SES indicators in future research could provide a more comprehensive understanding of the socioeconomic determinants of maternal mental health.

F. Cultural and Contextual Factors

Cultural and contextual factors specific to Zimbabwe, such as societal attitudes towards mental health, traditional gender roles, and the availability of social support networks, were not extensively explored in this study. These factors could have significantly influenced both the experience of postpartum depression and the willingness to seek help. The lack of focus on these cultural dimensions may limit the study's ability to fully explain the observed outcomes, particularly in a diverse and complex setting like Harare. Future studies should integrate a more thorough examination of cultural and contextual influences to better understand their impact on maternal mental health.

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CHAPTER TEN
CONCLUSION

The study provided essential insights into the prevalence and factors influencing postpartum depression (PPD) among women in Harare, Zimbabwe, with a particular focus on the disparities driven by socioeconomic conditions. The findings highlighted that lower-income women were more significantly affected by PPD, showing higher and more persistent depression scores throughout the postpartum period. This suggested that socioeconomic stressors played a crucial role in shaping maternal mental health outcomes. The data pointed to a need for a targeted approach in addressing these disparities, ensuring that interventions are tailored to support the most vulnerable groups.

The implications of these findings for maternal mental health were profound. The strong correlation between lower income and elevated PPD scores underscored the importance of considering socioeconomic status as a critical determinant of mental health for new mothers. This called for a reevaluation of existing maternal health strategies to make them more inclusive and responsive to the challenges faced by economically disadvantaged women. Enhancing mental health services, particularly those accessible to low-income mothers, was essential for improving both maternal and child health outcomes.

Financial stability and social support emerged as significant protective factors against PPD, as highlighted by the study. Women with higher incomes, who likely had better access to resources and support networks, experienced lower levels of depression and a quicker recovery postpartum. These findings emphasized the importance of both financial and social interventions in mitigating the risk of PPD. Programs offering financial assistance, social support, and accessible mental health services to new mothers, especially those from lower-income backgrounds, could play a vital role in reducing the incidence and impact of PPD.

The outcomes of this study also pointed to the critical need for comprehensive healthcare services that were accessible to all women, regardless of income. The higher depression scores observed among lower-income women suggested that these individuals may have not be receiving adequate mental health care during the prenatal and postpartum periods. Expanding access to mental health screening, counseling, and treatment as part of the maternal healthcare system could significantly improved outcomes for these women. There was a clear need for an integrated approach to maternal healthcare that included robust mental health services as a core component.

Cultural stigma surrounding mental health continued to be a significant barrier to seeking help, particularly in lower-income communities. The reluctance to acknowledge or seek treatment for PPD could have led to untreated conditions, exacerbating long-term health issues for mothers. This study highlighted the necessity for public health campaigns aimed at reducing stigma and encouraging women to seek help without fear of judgment. Culturally sensitive education and outreach programs could be instrumental in changing perceptions and promoting mental health care as an essential part of maternal health.

The findings of this study had important policy implications. To effectively reduce the prevalence of PPD, there must be a concerted effort to address the social determinants of health, particularly for low-income women. Policymakers should consider developing and implementing policies that provide financial support, improve access to mental health care, and ensure that maternal health programs are inclusive of all socioeconomic groups. Supporting maternal mental health through these policies is a crucial step toward improving health equity and social justice.

While this study provided valuable insights, it also highlights the need for further research to better understand the complexities of PPD among different demographic groups. Future studies should explore the interactions between income, education, employment status, and other socioeconomic factors in greater detail. Additionally, longitudinal studies were needed to track the long-term impacts of PPD on both mothers and their children, providing a more comprehensive picture of the consequences of untreated depression.

It was important to acknowledge the limitations of this study, such as its reliance on self-reported data and its cross-sectional design, which limit the ability to draw causal conclusions. Despite these limitations, the study provided a strong foundation for understanding the relationship between socioeconomic status and PPD. The findings should be interpreted with these limitations in mind, and future research should aim to address these gaps by using more robust methodologies, such as longitudinal studies and more representative sampling.

This study emphasized the need for a holistic approach to maternal health that considered the psychological, social, and economic aspects of a woman's well-being. Addressing PPD required more than just clinical treatment; it necessitated a broader strategy that included financial support, social services, and education. By adopting a holistic approach, healthcare providers and policymakers can create a more supportive environment for new mothers, helping to reduce the prevalence of PPD and improve overall maternal and child health.

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In conclusion, this study had shed light on the significant impact of socioeconomic factors on postpartum depression among women in Harare, Zimbabwe. The findings underscored the urgent need for targeted interventions to support low-income women, who are most vulnerable to PPD. By addressing the social determinants of health and ensuring equitable access to mental health care, it will be possible to improve the well-being of mothers and their families, contributing to healthier communities and a stronger society. This study serves as a crucial step in understanding and addressing the challenges of maternal mental health in Zimbabwe and beyond.

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CHAPTER ELEVEN
RECOMMENDATIONS

Based on the findings of this study, it was clear that addressing postpartum depression (PPD) in Harare, Zimbabwe, required a multi-faceted approach that prioritizes the mental health needs of mothers, particularly those from lower-income backgrounds. One of the key recommendations is the integration of comprehensive mental health services into existing maternal healthcare programs. This would involve routine screening for depression during prenatal and postpartum visits, coupled with accessible counseling and treatment services. Health facilities should be equipped with trained mental health professionals who can provide support and referrals to specialized care where necessary.

In addition to healthcare interventions, there is a pressing need for community-based support systems that can provide emotional and social backing to new mothers. Establishing peer support groups and community outreach programs could help in creating a network of support that reduces the stigma associated with mental health issues. These groups can also serve as platforms for sharing information on recognizing the signs of PPD and encouraging early intervention. Furthermore, public health campaigns should be designed to raise awareness about PPD, aiming to educate both women and their families about the importance of mental health and the available resources.

Economic interventions are also crucial in mitigating the effects of PPD, particularly among low-income women who are at higher risk. Policies aimed at improving financial security for new mothers, such as maternity leave benefits, childcare support, and income supplements, could alleviate some of the stressors associated with PPD. Additionally, partnerships with non-governmental organizations (NGOs) and community-based organizations could help in providing targeted financial assistance and resources to those most in need. Ensuring that economic support is readily accessible to women in the postpartum period could significantly reduce the incidence of PPD.

Education and training for healthcare providers are essential components of an effective response to PPD. Medical and nursing curricula should include comprehensive modules on maternal mental health, with a focus on early detection and intervention strategies. Continuous professional development programs should also be implemented to ensure that healthcare providers remain updated on the best practices for managing PPD. By equipping healthcare workers with the knowledge and skills necessary to address PPD, the healthcare system can provide more effective and compassionate care to affected women.

Finally, there is a need for ongoing research to further explore the nuances of PPD in different demographic groups within Zimbabwe. Longitudinal studies that track mental health outcomes over time would provide valuable insights into the long-term effects of PPD and the efficacy of various interventions. Research should also focus on understanding the cultural and contextual factors that influence mental health in the Zimbabwean context. By continuing to study PPD in diverse settings, healthcare providers and policymakers can develop more tailored and effective strategies to support maternal mental health.

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APPENDIX

APPENDIX A: QUANTITATIVE QUESTIONNAIRE

➢ *Instructions:*

- Please answer all questions honestly.
- Your responses will be kept confidential and used for research purposes only.

A. Section 1: Demographic Information

{This questionnaire section is designed to gather basic demographic information, which will be used to analyze patterns and relationships within the study population. Each question directly corresponds to one of the variables you provided, ensuring clarity and relevance in the data collection process.}

➢ *Age Group*

Please select your age group:

- 18-25
- 26-30
- 31-35
- 35-40
- 41-45
- 46-50

➢ *Marital Status*

What is your current marital status?

- Single
- Married
- Divorced

➢ *Educational Level*

What is the highest level of education you have completed?

- None
- Primary
- Secondary
- Tertiary

➢ *Religion*

What is your religion?

- Christian
- Muslim
- Other (Please specify): _____

➢ *Residence*

Where do you currently reside?

- Urban
- Rural
- Semi-Urban

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B. Section 2: Postpartum Depression and Related Factors

➢ *Instructions:*

- Please answer the following questions based on your experiences during your most recent pregnancy and postpartum period.
- Your responses are crucial for understanding the factors influencing postpartum depression and will remain confidential.

{This section of the questionnaire is designed to explore the relationship between postpartum depression and various related factors, such as gender-based violence, stress levels, and support systems. Each question is straightforward, with binary (Yes/No) options or simple choices to ensure ease of response.}

➢ *Experienced Gender-Based Violence (GBV)*
Have you experienced any form of gender-based violence during or after your pregnancy?

- Yes
- No

➢ *Mother's Stress Levels*
Have you experienced significant stress during or after your pregnancy?

- Yes
- No

➢ *Awareness of Postpartum Depression (PPD)*
Before your pregnancy, were you aware of postpartum depression and its potential impact?

- Yes
- No

➢ *PPD Screening*
Have you been screened for postpartum depression by a healthcare professional?

- Yes
- No

➢ *Spousal Support*
Did you receive emotional or practical support from your spouse or partner during your pregnancy and postpartum period?

- Yes
- No

➢ *Planned Pregnancy*
Was your pregnancy intended or planned?

- Intended
- Non-Intended

➢ *Loss of Pregnancy*
Have you experienced a loss of pregnancy (miscarriage, stillbirth, etc.) before or during this pregnancy?

- Yes
- No

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C. Section 3: Health Indicators and Access to Healthcare

➢ *Instructions:*

- Please select the option(s) that best describe your current health insurance status, healthcare access, and recent interactions with the healthcare system.
- Your responses will be used to assess the overall health indicators and access to healthcare among the study participants.

{This section is designed to gather information about participants' access to health insurance, their relationship with a primary care physician, and their engagement with healthcare services within the past year. The data collected from these questions will help in understanding how these factors impact overall health outcomes.}

➢ *Health Insurance Status*

What type of health insurance coverage do you currently have? (Please select all that apply if you have more than one type of insurance.)

- Private
- Medicaid
- Veterans' benefits
- More than one type of insurance
- Uninsured

➢ *Primary Care Physician*

Do you have a primary care physician (PCP) who you regularly see for general health concerns?

- Yes
- No

➢ *Physician Visits in the Past 12 Months*

Have you seen a physician in the past 12 months for any health-related issues or routine check-ups?

- Yes
- No

D. Section 4: Mental Health and Well-being

➢ *Instructions:*

- Please reflect on your experiences over the past month or weeks and select the options that best describe your feelings and behaviors.
- Your responses will help in assessing mental health and well-being, particularly in relation to postpartum depression.

{This section aims to capture the psychological state of the participants, focusing on common symptoms of depression and fatigue. The questions are designed to measure the frequency and intensity of these experiences to better understand the mental health of the respondents}

➢ *Felt Down or Depressed Over the Past 1 Month*

Over the past month, have you felt down, depressed, or hopeless?

- Yes
- No

➢ *Little Interest or Pleasure in Doing Things Previously Enjoyed Over the Past Weeks*

Over the past few weeks, have you had little interest or pleasure in doing things you previously enjoyed?

- Yes
- No

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➢ *Little Interest or Pleasure in Doing Things Previously Enjoyed*
How often have you had little interest or pleasure in doing things you previously enjoyed?

- Not at all
- Sometimes
- Always

➢ *Trouble Falling or Staying Asleep Even When Baby is Sleeping, or Sleeping Too Much*
How often have you experienced trouble falling or staying asleep, even when your baby is sleeping, or found yourself sleeping too much?

- Not at all
- Sometimes
- Always

➢ *Feeling Tired or Having Little Energy*
How often have you felt tired or had little energy over the past few weeks?

- Not at all
- Sometimes
- Always

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APPENDIX B: QUALITATIVE PHASE

Qualitative Interview Guide: Postpartum Depression and Related Factors

Introduction:

- Welcome the participant and explain the purpose of the study.
- Ensure informed consent is signed and understood.
- Explain that the interview will be audio-recorded (if applicable) and responses will remain confidential.

Section 1: Background Information

1. Can you tell me a little about yourself?
    - Age: ____
    - Marital status: ____
    - Educational background: ____
    - Employment status: ____
    - Number of children: ____
2. Can you describe your recent pregnancy and childbirth experience?
    - Planned or unplanned pregnancy?
    - Support received during pregnancy?

Section 2: Emotional Well-being and Mental Health

3. How did you feel emotionally during your pregnancy?
    - Any feelings of sadness, anxiety, or stress?
4. Can you describe your emotional experience since giving birth?
    - Have you felt down or depressed? For how long?
    - Have you lost interest in activities you used to enjoy?
5. Do you feel that your mental health has changed since you became a mother?
    - In what ways?
6. Have you sought help for your mental health (counseling, therapy, etc.)?
    - If not, why? (Cost, stigma, lack of awareness)

Section 3: Support Systems and Relationships

7. Who has been your primary source of support during your pregnancy and postpartum period?
    - Spouse/partner, family, friends, community?
8. How has your relationship with your spouse/partner changed since the birth of your child?
    - Has your partner been supportive? In what ways?
9. Do you feel that you have enough social support during this time?
    - If not, what do you feel is missing?

Section 4: Cultural and Social Factors

10. In your community, how is postpartum depression viewed?
    - Is it openly discussed?
    - Any stigma around seeking help for mental health?
11. Have cultural or religious beliefs influenced how you deal with postpartum depression?
    - In what way?

Section 5: Access to Healthcare and Resources

12. Have you spoken to a healthcare provider about your emotional well-being?
    - What was their response?
    - Were you offered any mental health services?
13. What kind of healthcare services are available to you in your area (counseling, PPD screenings, etc.)?
    - Are they accessible and affordable?
14. In your opinion, what could be done to better support mothers experiencing postpartum depression?