

**EFFECTS OF PERINATAL LOSS ON THE BEHAVIOUR AND EMOTIONAL
WELL-BEING OF YOUNG MOTHERS IN MAKUENI AND MACHAKOS
COUNTIES IN LOWER EASTERN KENYA.**

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**A Thesis Submitted in Partial Fulfillment of the Requirements for the Award of the
Degree of Master of Arts in Counselling Psychology in the Department of
Counselling Psychology, School of Humanities and Social Sciences of
AFRICA NAZARENE UNIVERSITY**

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DECLARATION

I declare that this thesis is my original work and has not been presented in any other university for academic work.

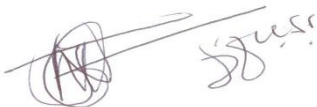
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DEDICATION

This thesis is dedicated to Jay, who brought me so much joy and so much pain and solidified my why, and all the parents who have lost a baby through perinatal loss

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TABLE OF CONTENTS

DECLARATION	i
DEDICATION	ii
ACKNOWLEDGMENTS.....	iii
TABLE OF CONTENTS.....	iv
LIST OF TABLES.....	viii
LIST OF FIGURES.....	ix
ABSTRACT.....	x
OPERATIONAL DEFINITION OF TERMS.....	xi
ABBREVIATIONS AND ACRONYMS	xii
INTRODUCTION.....	1
1.1 Introduction	1
1.2 Background of the Study.....	1
1.3 Statement of the Problem	6
1.4 Purpose of the Study.....	7
1.5 Objectives of the Study	7
1.5.1 General study objective	7
1.5.2 Specific objectives.....	7
1.6 Research Questions	7
1.7 Significance of the Study.....	8
1.8 Scope of the Study	9
1.9 Delimitation of the Study.....	10
1.10 Limitations of the Study.....	10
1.11 Assumptions of the Study	11
1.12 Theoretical Framework.....	12
1.12.1 Stress and Coping Theory	12
1.12.2 The Biopsychosocial Theory.....	16
1.13 Conceptual Framework.....	18
LITERATURE REVIEW	21

2.1 Introduction	21
2.2 Review of Literature.....	21
2.2.1 Influence of perinatal loss on young mothers' behavior	24
2.2.2 The emotional effects of perinatal loss on the young mother's mental health	27
2.2.3 Coping strategies used by young mothers to manage their grief and improve their psychological well-being.	30
2.3 Summary and Research Gap.....	32
CHAPTER THREE	35
RESEARCH METHODOLOGY	35
3.1 Introduction	35
3.2 Research Design	35
3.3 Research Site.....	36
3.4 Target Population	36
3.5 Study Sample	36
3.5.1 Study Sample Size	36
3.5.2 Sampling Procedure	38
3.6 Data Collection.....	38
3.6.1 Data Collection Instruments	38
3.6.2 Pilot Testing of Research Instruments	40
3.6.3 Instrument Reliability.....	41
3.6.4 Instrument Validity	41
3.6.5 Data Collection Procedure	42
3.7 Data Processing and Analysis.....	43
3.8 Legal and Ethical Considerations	43
CHAPTER FOUR	45
DATA ANALYSIS AND FINDINGS	45
4.1 Introduction	45
4.2 Characteristics of the Respondents	45
4.2.1 Response Rate.....	45
4.3 Socio-Demographic and Socio-Economic Data	46
4.3.1 Age Distribution	46
4.3.2 Education Level	47
4.3.3 Religion	47

4.3.4 Marital Status.....	48
4.3.5 Type of Union.....	49
4.3.6 Occupation.....	50
4.3.7 Housing Type.....	50
4.4 Presentation of Research Analysis, Findings, and Interpretation.....	51
4.4.1 Objective 1: To assess the influence of perinatal loss on young mothers' behavior.....	51
4.4.2 Objective 2: Emotional Effects of Perinatal Loss on the Mother's Mental Well-being	53
4.3.3 Objective 3: Managing Grief and Improving Psychological Well-Being.....	60
4.4 Key Findings	65
4.5 Summary of Findings.....	66
CHAPTER 5	69
DISCUSSIONS, CONCLUSIONS, RECOMMENDATIONS	69
5.1 Introduction	69
5.2 Discussion.....	69
5.3 Effects of Perinatal Loss on Young Mothers' Behavior	69
5.3.1. Age Distribution and Behavior:.....	69
5.3.2 Education Level and Behavior.....	70
5.3.3 Marital Status and Behavior	70
5.3.4 Religion and Behavior	71
5.3.5 Occupation and Behavior.....	71
5.3.6 Behavioral Response.....	72
5.4 Emotional Effects of Perinatal Loss on Mental Well-Being.....	72
5.4.1 Depression and Anxiety Levels	73
5.4.2 Psychological Well-being	74
5.4.3 Grief Responses	75
5.5 Coping Strategies Used by Young Mothers.....	76
5.5.1 Adaptive Coping Strategies	76
5.5.2 Maladaptive Coping Strategies	78
5.5.3 Impact on Psychological Well-Being	79
5.6 Conclusion.....	80
5.7 Recommendations	81
REFERENCES.....	84

APPENDICES	92
Appendix 1: CONSENT FORM.....	92
Appendix 2 – Questionnaires.....	94
Appendix 3 – Research Permit.....	106
Appendix 4 - Field letter.....	108
Appendix 5 – Map of Study Area	109

LIST OF TABLES

Table 4.0.1: Response Rate Analysis.....	45
Table 4.0.2: Age Distribution	46
Table 4.0.3: Education Level	Error! Bookmark not defined.
Table 4.0.4: Religion.....	Error! Bookmark not defined.
Table 4.0.5: Marital Status	48
Table 4.0.6: Type of Union.....	48
Table 4.0.7: Occupation.....	49
Table 4.0.8: Housing Type.....	50
Table 4.0.9: Depression and Anxiety Levels	54
Table 4.0.10: Grief Responses (PGS)	55
Table 4.0.11: Psychological Well-being (RYFF Scale).....	57
Table 4.0.12: Adaptive Coping Strategies	Error! Bookmark not defined.
Table 4.0.13: Maladaptive Coping Strategies	Error! Bookmark not defined.
Table 4.14: Statistical Analysis.....	Error! Bookmark not defined.

LIST OF FIGURES

Figure 1.0: Conceptual framework	19
Figure 2.0: Behaviour Response graph.....	53
Figure 3.0: Adaptive Coping Strategies Graph.....	62

ABSTRACT

Research suggests that it is essential to learn more about the context in which bereaved mothers' experiences of perinatal loss take place, as well as their perspectives on these experiences. This study aimed to investigate the effects of perinatal loss on the behaviour and emotional well-being of young mothers in Makueni and Machakos Counties in Lower Eastern Kenya and what interventions were implemented to support them. In Lower Eastern Kenya, the effects of perinatal death among young mothers is an increasing issue that requires attention. The objectives of this study were to assess the impact of perinatal loss on young mothers' behaviour, secondly, to examine the emotional effects of perinatal loss on young mothers' mental well-being, and thirdly, to explore the coping mechanisms employed by young mothers to manage their grief and improve their psychological well-being. The study was anchored within the tenets of the Biopsychosocial and Stress and Coping theories, using a cross-sectional survey design as its method. The target population was 65 respondents, with a sample size of 64 respondents. Data for the study was collected using structured questionnaires and in-depth interviews. A pilot study exercise was undertaken to ensure its validity and reliability. The data generated by questionnaires was analyzed descriptively by the use of frequencies, percentages, and means and inferentially by the use of Pearson correlation and regression. Qualitative data from interviews was subjected to content analysis. The study findings revealed that 45% - 50% of the young mothers who had experienced perinatal loss had their behaviors affected. The perinatal loss affected young mothers more emotionally, with 65% indicating depressive symptoms, 58% having high levels of anxiety, and 72% reporting experiencing intense feelings of grief. Finally, adaptive coping mechanisms were utilized by the young mothers after experiencing perinatal loss, with seeking social support at 78%, engaging in self-care coping mechanisms at 62%, participating in religious activities at 59%, and professional counseling at 35%. The study concluded that perinatal loss significantly impacts the psychological well-being of young mothers, necessitating targeted interventions to support them. It recommends enhancing mental health support services, integrating mental health into routine maternal care, educating and training health workers, raising awareness and reducing stigma, developing supportive policies, and promoting self-care and empowerment initiatives. These measures can help mitigate the adverse effects of perinatal loss and improve the psychological well-being of young mothers in Makueni and Machakos Counties.

OPERATIONAL DEFINITION OF TERMS

Coping mechanism: This refers to the voluntary mobilized thoughts and behaviors to manage internal and external stressful situations.

Denial: Denial serves as a protective mechanism and an emotional anesthetic to prevent the survivor from becoming completely overcome by the loss.

Emotions: These are conscious mental reactions (such as anger or fear) that are autonomously experienced as strong feelings.

Emotional well-being: This is a balance of a person's positive and negative affect and, a person's general satisfaction with life.

Mental health: Refers to a state of well-being in which an individual realizes their potential, can cope with the normal stresses of life, and can contribute to their community.

Mental disorder: It is a behavior that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning.

Perinatal: The period when a woman becomes pregnant up to a year after giving birth

Perinatal loss: This refers to a death of a fetus during pregnancy, labor, delivery, or within the first 28 days of life. This can include stillbirth, neonatal death, or miscarriage.

Post-Traumatic Stress Disorder: A disorder of the mind that may appear following exposure to a traumatic incident, like the death of a child.

Prenatal: A period relating to a pregnant woman before birth, during or during pregnancy

Psychological well-being – The inter- and intra-individual levels of positive functioning

ABBREVIATIONS AND ACRONYMS

AIDS	Acquired immunodeficiency syndrome
CBT	Cognitive behavioral therapy
DM	Diabetes Mellitus
EPDS	Edinburgh Postnatal Depression Scale
HICs	High Income Countries
IPT	Interpersonal therapy
KDHS	Kenya Demographic and Health Survey
KHIS	Kenya Health Information System
KNBS	Kenya National Bureau of Statistics
LMIC	Low- and Middle-Income Country
MNCH	Maternal, Newborn, and Child Health
PGS	Perinatal Grief Scale
PL	Perinatal Loss
PMR	Perinatal Mortality Rates
PPD	Postpartum psychosis disorder
PTSD	Post Traumatic Stress Disorder
SSA	Sub-Saharan Africa
TFA	Termination of pregnancy owing to fetal abnormalities
WHO	World Health Organization

CHAPTER ONE

INTRODUCTION

1.1 Introduction

This chapter presents crucial information regarding perinatal loss and its effects on young mothers' behavior and emotional well-being in Makueni and Machakos Counties, Lower Eastern Kenya. It delves into various aspects, such as the study's background, problem statement, purpose, research questions, and objectives. Additionally, it outlines the study's significance, scope, justification, and underlying assumptions. The chapter also provides insights into the theoretical and conceptual frameworks guiding the research.

1.2 Background of the Study

The mother's expectations are often filled with joy and anticipation during pregnancy, childbirth, and motherhood. However, for some women, this journey takes a heartbreaking turn due to perinatal loss, which can profoundly impact their self-perception and become a significant source of stress, leading to both psychological and physical repercussions (Kirui & Lister, 2021). Research by Modiba & Nolte (2007) emphasizes that the loss experienced during pregnancy or shortly after childbirth not only involves the tragic death of a baby but also shatters the dreams and aspirations of parents. The profound trauma and anguish experienced by parents, especially mothers, following the loss of a child can have lasting effects on their physical and mental well-being (Wonch-Hill et al., 2016). According to the World Health Organization (2016), the perinatal period spans from 22 weeks of gestation to one week after the baby's birth. Perinatal loss encompasses various circumstances, including miscarriage, Termination of pregnancy due to Fetal Abnormalities (TFA), stillbirth, or neonatal mortality.

Women's lives are complex throughout the perinatal period. This transition period calls for significant adjustments and difficulties, such as finding one's new identity as a person, a partner in a

relationship, and a contributor to society. More than ever, the difficulty of this time may significantly increase for women experiencing prenatal loss. (Arisi, 2021).

When parents experience the loss of a child during pregnancy, they undergo a spectrum of challenging emotional reactions. These may initially manifest as shock, anger, emptiness, helplessness, and profound loneliness. Over time, these short-term emotions can evolve into longer-lasting reactions, such as depression, anxiety, and post-traumatic stress disorder (PTSD). Between 20 and 30 percent of pregnancies all over the world result in miscarriage (Abdel Razeq et al., 2018). Additionally, 2.6 million fetal fatalities occurred globally in 2015 at a rate of 18.4 per 1,000 live births (Lawn et al., 2016). However, scientific advancements and better maternity and infant healthcare have lowered perinatal mortality (Koopmans et al., 2013).

In this study, miscarriages, stillbirths, and neonatal deaths are all referred to as Perinatal Loss (PL). A miscarriage, characterized by the unexpected termination of a pregnancy before twenty weeks of gestation, represents the most prevalent form of pregnancy loss. Conversely, a "stillbirth" refers to the premature demise of a fetus after twenty weeks of pregnancy, commonly occurring either in utero or shortly after childbirth (Centers for Disease Control, 2019). Neonatal deaths, on the other hand, encompass those occurring within the first 28 days of a baby's life. Perinatal loss is prevalent in women aged 25 to 29, with a prevalence incidence ranging from 15% to 27%. Women above 45 have a 75% probability of losing their pregnancy (Cacciatore, Froen, & Killian, 2018). Other women who are in danger are those who have previously lost pregnancies.

Once more, teenage girls under the age of 15 are at the most significant risk of maternal mortality. In contrast, those between the ages of 10 and 19 are at the greatest risk of having a difficult pregnancy and delivery (compared to those between the ages of 20 and 24). Therefore, at this point, young mothers are at risk of perinatal loss. It may be a traumatic and psychologically painful event, with research

showing that it has a detrimental influence on mental, psychological, and physical well-being across the lifespan. Individuals who have undergone the loss of newborns or experienced stillbirths often feel that their grief is not acknowledged to be as profound as that experienced following the loss of an older child. Many women may experience significant adverse effects from the pain of perinatal loss at any point. For some pregnant mothers, the psychological stress may be so great as to necessitate a mental health diagnosis. Untreated mental health issues can impose avoidable financial strains on healthcare systems and society at large (Heazell et al., 2016).

It can be challenging to adjust to the new normal after perinatal loss. Parents go through various sorrow phases. They frequently struggle with anxiety, low self-esteem, sleep problems, postpartum depression, and a change in perspective due to the reality of their child's passing (Blackmore, Côté-Arsenault, & Tang, 2019). According to research done by Modiba and Nolte (2007), mothers who have experienced prenatal loss frequently want the loss to be acknowledged by others. They go to their friends and family for moral support, a sympathetic ear, and a shoulder to cry on (Arisi, 2021). They want to hold their newborns and describe their arms as heavy; they occasionally hear a baby scream, which pregnant ladies and newborn babies can trigger.

According to Nicolson (1999), the loss is felt as a loss of maternal identity, sexuality and femininity, attractiveness, time, and autonomy. A woman who suffers a perinatal loss may find difficulties keeping up a positive emotional stance. Additionally, perinatal death frequently results in psychological discomfort, and the mother has rapid emotional reactions that can range from moderate to severe, according to Arisi (2021).

For many years, academics held the view that there shouldn't be any grieving after a loss since there isn't any relationship between the mother and fetus throughout pregnancy (Raghuveer et al., 2020). It was later shown that the mother-child connection develops from the start of pregnancy and steadily

rises, peaking in the second trimester and continuing until after birth. The perinatal connection grows with perinatal diagnostic and imaging methods and can be a damaging emotional experience if the pregnancy fails.

The perinatal loss rate is often higher in underdeveloped countries than in industrialized nations. According to the World Health Organization (WHO), 2.6 million stillbirths occur annually around the world, 98% of which occur in low- and middle-income countries. Furthermore, an estimated 2.7 million babies die each year, with the majority dying during the first week of life. Stillbirths are estimated to be over 25 per 1,000 births in Sub-Saharan Africa, while they are around 9 per 1,000 births in wealthy nations.

It is believed that between 15% and 20% of clinically confirmed pregnancies in the USA and the UK end in miscarriage. According to research, between 30 and 40 percent of pregnancies each year are miscarried, including missing or unrecorded miscarriages: Charrois and Co. (2019). These prevalence percentages imply that many women have gone through a particular kind of loss that is accompanied by different ambiguities, making it extremely traumatic and challenging to comprehend.

According to a study by Okafor (2020), the experiences following perinatal death in Nigeria were marked by various forms of emotional grief, a sense of guilt, and physical agony. Some of the traumatic experiences these women had to endure included the bodily stress and physical agony that came with the miscarriage, including multiple hospital visits, prolonged hospital stays, large medical expenses, and returning home without a baby.

Research on the effects of perinatal loss on young mothers in Kenya remains scarce. A study by Kasanga (2019) investigated the knowledge status of health workers regarding maternal and neonatal health in Makueni. It revealed insufficient understanding among healthcare providers concerning the

management of pre-eclampsia, a significant contributor to perinatal loss. Additionally, the study centered on the Makueni Level 5 hospital, mirroring the focus of the present investigation.

In Kenya, where 40% of births occur at home, efforts to accomplish this goal have primarily focused on deterring home births by offering free maternity services in government facilities (Kunkel *et al.*, 2019). A substantial quantity of research is being conducted on the effectiveness of psychosocial therapies for prenatal loss in young women. It has been demonstrated that interventions like cognitive behavioral therapy (CBT), interpersonal therapy (IPT), and support groups can help perinatal loss mothers with their symptoms of depression, anxiety, and posttraumatic stress disorder (PTSD). Furthermore, these therapies can assist mothers in processing their grief, improving their relationships with their spouses, and increasing their ability to cope with loss. Kanini (2019) did a study that focused on the “use of counseling to mitigate psychological morbidity after stillbirth among women in Kitui and Machakos Counties, Kenya.” They stressed the need for counseling as a mitigating factor among women after a stillbirth. However, it did not focus on the direct link between the effects of perinatal loss and the age of the mother.

Understanding how prenatal loss affects the behavior and emotional well-being of young mothers is crucial for preventing its negative effects. However, there is insufficient information in place to help. In Kenya, the collection of perinatal loss information began in 2017, and 3.6% of the country's perinatal deaths have been assessed based on data from the perinatal death review system. The effects of prenatal losses on a mother's psychological health must be better understood. Therefore, The study is of utmost significance since it sheds light on the effects of prenatal losses on young mothers' behaviour and emotional well-being.

1.3 Statement of the Problem

The Lower Eastern region in Kenya has one of the highest rates of perinatal losses in the nation, and young women are particularly susceptible to the behavioral and emotional effects of perinatal loss. This loss results in psychological symptoms like anxiety, grief, and other mental disorders, affecting the quality of life and relationships of the individuals involved.

KHIS reports that the Lower Eastern area had some of the highest rates of stillbirths. Due to their difficult topography and high rates of perinatal losses recorded in the year 2023 (Kitui at 29.59%, Makueni at 25.12%, Machakos recording 25.89%, respectively), Makueni and Machakos counties are not an anomaly (KNBS, 2022). According to estimates, there are between 26 and 65 neonatal deaths (deaths in the first 28 days of life) for every 1,000 live births (Lawn et al., 2016). However, research released in 2018 suggested that Kenya's perinatal mortality rate (PMR) was 26.3 per 1,000 live births, with variances in different parts of the nation. The study also found that the PMR in the Eastern region of Kenya (including Lower Eastern) was reportedly 31.5 per 1,000 births (Ngare et al., 2020). Although it is a painful loss for women and families, it is often treated improperly

A study by Gaudet et al. (2018) highlights that young mothers who experience the loss of a baby through miscarriage, stillbirth, or neonatal death may face conflicting emotions such as relief, guilt, sadness, regret, or shame. The precise effects of pregnancy loss on the behavior and emotional well-being of adolescent mothers are not well understood due to limited research in Makueni and Machakos Counties in Lower Eastern Kenya. It is crucial to understand and address the unique challenges faced by these young mothers dealing with perinatal loss to provide appropriate support and care. The creation of efficient therapies to meet the psychological needs of young mothers who have experienced prenatal loss is hampered by this knowledge gap. To address perinatal loss and promote maternal mental health, it can be helpful to have a thorough understanding of the special experiences and difficulties faced by young mothers.

1.4 Purpose of the Study

The study sought to explore the effects of perinatal loss on the behavior and emotional well-being of young mothers in Makueni and Machakos Counties in Lower Eastern Kenya.

1.5 Objectives of the Study

This section outlines the general study objective and includes the specific study objectives and the foundation for the research's core topic.

1.5.1 General study objective

The general objective of this study was to gain insight into the effects of perinatal loss on the behavior and emotional well-being of young mothers in Makueni and Machakos counties in Lower Eastern Kenya and identify coping strategies they may use to manage their grief and improve their mental health.

1.5.2 Specific objectives

The specific objectives of this study were:

- i. To assess the influence of perinatal loss on young mothers' behavior in Makueni and Machakos Counties in Lower Eastern Kenya
- ii. To examine the emotional effects of perinatal loss on the mother's mental well-being in Makueni and Machakos Counties in Lower Eastern Kenya
- iii. To examine the coping strategies used by young mothers to manage their grief and improve their psychological well-being.

1.6 Research Questions

The study sought to answer the provided research questions;

- i. How is the behaviour of young mothers in Makueni and Machakos Counties in Lower Eastern Kenya affected by perinatal loss?

- ii. Does perinatal loss affect a young mother's emotional well-being in Makueni and Machakos Counties in Lower Eastern Kenya?
- iii. What coping strategies do young mothers who have experienced perinatal loss use to manage their grief in Makueni and Machakos Counties, Lower Eastern Kenya?

1.7 Significance of the Study

This study has generated insights into the experiences of young mothers who had experienced perinatal loss, as well as identified gaps in the support systems available to them. This information can be used in the development of culturally sensitive support systems for these women, which can help improve their psychological well-being and aid in their grief recovery process.

This study added to the scant research in Makueni and Machakos Counties in Lower Eastern Kenya. It highlighted the unique difficulties experienced by young mothers in Makueni and Machakos Counties, which will benefit the larger field of perinatal loss and maternal mental health. This study can be used to enlighten stakeholders, such as healthcare professionals and legislators, on the significance of offering young mothers who have experienced perinatal loss the right kind of assistance. In the end, this study's findings could have a positive influence on the lives of young mothers who have suffered prenatal loss and help create strong support networks to help them through the grieving process.

Understanding the impact of perinatal loss on young mothers can also help other family members. By recognizing the emotional and psychological challenges these mothers face, family members can offer better support and empathy.

Healthcare providers and hospitals can benefit from the findings by gaining a better understanding of the psychological needs of young mothers who have experienced perinatal loss. This can improve patient care protocols, including integrating mental health support services in maternal and

neonatal care. Hospitals can implement routine screenings for depression, anxiety, and PTSD during prenatal and postnatal visits, ensuring timely intervention and support for affected mothers.

For policymakers, this study highlights the need for comprehensive mental health policies that address the specific needs of young mothers who have experienced perinatal loss. The findings can inform the development of policies and programs that ensure accessible and effective mental health services. This includes funding for mental health programs, training for healthcare workers, and the establishment of support groups and counseling services. By prioritizing maternal mental health, policymakers can help create a supportive environment that fosters the well-being of young mothers and their families.

1.8 Scope of the Study

This research concentrated on young mothers in Makueni and Machakos Counties in Lower Eastern Kenya who have experienced perinatal loss. The study examined the behavior and emotional well-being of these young women after a perinatal loss, as well as the coping strategies they used to manage their grief and improve their psychological well-being. The sample size was determined based on the criteria established for the study. It was made up of a purposive sample of young mothers who have lost a baby during pregnancy or a week after delivery.

Makueni and Machakos Counties were chosen due to their unique socio-economic and cultural contexts, which may influence the experiences and coping mechanisms of young mothers dealing with perinatal loss. These counties represent a significant part of Lower Eastern Kenya, where there is a need to understand localized impacts and support systems for perinatal loss. Moreover, the Lower Eastern Kenya region has limited research on this topic, providing an opportunity to fill a critical gap in the literature and offer insights that can be beneficial to similar contexts in Kenya and other developing

regions. The study examined the behavioral and emotional well-being of young mothers following perinatal loss to address an often overlooked aspect of maternal health.

1.9 Delimitation of the Study

Only young mothers in Makueni and Machakos Counties who have suffered perinatal loss and are between the ages of 15 and 25 were enrolled in the study. The study was only carried out in Lower Eastern Kenya, and it is possible that the results won't apply to other areas. To learn more about the perspectives and experiences of young women who have experienced prenatal loss, the study used qualitative research techniques like in-depth interviews. Only perinatal loss—defined as the death of a child during pregnancy or infancy—was the subject of this study. The study only included young mothers who can and are willing to participate. This reduced how representative the study sample was. Finally, the study considered the immediate effects of perinatal loss on young mothers and did not reflect on the long-term impact of perinatal loss on their psychological health.

1.10 Limitations of the Study

This study had certain limitations. The data collected relied on the self-reported experiences and perspectives of young mothers who had experienced perinatal loss. Recruiting young mothers who have had to experience perinatal loss was challenging, as some were reluctant to participate in the study due to the sensitive and personal nature of their experiences. Cultural attitudes and beliefs about perinatal loss and mental health may also impact the experiences and coping strategies of young mothers in Makueni and Machakos Counties in Lower Eastern Kenya. The results of this study did not apply to other groups or regions, as it was limited to young mothers in Lower Eastern Kenya. Participants who had experienced prenatal loss may have endured mental anguish as a result of the study. Thus, the research team ensured proper safeguards were in place to support their well-being throughout the study.

1.11 Assumptions of the Study

The suppositions were as follows.

- i) That the study participants would be able and willing to engage in the research and that they would be able to provide accurate and truthful information about their experiences and perspectives.
- ii) It was assumed that cultural norms and beliefs surrounding perinatal loss in Makueni and Machakos Counties in Lower Eastern Kenya would not significantly impact the willingness of young mothers to participate in the study or their ability to provide accurate information.
- iii) It was anticipated that a significant number of young mothers in Makueni and Machakos Counties have experienced perinatal loss and are ready to participate in the study.
- iv) Another assumption was that the data collection tools used in the study, such as surveys and interviews, were culturally appropriate and sensitive and were accurately capture the experiences and perspectives of young mothers who have lost a baby during childbirth.
- v) It was also assumed that sufficient funding was secured to conduct the study and that the budget was sufficient to cover all necessary expenses.
- vi) It was also assumed that the study results were externally valid and were generalized to other populations and regions. However, the study's findings were limited to the specific context of Lower Eastern Kenya.
- vii) It was assumed that adequate time and resources were available to conduct the study, including data collection, analysis, and report writing.
- viii) Lastly, this study assumed that the participants' rights were upheld and carried out in compliance with the set ethical principles.

1.12 Theoretical Framework

A theoretical framework is a set of concepts and principles that guide understanding a particular phenomenon or research question. Furthermore, theories are the most effective means of explaining the observations individuals frequently observe or experience daily. In the context of psychological interventions for young mothers who have experienced perinatal loss, different theories may be used depending on the focus of the intervention. Some of the theories that were applied in this study include stress and coping theory and biopsychosocial theory.

1.12.1 Stress and Coping Theory

Based on Lazarus and Folkman's transactional approach to coping with stress (1984). According to the stress and coping theory, stress results from interactions between a person's environment and themselves. This theory posits that stressors, such as perinatal loss, can lead to negative outcomes such as psychological distress. However, individuals can cope with stressors through various coping strategies, such as seeking social support, engaging in self-care, or using problem-focused coping strategies. According to this theory, stress occurs when a person notices a threat or challenge in their environment (the stressor) and needs to take action to deal with it. Transaction, stimulus, and reaction describe stress (Selye, 1978). According to the stress and coping hypothesis, people's resources and coping mechanisms impact their capacity to deal with pressures. Resources might include healthcare access, social support, and individual traits like resiliency and optimism. Problem-focused coping techniques include getting help, making plans, and so forth. Emotion-focused coping techniques include positive thinking, journaling, and relaxation (Eniola et al., 2020). An individual's coping mechanism, adaption, and reaction are determined by their capacity to understand the stress. As a result of the fact that coping with stress is often a dynamic process, the transactional theory of stress and coping was created (Kobasa, 1979). According to this theory, stress is a common result of how a person's systems

interact with their complex environment. Multiple neurological, psychological, emotional, physiological, and cognitive systems may be involved.

Coping is the continual, adaptable behavior and thinking processes utilized to handle the demands of some stressful situations (Lazarus & Folkman, 1984). The efforts made to cope with perinatal loss can significantly affect whether unfavorable physiological, cognitive, behavioral, or emotional reactions brought on by the death of a baby occur or not. In turn, the mother's capacity to develop a useful coping mechanism can be a source of resilience, protecting her and her family from exposure to the stressor (Lafarge et al., 2017). Women who have experienced perinatal loss and have access to emotional and social support as a coping mechanism would be less nervous than those who do not, which serves as an example of this theory. When mothers are unable to employ appropriate coping techniques, they may occasionally resort to unhealthy behaviors that are bad for their health, such as drinking too much alcohol, smoking, or using other drugs. In one epidemiological investigation, it was shown that mothers who struggled to cope with their prenatal loss mainly used the avoidant coping strategy (Dole et al., 2004).

There are general and specialized coping styles, and theorists have divided them into problem- and emotion-focused coping. The problem-focused coping strategy concentrates on the stressor itself and includes procedures that must be followed for the problem to be treated. It is frequently employed when a person believes a stressor is under their control. The emotion-focused approach, on the other hand, aims to lessen the feelings brought on by the stressor. The person uses this coping mechanism when they believe the stressor is unmanageable. Depending on how she has dealt with stressful situations in the past, the resources she has access to, and her personality type, mothers who have experienced prenatal loss can choose to employ any of the coping mechanisms. Additionally, avoidance coping is linked to emotion-focused coping since it frequently entails attempting to escape or avoid the distressing emotions brought on by the stressor (Lazarus & Folkman, 1984).

Coping, health, and stress are all related, and they're important because people use them to evaluate how much stress they're under (Volker & Striegel, 1995). It implies that a person might react positively or negatively to a stressor depending on how they judge it. Whether or not a stressor is unpleasant depends on several contextual and individual elements, including norms, resources, limitations, talents, skills, and capabilities. In addition, according to Lazarus and Folkman (1984), a stress appraisal model consists of components for primary assessment, secondary appraisal, and reappraisal. Determining whether a stressor poses a threat is typically a key component of the initial evaluation. Examining a person's coping mechanisms or resources for dealing with the perceived dangers is a component of the secondary appraisal. Last but not least, there is a constant evaluation of the available resources and the essence of a stressor to determine if it still poses a threat.

The Stress and Coping theory can be applied to determine the effectiveness of psychological interventions among young mothers after perinatal loss. According to the theory, the loss of a child can be perceived as a significant stressor that can result in emotional anguish, such as depression and anxiety. Therefore, psychological interventions that help young mothers cope with the stress of perinatal loss can be effective in reducing emotional distress. The theory suggests that interventions designed to provide problem-focused coping strategies can effectively reduce stress related to perinatal loss (Lacombe-Duncan et al., 2022). Such interventions may include providing information and psycho-education about the grieving process, teaching young mothers how to communicate their feelings and needs to others, and helping them to develop a support network. Emotion-focused coping strategies may also be beneficial. Such interventions may include providing emotional support, teaching young mothers how to manage their emotional responses to the loss, and providing relaxation techniques such as mindfulness or yoga.

It is important to note that different interventions may be more effective for different individuals, depending on their coping styles and the stage of grief they are in. Therefore, it's important to consider

young mothers' needs and preferences when selecting the appropriate psychological intervention. Overall, the Stress and Coping theory can be used as a framework to understand how psychological interventions can be useful in easing young mothers' mental pain and helping them deal with the strain of perinatal loss.

The stress and coping theory developed by Lazarus and Folkman (1988) was extremely valuable in conducting this study since it focuses on a person's meaning and perception of events. It also suggests that coping and cognitive assessments are important during stressful situations. If a woman suffers a perinatal loss, her view of the situation can indicate how she will handle it. Most of the time, the mother's emotions are influenced by the gestational age and the care she got throughout the loss (Folkman & Lazarus, 1988). This idea is crucial to the study because it emphasizes the strain a woman experiences after a perinatal loss and the influence it has on her emotional health, depending on how she handles the loss. This particular theory of stress was chosen over all others because, as seen from the general and empirical literature evaluation, it has been effective in research involving perinatal loss.

Mothers who have had a perinatal loss are prone to be distressed. As a result, they must design coping methods that will allow them to deal with the provided scenario. Perinatal loss can result in sadness, as demonstrated by the pressing on hypothesis outlined below. As a result, the theory explains how a woman might transcend the phases of grieving linked with perinatal bereavement.

However, while the Stress and Coping theory is robust, its application may lack cultural sensitivity, as cultural norms and values can deeply influence coping strategies. In Makueni and Machakos Counties in Kenya, cultural beliefs and practices surrounding perinatal loss are critical factors that influence coping mechanisms. The theory primarily focuses on the immediate and short-term coping responses to stress, which may not fully capture the long-term psychological effects of perinatal loss. Additionally, the theory's emphasis on stress and coping might not fully encompass the emotional

nuances of grief associated with perinatal loss, such as guilt, anger, and profound sadness. To provide a more holistic understanding of perinatal loss, it may be beneficial to integrate the Stress and Coping Theory with other relevant theories, such as the Biopsychosocial Model, to offer a more comprehensive approach by considering biological, psychological, and social factors influencing a mother's grieving process.

1.12.2 The Biopsychosocial Theory

The biopsychosocial model is a theoretical framework that describes the interaction between biological, psychological, and social variables to produce health and sickness. American psychiatrist George L. Engel created the biopsychosocial model in 1977. In an article titled "The need for a new medical paradigm: A challenge for biomedicine," he proposed the biopsychosocial model as an alternative to the traditional biomedical model, which focuses primarily on the biological component of health and illness." Engel contended that this conventional approach was insufficient for comprehending and managing the mental and social aspects of health disorders. He suggested the biopsychosocial model as a more comprehensive strategy that considers the interaction of psychological, biological, and social aspects in health and illness (Engel, 1977). The model is regarded as a crucial idea in comprehending health and illness and has subsequently been widely embraced in medicine and psychology.

According to the model, these three variables are interdependent, meaning that changing one can impact the other. The physical and medical root causes of a person's health status are discussed in the model's biological component. It encompasses a person's biology, genetics, and physiology (Rosen et al., 2017). The psychological component of the concept relates to a person's feelings, beliefs, and actions connected to their state of health. It incorporates the person's feelings, perspectives, and coping mechanisms. The social component of the concept refers to the individual's surroundings, which may include their family, friends, neighborhood, culture, and social network. It covers things like the person's employment, living situation, and access to medical treatment. Many mental and physical health

disorders are understood and treated using the biopsychosocial paradigm (Frankel et al., 2003). It's a holistic approach that considers the entire individual, not just the symptoms. It implies that the therapy should cover all three facets of the model.

The physical loss of the pregnancy or new-born would be the biological element when relating to perinatal loss. The emotional and psychological reactions to the loss, such as grief, depression, and anxiety, would be considered psychological elements. Social factors include the mother's support network, access to care, and the cultural and socioeconomic context in which the loss happens. The biopsychosocial model emphasizes the interconnectedness of the biological, psychological, and social factors that contribute to a mother's emotional and psychological response to the loss, which is relevant to the impact of perinatal loss on the psychological well-being of young mothers in Lower Eastern Kenya. This model proposes that cognitive behavioral therapy (CBT) and interpersonal therapy (IPT), which address the emotional and psychological response to the loss, are useful in lowering symptoms of despair, anxiety, and PTSD. Support groups and mindfulness-based programs that offer emotional and social support would also be beneficial to lessen symptoms and enhance general well-being.

The biopsychosocial model also suggests that all three elements be taken into account while creating and implementing psychological therapies for young mothers who have experienced prenatal loss (Engel, 1977). One, biological: The psychological intervention should recognize and address the physical loss of a pregnancy or newborn. This may entail educating the mother about the physical effects of the loss and assisting her in comprehending the bodily changes that occur. Second, psychological intervention should address the emotional and psychological reactions to the loss. These can include giving support to women who are grieving, managing their sadness, anxiety, and PTSD symptoms, and enhancing their general well-being. The last component is social, which states that the psychological solution should consider the cultural and societal context in which the loss occurs. This can involve

assisting women in navigating societal perceptions and attitudes around prenatal bereavement and enhancing their social support systems.

Considering these three factors, the intervention can better meet the special needs of young mothers, help them deal with their loss, and improve their overall wellbeing (Bolton & Gillett, 2019). George L. Engel emphasizes that clinicians should acknowledge the significance of relationships in healthcare provision, utilize self-awareness as a diagnostic and therapeutic tool, gather patient histories within their unique contexts, prioritize biological, psychological, and social factors in promoting health, and deliver multidimensional care. Furthermore, the biopsychosocial model underscores the necessity of considering the cultural and societal context of loss, highlighting their potential influence on a young mother's response to loss and healthcare accessibility (Engel, 1977), and understanding the cultural and socioeconomic issues that could hinder receiving psychological therapies.

1.13 Conceptual Framework

Perinatal loss can be viewed as a significant stressor that can impact the behavior and emotional well-being of young mothers in Makueni and Machakos Counties in Lower Eastern Kenya. The study examined the effects of perinatal loss on these young mothers' psychological well-being and how they mitigate it through different coping strategies. Furthermore, the study examined the role of promoting positive outcomes in the face of perinatal loss.

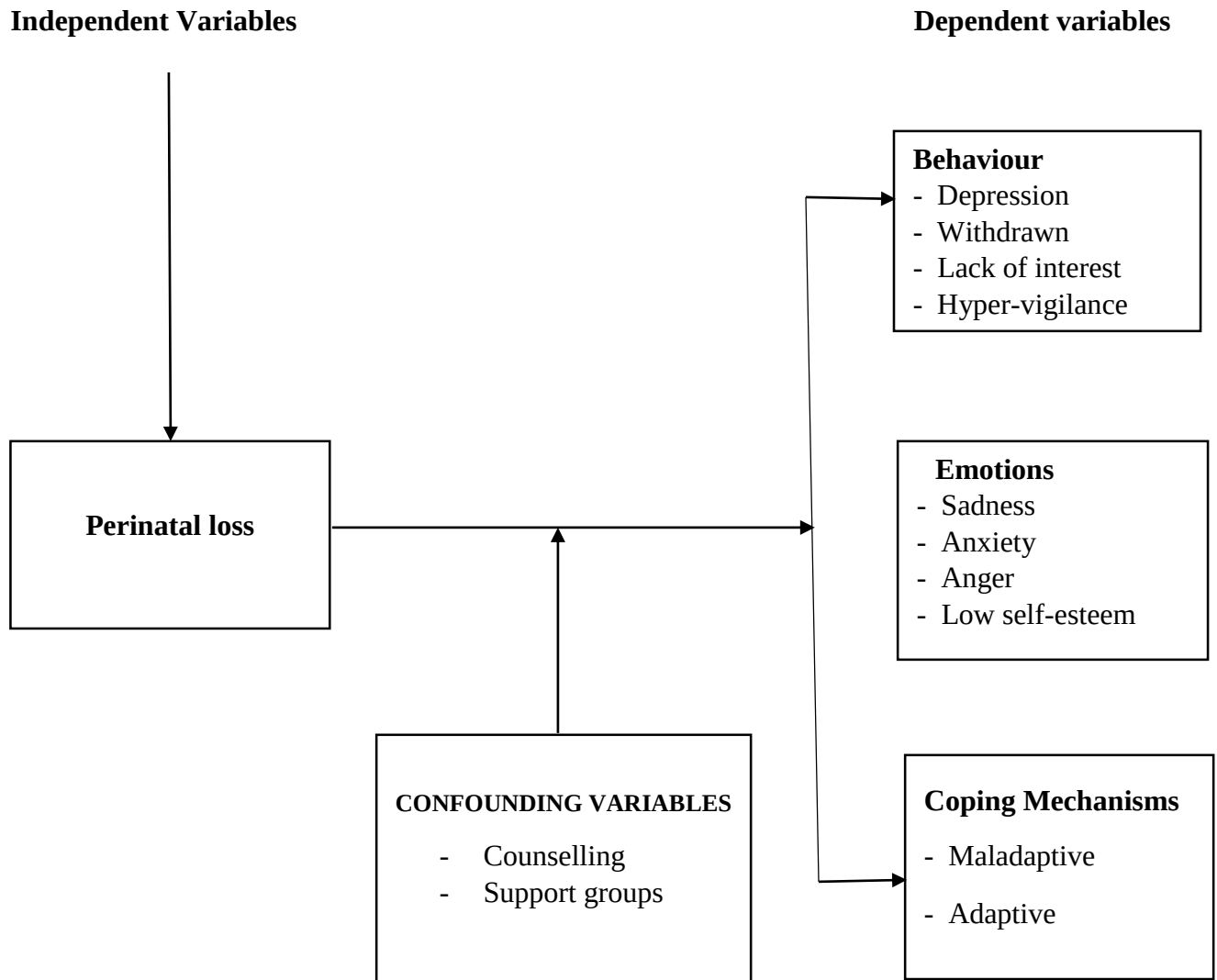


Figure 1.0: Conceptual framework

(source; researcher 2024)

Discussion of the Conceptual Framework

This independent variable refers to the death of a fetus or neonate, including miscarriages, stillbirths, and neonatal deaths. Perinatal loss is a traumatic event that can have profound behavioural

and emotional impacts on mothers. The conceptual framework on the effects of perinatal loss on the behavior and emotional well-being of young mothers can be understood by considering the following key points.

Behavioural Impact, perinatal loss can have significant psychosocial impacts on young mothers, including feelings of sadness, depression, nightmares, and worry. These impacts can be influenced by factors such as support from friends and family, with better support leading to reduced psychosocial impact. Emotional effects and perinatal loss can result in prolonged grief reactions, which can be associated with post-traumatic stress disorder (PTSD). The grief process can be complex and influenced by factors such as gender, age, and mental health status. Coping mechanisms serve as critical mediators in this relationship. The effectiveness of coping strategies can significantly influence the psychological outcomes of perinatal loss. For instance, seeking social support and engaging in self-care activities can mitigate the negative impacts on psychological well-being, providing mothers with emotional and practical support to navigate their grief. Support and Interventions, for young mothers who have experienced perinatal loss should be screened for psychosocial impact and offered support when needed. Health workers should provide appropriate support to these mothers, and family and friends should continue to offer emotional support. Professional support interventions should be aimed at addressing the specific needs and concerns of these mothers, such as developing a birth plan to meet their special needs.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter offers a thorough examination of the study's relevant literature. With a focus on identifying the difficulties young mothers face and the strategies that can be used to support their psychological well-being. It aims to provide a thorough overview of the existing research on the impact of perinatal loss on the psychological well-being of young mothers in Lower Eastern Kenya. It achieves this by concentrating on concepts related to the study's objectives, which include evaluating how perinatal loss affects young mothers' behavior, looking at the emotional well-being of affected young bereaved, and looking at the coping mechanisms employed by young mothers to overcome their grief better. Finally, a summary of what is known and unknown concerning the impact of perinatal loss on the psychological well-being of young mothers is presented, as well as how this study might contribute to nursing knowledge in this area. By synthesizing the findings of previous studies, this review illuminated the psychological consequences of perinatal loss for young mothers in this region, identified gaps in the literature that need to be addressed in future research. It helped develop strong interventions and support systems for this vulnerable group.

2.2 Review of Literature

Perinatal loss is an experience that parents frequently do not expect, prepare for, or come to terms with in advance as they would have in other grief-related situations (Kersting & Wagner, 2012). It is similar to losing a cherished but unwelcome family member whose parents anticipated a long life. When a pregnancy ends in miscarriage, the woman must change her mindset right away, "transitioning from joy, hope and expectations to unexpected perplexity, surrender, and tremendous grief." Pregnancy is traditionally connected with life, but perinatal loss changes this relationship to one of death (Kersting &

Wagner, 2012). In several ways, this rejection of comprehension has the potential to make the mother's psychological anguish worse. Due to the lack of knowledge surrounding perinatal loss, there is little societal acceptance of the harm it causes to women, the knowledge that close friends and family can be an effective support system, a desire among women to seek out resources for emotional health, efficient referral procedures, and access to psychotherapeutic intervention.

People lose their loved ones, but for young mothers, experiencing a perinatal loss may feel overwhelming and may cause one to fall into despair, knowing that no one can help in any way or understand them. All these feelings and emotions can cause trauma. Loss and grief might bring destruction in the long run if not dealt with appropriately.

Shock, anger, denial, and rage are some emotions that go through people. These emotions are normal but might do more harm than good if left unattended. A young mother who has just suffered a perinatal loss may have gone through other traumatic experiences, such as defilement or even intimate partner violence, before she got pregnant. The loss of the baby may contribute to more psychological trauma with disorders ranging from anxiety disorders, panic attacks, posttraumatic stress disorders, and even phobias.

A study done in Northern Uganda by Arach, Kiguli, Nankabirwa, Nakasujja, Mukunya, Musaba, Napyo, Tumwine, Ndeezi & Rujumba (2022) stated that the estimated stillbirth risk in Uganda is similar to Kenya and Tanzania at about 17.8/1000 total births. These deaths have been associated with risk factors such as maternal age, infections, nutrition and lifestyle factors, and socioeconomic factors. Rural areas are reported to contribute higher proportions of perinatal deaths than peri/urban areas.

The likelihood of a stillbirth is twice as high in Kenya as it is in Mauritius and the Seychelles, the two nations in sub-Saharan Africa with the lowest stillbirth rates. According to Frøen et al. (2016), Kenya is ranked 11th among the nations with the highest stillbirths worldwide. Kenya had roughly 26

stillbirths per 1,000 live births, according to the Lancet eliminating avoidable stillbirth report from 2016. (Lawn et al., 2016). According to KDHS, there were 10% more stillbirths in Kenya in 2014 compared to approximately 32,000 in 2000. (KNBS, 2020). For every 1,000 live births in 2014, there were roughly 39 neonatal deaths, with the mortality rate for children under five being substantially higher (52/1000). With various risk factors mentioned, the prognosis states that 26 out of every 100 Kenyan infants will pass away before turning one, and 19 out of every 100 will do so before turning five.

Despite this relatively high occurrence rate, maternity healthcare workers who provide care and support to mothers and families who have experienced stillbirth are not given any specific evidence-based therapies or instructions. Despite stillbirth being a risk factor for psychiatric problems, there has not been much research on patients' satisfaction with post-stillbirth care (Navidian & Saravani, 2017). For instance, a significant risk of stillbirth is associated with preterm delivery problems, birth trauma, asphyxia, severe congenital abnormalities, and trauma in SSA and South-Central Asia. The placenta is one of the most typical obstetric problems. In contrast, labor-related problems include cord prolapse, uterine rupture, low birth weight, multiple pregnancies, and preterm delivery. Placenta Previa or abruption, antepartum hemorrhage, eclampsia, or pre-eclampsia are examples of pregnancy-related problems.

Other unidentified risk factors for poor perinatal outcomes in Sub-Saharan Africa include low levels of maternal education, which could be associated with poor nutritional status and, thus, bad health. A birth every two years or less might significantly increase the risk of perinatal mortality and low birth weight kids due to poor maternal nutrition. Perinatal mortality rates (PMR) can also result from advanced maternal age or exceptionally young conception ages (below 18 years). In addition to essential hypertension, pregnancy-induced diabetes mellitus (DM), malaria, anemia, TB, and acquired immune deficiency syndrome (AIDS), the health of the mother is a risk factor for perinatal mortality. These traits have been linked to an increased risk of low birth weight, intrauterine growth restriction, and perinatal

mortality. For women, prenatal loss can be a physically and emotionally stressful experience that puts their comfort and wellbeing in jeopardy. KNH registered 5025 perinatal births between 2015 and 2018. (KNBS, 2015).

Perinatal loss is related to a variety of reasons. These are access to care and maternal and fetal variables. The loss greatly impacted the young mothers, which can be attributed to societal and cultural reasons. Many coping mechanisms may be used. The study examined the ideas associated with the study's objectives, which included assessing how perinatal loss affects young mothers' behavior, examining the emotional effects of young mothers who have experienced perinatal loss, and examining the coping mechanisms used by young mothers to cope with their grief, to establish this.

2.2.1 Influence of perinatal loss on young mothers' behavior

The impact of perinatal loss can manifest in several ways, including changes in social interactions, a lack of self-care, and altered parenting practices. These changes can negatively impact the mother's overall well-being and that of her family. During pregnancy, the mother frequently develops an attachment to the fetus growing inside her, whom she perceives as a distinct and individual (Blackmore et al., 2011). At this point, the mother's mental image of the unborn kid is so ingrained that she can even perceive the child's temperament in terms of mood, adaptability, rhythm, and activity, both in utero and afterward. The mother already has prenatal views of the unborn child that are unique, even at one month pregnant (Blackmore et al., 2011).

Perinatal loss frequently results in poor mental health. One study revealed that mothers with a deceased baby felt numb, experienced intrusive thoughts, yearned for the child, and withdrew from social activities and routine daily tasks (Kersting & Wagner, 2012). Another study found that mothers reported being confused and “lost in thoughts” on hearing that the outcome of the pregnancy was a perinatal loss (Arach et al., 2020). Mothers who have lost several children suffer from cumulative grieving, which is when the agony of the most recent loss is made worse by recollections of earlier

losses. Perinatal losses are painful and distressing; they have an impact on the mother's health more than anybody else who is close to the infant. The mother may experience worry, depression, difficulty sleeping, appetite loss, and post-traumatic stress.

The frequently unexpected nature of the loss and the strength of sentiments that might arise have been compared to post-traumatic stress disorder. A difficult dual suffering can result from the physical elements—pain, loss, hospitalization/operation, and blood loss—as well as emotional anguish. Women who have spoken about their experiences have listed symptoms, including unceasing sobbing, flashbacks, and being unable to go back to work.

Around 30% of the 400 female participants in Cumming et al., (2019) study who had miscarriages had anxiety levels that were over the threshold. It has been demonstrated that anxiety persists for a very long time after a loss and that, if managed, there is a high chance of developing depression or serious psychiatric morbidity. A third of mothers who had stillborn children experienced related anxiety, and a quarter experienced related depression. There have been comparisons made between post-traumatic stress disorder and loss because of how commonly unexpected it is and how strong the emotions that may develop may be. The physical elements—pain, loss, hospitalization/operation, and blood loss—as well as emotional suffering, can combine to create a painful dual suffering. The symptoms mentioned by women who have spoken about their experiences include constant crying, flashbacks, and failure to resume work,

Following a perinatal loss, there is typically guilt and humiliation, and women may hold themselves responsible for the loss (Montero et al., 2019). According to Arach et al. (2020), the presence of challenges in their marriages increased worries and pain, and they would wish no child death had happened. When the reason for the loss is unknown, self-blame is most common. It may also stem from irrational thoughts about having made a mistake throughout the pregnancy that caused the loss. Lower self-esteem is linked to a higher stillbirth stigma. Women may also feel as though their

femininity has been diminished and their bodies have failed them down. The mother may occasionally sense "pregnancy or child envy." Attempting to get in touch with loved ones or friends who were in the same stage of pregnancy and those who have living children can exacerbate negative self-esteem feelings. Mothers who avoid or cannot deal with their feelings may become reclusive (Kersting & Wagner, 2012).

According to research by Gaudet et al. (2018), the majority of the time, a mother's initial response to perinatal death is shock, disbelief, perplexity, numbness, and despair. After the first shock wears off, individuals could become more agitated, restless, anxious, or distressed. Aching hands are one of the main somatic symptoms experienced by these women; they claim that they feel heavy as they yearn to hold and carry their kids. These symptoms exacerbate the loss's anguish and undermine their emotional stability (Montero et al., 2019). The mother's quality of life is negatively impacted by her overwhelming sadness and preoccupation with her unborn child. Also, she might go through protracted phases of fury, regret, loneliness, and hopelessness.

To comprehend the psychosocial effects of this prenatal loss on the mothers and their families, a study was conducted in South Africa on 25 mothers who had had a perinatal loss. It demonstrated how stillbirths trigger intense sentiments of instability and are viewed as a catastrophe. 40% of the mothers experienced triggers regularly, including hearing about previous perinatal losses and seeing healthy children. 11% of the mothers expressed heavy grief, and 20% said they had thought about their baby every day since the death. These feelings impact their emotional health (Montero et al., 2019). With counseling and support from her social and support networks over the coming months and years, she will gradually come to terms with the perinatal loss.

Another qualitative study conducted in Spain found that the low perinatal mortality rate resulted from Montero et al. (2019)'s efforts to get feedback from healthcare professionals. They concurred that women who suffer a prenatal loss should receive special attention and care. The mother experiences a

variety of emotions during the grieving process, all of which have an impact on their overall emotional health. These emotions include apathy, scepticism, dread of conceiving again, deep sadness, impatience, guilt, and an inward blank. In extreme situations, the mother may have anxiety and depression a year after the perinatal loss. According to Bowles et al. (2018), 10% of mothers who have experienced a loss meet the criteria for acute stress disorder, which is classified as a traumatic experience that affects one's emotional well-being, while 1% of young bereaved mothers meet the criteria for post-traumatic stress disorder. The best way to care for the mothers should be taught to the medical staff, and the best way to address and understand loss should be taught (Montero et al., 2019).

According to a recent study by Corno et al. (2020), mental discomfort, particularly those connected to adjustment, is likely to be felt when the perinatal loss has happened. The mother could not be ready to move on from the loss and be in denial about it. These are typical behaviors following a miscarriage. Healthcare professionals are advised to offer mothers all the support they can while in the hospital. Mothers in the neonatal intensive care unit, postnatal clinic, and postnatal ward were studied using a retrospective cross-sectional methodology. Sultan et. al., (2010)

The death of a child profoundly alters a mother's perspective on herself, her family, and the world. Behaviourally, these mothers may withdraw from social activities, struggle with daily routines, and show signs of increased irritability. Emotionally, they frequently experience deep sadness, intense grief, and high levels of anxiety. Both the behavioral and emotional impacts of perinatal loss highlight the critical need for comprehensive support systems to help these mothers navigate their grief and maintain their psychological well-being.

2.2.2 The emotional effects of perinatal loss on the young mother's mental health

Throughout the past few decades, research has been done on the emotional effects of prenatal bereavement on young mother's mental health. The experience of perinatal bereavement was linked to a higher incidence of postpartum depression and anxiety, according to Bell's (2017) research. The study

also discovered that losing more than one pregnancy raised the likelihood of postpartum depression. According to a different study by Bartley, O'Connor, and Adams (2018), women who had a prenatal loss were more likely to have higher levels of psychological distress and poorer levels of psychological wellbeing than mothers who had no perinatal loss. In addition, a study by Wisner et al. (2016) discovered that mothers who had prenatal loss were more likely than those who did not have posttraumatic stress disorder symptoms.

Mothers who endure perinatal loss may face a higher risk of developing emotional disorders such as depression, anxiety, and post-traumatic stress disorder. Suicidal ideation, an emotional response, is also more common among these mothers. According to a study by Allen et al., (2016), mothers who experience perinatal bereavement are more likely to harbor suicidal thoughts than those who do not. Additionally, research by Köhler et al., (2018) revealed that these mothers are more likely to attempt suicide, a behavioral response, compared to mothers who have not experienced such loss. This highlights the urgent need for mental health interventions that address both emotional distress and potentially dangerous behaviors in bereaved mothers.

After the initial phase of grief and grieving, the emotional repercussions of prenatal death on the young mother's mental health continue. According to research by van Horck et al., (2015), up to 12 months after the loss, mothers who suffered perinatal losses were more depressed and anxious than mothers who did not. In addition, a study by Fisher, Brown, and Ussher (2016) discovered that mothers who suffered perinatal losses had higher levels of anxiety and despair three years following the loss than mothers who had not.

Perinatal loss is linked to a higher incidence of depression and anxiety in mothers, according to a body of research (Côté-Arsenault & Donato, 2017; Kersting et al., 2011). According to a study by Kersting and colleagues (2019), 39% of mothers who had experienced prenatal bereavement and 5% of

mothers who had not satisfied the criteria for severe depression had major depression. Similar findings were made by Côté-Arsenault and Donato (2017), who discovered that women who had experienced prenatal bereavement were more likely to show signs of anxiety and sadness than mothers who had not.

Research has found that young mothers who experience perinatal loss may be at increased risk for depression and anxiety compared to older mothers who experience perinatal loss (Boyle et al., 2017; Maas et al., 2020). Maas and colleagues (2020) found that young mothers who experienced perinatal loss reported higher levels of depression and anxiety than older mothers who experienced perinatal loss. Similarly, Boyle and colleagues (2017) found that young mothers who experienced perinatal loss were more likely to experience symptoms of depression and anxiety than older mothers who experienced perinatal loss.

Cross-sectional research conducted by Nyongesa et al. (2020) to determine the emotional effects of perinatal loss on young mothers in rural Kenya found that the majority of the study population (n=259) experienced negative emotions such as sadness, fear, and guilt, with almost half (48%) reporting feeling “very sad.” Also, the study discovered that young mothers who had experienced prenatal loss were more likely to suffer from depression (OR = 2.86) and post-traumatic stress disorder (OR = 3.42). According to the authors, perinatal death significantly increases the risk of mental health issues in young mothers in lower eastern Kenya.

In a qualitative study by Njenga et al. (2019), the authors investigated how young mothers in rural Kenya cope with perinatal loss. The study found that the most common coping strategies were seeking social support and engaging in religious activities, while some young mothers also reported using alcohol and drugs to cope. The authors concluded that coping strategies used by young mothers in this region are often inadequate or ineffective and that more attention should be paid to providing mental health support for young mothers affected by perinatal loss.

The findings of these studies suggest that perinatal loss might have a significant influence on the mental health of young mothers in Makueni and Machakos Counties in Lower Eastern Kenya. These effects may be compounded by inadequate social and mental health support, increasing the risk of post-traumatic stress disorder, depression, and other mental health issues. It is, therefore, clear that more attention should be paid to providing adequate support to young mothers in this region who have lost a baby during pregnancy.

Young mothers' mental health may be significantly impacted by perinatal loss, who are more likely to have despair, anxiety, and PTSD. Due to added stressors associated with their age, young mothers may be particularly vulnerable to the emotional repercussions of prenatal loss. Providing support and interventions to help young mothers cope with perinatal loss is crucial to improving their mental health outcomes.

2.2.3 Coping strategies used by young mothers to manage their grief and improve their psychological well-being.

According to Van and Meleis (2018), African Americans use a variety of healthy coping mechanisms, such as adaptive distraction (setting the loss aside), giving it purpose (there was a reason), taking responsibility for one's health (healing oneself), and looking for benefits from the loss (he's in a good place). Additional qualitative studies show that African American women often use religious practice, personal prayer, and unofficial social support from family and friends to help them cope with stillbirth loss (Gold et al., 2016). The dual process model of grief may also help to explain the unexpected finding that bereaved pregnant women was significantly less likely to screen positive for depression and PTSD. It acknowledges that actively restoring prior functioning, like planning a subsequent pregnancy, and not solely resolving grief, is an essential aspect of loss recovery (Stroebe & Schut, 2018). Support networks, a crucial aspect of resilience, were discovered to be significantly associated with a lower incidence of depression and PTSD (Gold et al., 2016).

For working with mothers who are grieving a perinatal loss, peer support is sometimes utilized as an intervention. Peer support is crucial when processing a loss (Lazarus & Rossouw, 2020). It describes the social support a person receives from others who have gone through similar things. They would do better to offer genuine empathy and validation. Peer social support in this situation includes emotional, practical, informational, and affirming help. One such instance is peer support, where the ladies are in groups to speak openly about their losses (Lazarus & Rossouw, 2020). Insufficient peer support may cause social isolation, worsening someone's emotional wellbeing.

All support and self-help groups exist to assist people going through similar experiences. Particularly about perinatal bereavement, support groups have been proven to be quite helpful in offering social support and psychoeducation. It is crucial for enhancing coping mechanisms, the quality of the relationship with the spouse, and even general well-being. Common concerns in perinatal loss support groups include how to include siblings in the grieving process, future pregnancies, guilt, marital problems, communication problems, how to deal with feelings of jealousy toward friends who are expecting, and how to celebrate anniversaries, birthdays, and other significant dates like due dates. Mothers have reportedly experienced less guilt and shame after attending support groups, acknowledging their experiences, and discovering appropriate ways to grieve and cope with the loss. The programs are also credited with fostering stronger relationships between mothers and their partners and with restoring hope.

Hoey et al. (2018) observed that peer-to-peer support programs can greatly enhance social support, personal relationships, and satisfaction with the psychosocial care offered. Additionally, it may result in improved mood and a greater sense of belonging. It was also asserted in a related study by Galinsky et al. (2018) that social support groups and peer support groups could offer the participants various advantages. They consist of feeling taken care of, reduced ambiguity and dread, increased self-assurance, improved coping mechanisms, and a sense of relaxation. Other prominent sensations were

being able to handle daily obligations, feeling less powerless, releasing emotions, and having a sense of direction.

In a preceding qualitative study, coping strategies included reframing the meaning of death, expressing emotions, seeking acceptance of the mother's grief, self-healing, and connecting with the departed kid as though it were a living relative or in a better place (Yamazaki, 2019). In a 2013 study by Gourounti et al., women's coping strategies included denial, behavioral disengagement, self-blame, self-distraction, substance abuse, acceptance, positive reforming, active coping, and seeking emotional support.

Care from qualified healthcare professionals could lessen the psychological morbidity following a stillbirth experience by assisting women in coping with the traumatic event (Yamazaki, 2019). Few of these mothers' report obtaining enough psychological help despite the vulnerability of stillbirth survivors and the connection between perinatal bereavement and mental illness (Kersting et al., 2013). The stillbirth trauma is disregarded as the healthcare system, and families place greater emphasis on live births. Women frequently experience social abandonment and neglect from those around them (Navidian & Saravani, 2019).

2.3 Summary and Research Gap

According to the literature, the effects of prenatal loss can take many different forms, such as modifications to social relationships, a lack of self-care, and changes to parenting techniques. These modifications might have a detrimental impact on the mother's general well-being and the well-being of her family. Perinatal losses are traumatic and upsetting, and they have the greatest effect on the mother's health of anybody who will be caring for the child. Worry, sadness, trouble sleeping, lack of appetite, and post-traumatic stress disorder are possible symptoms for the mother. Once more, culture has a complex and significant impact on how Kenyan parents respond to the death of their child. Strong family

bonds and other aspects of Africa's collectivist culture contributed to the increase in assistance for parents dealing with the trauma of prenatal loss. Last, several effective coping strategies are available, including active self-reliance and adaptive diversion, which give it significance and identify benefits from the loss.

According to research on perinatal loss, mothers may feel psychologically distressed as a result of the loss. Healthcare professionals, friends, and family members should not overlook the impact of experiencing a perinatal loss. A lady finds it challenging to live with and carry on with her pre-perinatal life after a loss. The woman is likely to have symptoms while she grieves that have an impact on her self-esteem and emotional health. It may be difficult for these young mothers to adjust to life following prenatal loss as a result of their judgments of their poor self-worth. The emotional health of a young mother is also impacted since she may experience anxiety, depressive symptoms, and suicidal thoughts.

Additionally, it was determined that some socio-cultural and demographic characteristics are related to perinatal loss in that they may improve or exacerbate the grieving mother's experience with perinatal loss. Among these include the mother's age, profession, level of poverty, and social support. The mother can, however, overcome the psychological distress brought on by perinatal loss with the appropriate treatment approach from trained specialists and go on to have a normal life.

The research covered in this literature review unequivocally shows that young mother's mental health is significantly impacted by their experience of perinatal bereavement. These results show that there is a need for further understanding of the psychological repercussions of prenatal loss and increased care for young mothers who have gone through this kind of loss.

There is a need to increase awareness of prenatal loss and talk about psychological morbidity caused by its underlying stigma. Provide prompt, culturally appropriate care. Parents of stillborn children should have access to caregivers and their close friends and family to receive the required support.

Unfortunately, there is limited data on the effectiveness of counseling in lowering the mental morbidity shown by mothers in low- and middle-income countries like Kenya who deliver stillborn kids. This study aimed to fill that gap. There has to be more consistency in the definition of prenatal loss, the identification of linked factors, the causes of stillbirth, and the attribution of the reasons. To lower the risk of prenatal loss, precise identification of the causes and relevant variables is necessary. A unified global framework that may be used in various contexts is necessary. Even though the causes of neonatal fatalities vary by area, all nations must accept the WHO categorization of ICD-10 for worldwide comparison.

Another gap in limited studies is focusing specifically on young mothers, in the African context. Most studies on perinatal loss have been conducted in developed countries, and there may be limited research that has been carried out in the African context, particularly in Lower Eastern Kenya. This gap could be particularly significant since the cultural and social context of Kenya could affect the experiences of young mothers who experience perinatal loss.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This research aimed to explore the effects of perinatal loss on the behavioral and emotional well-being of young mothers in Makueni and Machakos Counties in Lower Eastern Kenya. Through a mixed-methods approach, this study sought to identify the various psychological challenges experienced by young bereaved mothers and examine the coping strategies they employ to deal with these challenges.

This chapter focuses on the research design, its reasoning, data analysis methods, data collection methods, sample selection procedures, study population, and the validity and reliability of the instruments utilized to carry out this study.

3.2 Research Design

According to Oliver (2021), a researcher's overarching plan or strategy for responding to a research question or testing a hypothesis. Making decisions regarding the data to be collected, how to acquire it, and how to evaluate it are all part of this process. All research endeavors must have a research design because it assures that the study is methodical, exacting, and open. The study used a cross-sectional survey study design to accomplish its objectives. The design's objectives were to evaluate the effects of perinatal loss on the psychological well-being of young women in Makueni and Machakos in Kenya and the coping mechanisms they employed to handle their sorrow.

A cross-sectional survey study design is a useful approach for studying the impact of perinatal loss on the psychological well-being of young mothers because it allows for collecting data from a large and diverse sample at a single point in time (Setia, 2016). This design was especially useful when studying the psychological well-being of young mothers who have experienced perinatal loss, as several factors contribute to their well-being (Raimundo et al., 2018), including social support, coping strategies,

and mental health. After data collection, a quantitative approach was used for data analysis. It was possible to assess how perinatal death affects mothers' emotional health after the collection of data.

3.3 Research Site

The research was conducted in Level 5 hospitals within Makueni and Machakos counties in Lower Eastern Kenya. Machakos Level 5 Hospital is located at Muvuti/Kiima-Kimwe, Machakos KE, Machakos Wote Road, Machakos. Makueni Level 5 (Makueni County Referral Hospital) is in Wote town centre. Given the high rates of perinatal loss in the two counties, it was apparent that this study would ascertain how this loss affects young mothers in this region. Makueni Level 5 and Machakos Level 5 hospitals are the biggest health facilities in these counties, and they handle the majority of health and complex health conditions.

3.4 Target Population

The target population represents all cases of individuals with specific characteristics relevant to the study. The study population consisted of 65 young mothers residing in Makueni and Machakos Counties who have experienced perinatal loss and have delivered in the selected Level 5 hospitals in these counties between 2021 and 2023. Specifically, the focus was on young women who are adolescents up to 25 years old. These young mothers had diverse demographic backgrounds, including varying levels of education, marital status, and socioeconomic status. By targeting this specific group, the study aimed to provide a comprehensive understanding of the psychological impacts of perinatal loss and the coping mechanisms employed by young mothers in this age range.

3.5 Study Sample

3.5.1 Study Sample Size

The following formula was used to determine the sample size for this study:

$$n = [(Z^2 * \sigma^2)/E^2] / (1 + [(Z^2 * \sigma^2)/E^2N])$$

Where:

n = sample size

Z = z-value (corresponding to the chosen confidence level)

σ = standard deviation

E = margin of error

N = population size

substitute the values to obtain:

$$n = [(1.96^2 * 1.5^2) / (0.05^2)] / (1 + [(1.96^2 * 1.5^2) / (0.05^2 * 65)])$$

$$n = 63.8$$

$$n = 64$$

A sample size of at least 64 young mothers was needed for this study to achieve a 95% confidence level and a margin of error of 5% while accounting for the finite population correction factor.

Purposive sampling was used as the study's sample strategy. Instead of randomly choosing participants from a population, the researcher chose a sample based on a defined purpose or set of criteria using the non-probability sampling technique known as "purposeful sampling."

Makueni and Machakos counties were chosen because perinatal loss is highly prevalent in those two counties. The county Level 5 hospitals were also chosen on purpose since they are the major county hospitals where the majority of maternal problems are treated; hence, the majority of perinatal losses either take place en route to those hospitals or at those hospitals.

The researcher, research assistants, and post-natal ward supervisors worked together to purposefully choose study respondents in the Maternal, Newborn, and Child Health in each ward of the level 5 hospitals until the target sample size was reached.

3.5.2 Sampling Procedure

The study employed purposive sampling to recruit the study participants. The study involved recruiting 65 young mothers aged 15-25 years who have experienced perinatal loss in the past two years. Participants were recruited from Makueni and Machakos Counties at the Level 5 hospitals from the maternity and the newborns' units.

Participants who met the inclusion criteria of being young mothers (15–25 years old) who had experienced perinatal loss were chosen using the purposive sampling technique. The participants were identified by reviewing medical records at the health facilities. The use of the purposive sampling technique is appropriate for this study since it enables the identification of participants who have experienced perinatal loss and meet the inclusion criteria. This technique helped to ensure that the study participants had the required experience to provide the information needed to answer the research questions. However, the generalizability of the study's findings to populations other than the study population was constrained by this sampling method.

3.6 Data Collection

3.6.1 Data Collection Instruments

Quantitative data was collected using a self-administered questionnaire that was developed based on a review of the literature. The questionnaire was pretested before being administered to the study participants. The questionnaire comprised of validated instruments such as:

The Socio-demographics Data Questionnaire: This tool compiles data on research participants' demographic and social traits. It typically includes questions about age, gender, education, income,

marital status, ethnicity, religion, and other factors that are relevant to the study being conducted. Age, gender, education, income, marital status, ethnicity, religion, and any other relevant socio-demographic indicators are recognized as being relevant to the study. A questionnaire that included questions about these socio-demographic factors was developed. Then, pre-tests were conducted with a small group of participants to ensure that the questionnaire was completed within a reasonable amount of time and that the questions were simple and easy to understand. Face-to-face interviews or self-administration of the questionnaire, depending on the participants' context and preferences, were used in its administration.

The Perinatal Grief Scale (PGS): It measures the severity of grief experienced by parents following a perinatal loss. The PGS comprises 33 items that evaluate grief's cognitive, affective, and behavioral aspects. Higher scores indicate more severe grief, using a 5-point Likert scale ranging from 0 (not at all true) to 4 (totally true) for each topic. A score of 60 or more suggests significant grief; the total score goes from 0 to 132. This was administered through face-to-face interviews and self-administration of the instrument, depending on the participants' context and preferences.

The Edinburgh Postnatal Depression Scale (EPDS): It is a commonly used screening test for determining postpartum depression symptoms in new mothers. The EPDS consists of ten questions that focus on diverse depressive symptoms such as sorrow, guilt, disturbed sleep, and suicidal thoughts. Each question receives a score between 0 and 3, with higher numbers indicating more severe symptoms. The maximum score on the EPDS is 30, and a score of 10 or higher is typically considered indicative of significant depression. There was a consideration of adapting the EPDS to the local context in Lower Eastern Kenya, considering cultural differences and the specific experiences of young mothers in the area. This involved modifying some questions to be more relevant to the local context. This was administered through face-to-face interviews and self-administration of the instrument, depending on the participants' context and preferences.

Ryff's Psychological Well-being Scale: It measures six elements of well-being: autonomy, environmental mastery, personal growth, positive relationships with others, purpose in life, and self-acceptance. It consists of 42 items and evaluates an individual's psychological well-being. Each item on the scale is given a score on a Likert scale of 1 to 6, with 6 being the strongest agreement. Higher scores denote better levels of well-being. The scale's total score, which ranges from 42 to 252, is calculated by adding the scores for each of the 42 elements. It was adapted to the local context in Lower Eastern Kenya, considering cultural differences and the specific experiences of young mothers. This also involved modifying some questions to be more relevant to the local context. Following the situation and the participants' wishes, in-person interviews or self-administration of the scale were used.

Different data collection methods enabled the triangulation of the data to increase the validity of the study findings, and they provided a more thorough knowledge of the experiences of young mothers.

3.6.2 Pilot Testing of Research Instruments

This is a crucial step in ensuring the study's validity and reliability. Young mothers who matched the study's inclusion criteria but were not included in the final sample participated in the pilot project to test the data collection tools and methods. The goals of the pilot study were to assess the viability and acceptability of the data collection tools and procedures, evaluate the clarity of the questions and instructions in the data collection instruments, identify any potential issues or challenges in the data collection process, and make the necessary adjustments, project the time needed to complete the data collection process and assess the quality of the collected data and the reliability.

The results and findings of the pilot project were utilized to adjust the data-gathering tools and processes as necessary to increase the validity and reliability of the data. Young mothers who matched the study's inclusion criteria made up the 5 to 10-person sample size for the pilot trial. The participants in the pilot study were not included in the final sample, nor were the study results used in the final

analysis. The data gathered from the pilot study was crucial in guaranteeing the validity and reliability of the study findings, and it raised the likelihood of achieving precise and significant results.

3.6.3 Instrument Reliability

Reliability refers to the consistency of results across different researchers, items, and times, as assessed by interrater reliability and internal consistency. Heale and Twycross (2015) note that the reliability of a research instrument is determined by the extent to which it produces consistent results or data after repeated trials. Gibbs and Jenkins (2014) similarly assert that reliability indicates how well a research instrument measures what it is intended to measure using the test-retest method. Test-retest reliability was evaluated for the standardized psychological assessment tool, Ryff's Psychological Well-being Scale. Factors such as the speed of returning completed documents, the accuracy and honesty of the information provided, and the specificity of the information requested by the researcher were considered. Data from pilot testing were utilized to assess reliability. Ensuring instrument reliability is essential to guarantee that the data collection measures are consistent and accurate. This measure was administered twice to the same group of young mothers, with a two-week interval to assess the consistency of the responses. The questionnaires were considered reliable after correcting errors and omissions.

3.6.4 Instrument Validity

The degree to which a measure's results can faithfully represent the variable for which they were intended is known as validity. It gauges the extent to which a study tool would provide the same outcomes after several trials (Kothari, 2010). It is critical to ensure that the measures used to collect data measure what they are intended to measure. Considering this study's findings, only the instruments measured emotional well-being correctly. This study falls under the content validity category, meaning the questionnaire's questions should accurately reflect the issue it intends to examine. The data collection instruments were developed based on an extensive literature review, and the questions were developed

by an expert panel of researchers and clinicians with experience in perinatal loss and psychological well-being.

The content validity was assessed by evaluating the questions' relevance, clarity, and comprehensiveness in the data collection instruments. Research assistants with post-secondary education familiar with the local climate, language, geography, and culture were sought out from the research region to assist with data collecting. Before the data collection, they received training; after the collection, the questionnaires were reviewed for completeness. To prevent ambiguity, data-gathering tools were written in plain and unambiguous language.

3.6.5 Data Collection Procedure

This procedure ensures that the data collected accurately represents the target population. Before the commencement of the study, the researcher explained the study's objectives to the participants so they could obtain informed consent. Participants were fully informed about the study's purpose, the collected data, and their rights as outlined in the consent form. They were assured of their right to withdraw from the study without any consequences. Data collection was conducted using a questionnaire, including open-ended and closed-ended questions.

According to Mugenda & Mugenda (2003), closed or structured questions are generally easier to evaluate, while open-ended or unstructured questions allow for more detailed and nuanced participant responses. This combination of question types facilitated comprehensive data collection, capturing both quantifiable data and more in-depth insights. The questionnaire was chosen because it allows the researcher to gather a lot of data swiftly. The young mothers were guided to respond effectively where there was a need. Where a respondent could not communicate in English, the research assistants used the Kamba language to translate the questions.

3.7 Data Processing and Analysis

The quantitative data was analyzed using IBM SPSS version 29 (Statistical Program for Social Sciences). Information was coded to facilitate anonymity. The surveys were amended first and then coded to aid statistical analysis. A computer was used to input data, and a file was created, sorted, and examined. Using IBM SPSS 29, the data was organized and coded. The findings were triangulated to provide a comprehensive understanding of the research topic. Descriptive data was assessed during the analysis. When describing the data, the report utilized percentages and frequencies. Quantitative data analysis was included when calculating the mean and performing regression analysis.

The Likert scale scores were used to calculate the mean, and the results are displayed through graphs, charts, and tables to facilitate interpretation and inference. Regression analysis was conducted at a 95% confidence level to examine the relationship between the variables. The data analysis results were interpreted and presented clearly and concisely. The implications of the findings for theory, practice, and policy are discussed, along with suggestions for further research. The study provided a thorough and rigorous analysis of the effects of perinatal loss on the psychological well-being of young mothers in Makueni, Kenya.

3.8 Legal and Ethical Considerations

The appropriate institutions, such as the psychology department at The African Nazarene University, the Institutional Review Board, and the National Commission for Science, Technology, and Innovation (NACOSTI), requested permits and approvals for the research. The permit was obtained and used to obtain permission from the Hospital Administration Officers to conduct the study in the hospitals in Lower Eastern County where the research was conducted.

The research team ensured that all ethical considerations were followed, such as protecting the privacy and confidentiality of the participants and ensuring that no harm was caused during the data

collection process. Before agreeing to participate, participants were fully informed about the study's purpose, how data was collected, and any risks or advantages that may arise. The procedure of getting informed consent was made attentive to cultural differences and involved talking about how perinatal bereavement affected the participants' psychological health. Additionally, assent was obtained from legally authorized representatives or guardians for participants under 18 years old.

The study ensured that participants' anonymity and privacy were respected. Participation was voluntary, and participants were informed that they could withdraw without any penalty. The study was reviewed and approved by relevant institutional ethics review boards, including Lower Eastern Level 5 Hospitals and African Nazarene University, to ensure adherence to ethical standards and guidelines. Young mothers who have experienced perinatal loss may be a vulnerable population, and the study took steps to protect them from harm. This included providing support services and resources to participants who may need them during and after data collection. The study also ensured that the data collected was securely stored and not accessible by unauthorized individuals.

CHAPTER FOUR

DATA ANALYSIS AND FINDINGS

4.1 Introduction

This chapter presents the analysis of the data collected from the study on the effects of perinatal loss on the psychological well-being of young mothers in Makueni and Machakos Counties in Lower Eastern Kenya.

Through the presentation of the findings, insights into the unique circumstances and experiences of young mothers in Makueni and Machakos Counties will be offered, highlighting the importance of tailored support mechanisms and culturally sensitive interventions. By examining the data concerning the research questions, a nuanced understanding of the effects of perinatal loss on young mothers' behavior and emotional well-being is provided, identifying potential avenues for future research and intervention.

4.2 Characteristics of the Respondents

4.2.1 Response Rate

The response rate analysis helps to understand the engagement level of the participants in the study. Out of the targeted population of 65, a sample size of 64 young mothers was selected for the survey. However, only 59 participants completed the survey questionnaire.

Table 4.0.1: Response Rate Analysis

Response Status	Frequency	Percentage
Responded	59	92.20%
Did Not Respond	5	7.80%
Total	64	100%

4.3 Socio-Demographic and Socio-Economic Data

The study sought to determine the demographic information of the respondents based on age bracket, education level, religion, marital status, union type, work experience, and housing type.

Table 4.0.2: Age Distribution

Maternal age	Frequency	Percentage
<18 years	15	25.4%
18-25 years	44	74.6%
Total	59	100%

4.3.1 Age Distribution

The age distribution of the respondents underscores the diversity among young mothers who have experienced perinatal loss, and the findings are shown in Table 4.2

The findings in Table 4.2 show that most respondents, 44 (74.6%), were aged between 18 and 25 years, while only a minority of 15(25.4%) were below 18 years. This implies that the representation across different age groups, from adolescence to 25 years old, allows for exploring potential age-related patterns in the behavioral and emotional effects after a perinatal loss.

Calculation Example

To calculate the percentage for the age group <18 years:

$$\text{Percentage} = \frac{\text{Frequency}}{\text{Total Number of Participants}} \times 100$$

$$\text{Percentage} = \frac{15}{59} \times 100 \approx 25.4\%$$

To calculate the percentage for the age group 18-25 years:

$$\text{Percentage} = \frac{44}{59} \times 100 \approx 74.6\%$$

Table 4.0.3: Education Level

Education Level	Frequency	Percentage
Primary	14	23.7%
Secondary	34	57.6%
College	11	18.7%
Total	59	100%

4.3.2 Education Level

The findings in Table 4.3 show that 14(23.7%) of the respondents had primary education, 34(57.6%) had secondary education, and 11(18.7%) had college education. This diverse educational profile provides valuable insights into the participants' cognitive abilities, literacy levels, and potential barriers to accessing support services after experiencing perinatal loss.

Table 4.0.4: Religion

Religion	Frequency	Percentage
Catholic	19	32.2%
Protestant	30	50.8%
Muslim	4	6.8%
Other	6	10.2%
Total	59	100%

4.3.3 Religion

The findings in Table 4.4 show that 19(32.2%) of the respondents are Catholics, 30(50.8%) protestants, 4(6.8%) Muslims, and 6(10.2%) affiliated with other religions. By examining religious

affiliation, the study gains insights into the cultural and spiritual dimensions of perinatal loss and its impact on coping strategies. This analysis explores how religious beliefs and practices shape individuals' grief experiences and engagement with support-seeking behaviors.

Table 4.0.3: Marital Status

Marital Status	Frequency	Percentage
Not married	22	37.3%
Married	37	62.7%
Divorced	0	0%
Widowed	0	0%
Total	59	100%

4.3.4 Marital Status

The study results in Table 4.5 show that 22(37.3%) are not married, 37(62.7%) are married, and 0(0%) widowed or 0(0%) divorced. This analysis of marital status reveals a mix of respondents across different relationship statuses. While a notable proportion is married, others are unmarried, and some respondents were never divorced or widowed. This diversity in marital status allows us to explore the influence of family structure and support networks on coping mechanisms following perinatal loss.

Table 4.0.4: Type of Union

Type of Union	Frequency	Percentage
Married Monogamous	33	55.9%
Married Polygamous	3	5.1%
Inherited	1	1.7%
Not Married	22	37.3%

Total	59	100%
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4.3.5 Type of Union

The purpose of Table 4.6 is to provide an overview of the different types of marital unions among the study participants. The table categorizes the respondents based on their union type, with frequencies and corresponding percentages calculated from the total number of participants who completed the survey (59). This data helps in understanding the marital status distribution and its potential impact on the psychological and behavioral responses of young mothers experiencing perinatal loss.

Most participants, 33 out of 59 (55.9%), are in monogamous marriages. A small portion, 3 participants (5.1%), are in polygamous marriages. Only 1 participant (1.7%) reported being in an inherited union. Additionally, a significant number of participants, 22 (37.3%), are unmarried. This distribution highlights the prevalence of different marital statuses among the young mothers in the study, which can provide context for understanding variations in emotional and behavioral responses to perinatal loss.

Table 4.0.5: Occupation

Your Occupation	Frequency	Percentage
Employed	25	42.4%
Unemployed	24	40.7%
Other(Casual)	10	16.9%
Total	59	100%

4.3.6 Occupation

Table 4.7 presents the occupational status of the study participants, providing a breakdown of their employment situations. This information is crucial for understanding the socio-economic background of the young mothers involved in the study, which can influence their coping mechanisms and psychological well-being after experiencing perinatal loss. The table shows that 25 of the 59 respondents (42.4%) are employed, indicating that nearly half of the participants have some form of regular employment. On the other hand, 24 participants (40.7%) are unemployed, which represents a significant portion of the study group and may point to potential economic stress and its impact on their mental health. Additionally, 10 participants (16.9%) are engaged in casual or irregular work. This distribution underscores the varied occupational statuses among young mothers, which is important to consider when analyzing their responses and developing supportive interventions.

Table 4.0.6: Housing Type

Housing Type	Frequency	Percentage
Permanent own house	12	20.3%
Rental	40	67.8%
Temporal Shelter	7	11.9%
Total	59	100%

4.3.7 Housing Type

The housing type of the respondents provides valuable insights into their socioeconomic status and living conditions. This analysis reveals that while some participants reside in permanent own houses, others live in rental accommodations or temporary shelters. This variation highlights disparities in housing stability and access to basic amenities, influencing individuals' ability to access healthcare services and receive adequate psychosocial support.

4.4 Presentation of Research Analysis, Findings, and Interpretation

4.4.1 Objective 1: To assess the influence of perinatal loss on young mothers' behavior

The data collected on the behavioral responses to perinatal loss among young mothers can be interpreted through three distinct levels of emotional distress: Increased Emotional Distress, Moderate Emotional Distress, and Low Emotional Distress.

Data on Behavioral Response from the Research

- Behavioral Response A represents the proportion of young mothers showing increased emotional distress.
- Behavioral Response B represents the proportion of young mothers exhibiting moderate emotional distress.
- Behavioral Response C represents the proportion of young mothers demonstrating resilience or low emotional distress.

Data on Behaviour Response

Behavioral Response	Frequency	Percentage
Increased Emotional Distress (A)	25	42.40%
Moderate Emotional Distress (B)	20	33.90%
Low Emotional Distress (C)	14	23.70%
Total	59	100%

Increased Emotional Distress (Behavioral Response A):

A total of 25 young mothers, representing 42.4% of the sample, exhibited significant signs of emotional distress. These signs included severe depression, withdrawing themselves from the

community, and being hyper-vigilant. The high frequency of these symptoms indicates a critical need for intensive psychosocial support and counseling for these individuals. The emotional turmoil faced by these mothers can hinder their daily functioning and overall quality of life, necessitating immediate and comprehensive mental health interventions to help them cope with their loss effectively.

Moderate Emotional Distress (Behavioral Response B):

In this category, 20 young mothers, or 33.9% of the respondents, showed moderate levels of emotional distress. These mothers experienced notable emotional challenges but were comparatively better at managing their symptoms than those in the high-distress category. While their distress was not as severe, it was still significant enough to impact their behavior. For these individuals, participating in support groups and attending regular counseling sessions could provide the necessary assistance to navigate their emotional difficulties and promote better mental health outcomes.

Low Emotional Distress (Behavioral Response C):

Lastly, 14 young mothers, making up 23.7% of the sample, demonstrated resilience and exhibited low levels of emotional distress that led to less affected behavior. These mothers were more likely to adapt to their loss with minimal behavior disruption. Despite their relative resilience, it is important to continue monitoring these mothers and provide occasional support to ensure their long-term well-being. Even those who show fewer signs of distress can benefit from periodic check-ins and access to resources to help them maintain their mental health.

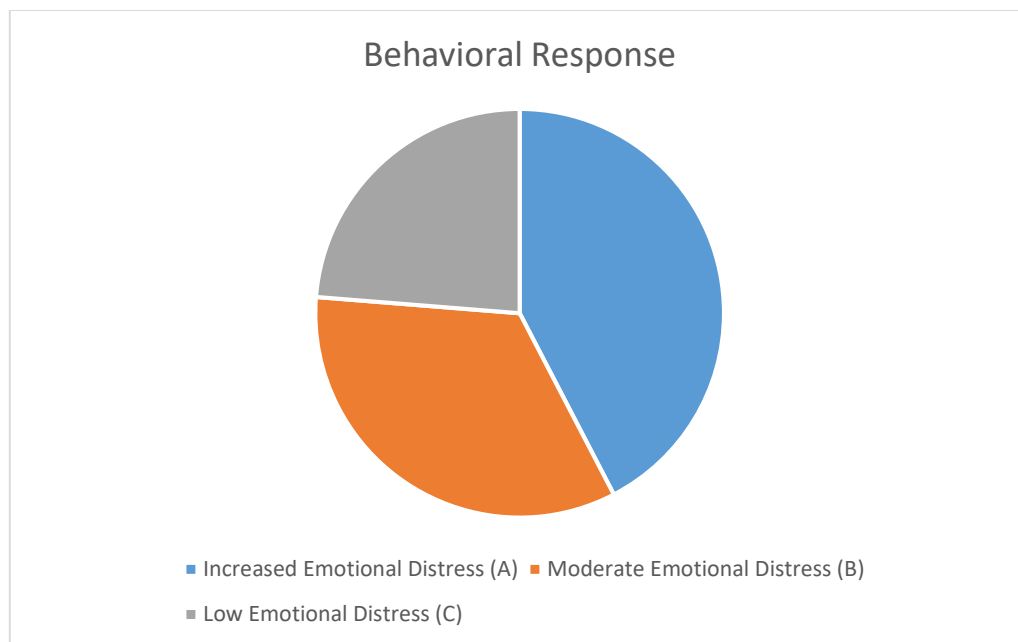


Figure 2.0: Behaviour Response pie chart

The pie chart above illustrating the behavioral responses to perinatal loss shows that 42.4% of young mothers exhibited increased emotional distress, necessitating intensive psychosocial support and counseling. Meanwhile, 33.9% of the mothers experienced moderate emotional distress, indicating a need for support groups and regular counseling sessions. Lastly, 23.7% of the mothers demonstrated resilience with low emotional distress, suggesting they require minimal psychological intervention but still benefit from continued monitoring and occasional support to ensure their long-term well-being.

4.4.2 Objective 2: Emotional Effects of Perinatal Loss on the Mother's Mental Well-being

The study focused on relevant questions from Sections B, D, and E to present the emotional effects of perinatal loss on the mother's mental well-being using the provided questionnaire data. The responses were categorized into "Very Frequently," "Frequently," "Rarely," and "Never" and included the frequencies and percentages of the respondents.

4.4.2.1 Depression and Anxiety Levels

The purpose of this analysis was to measure the frequency of depression and anxiety symptoms among young mothers who experienced perinatal loss using the Edinburgh Postnatal Depression Scale

(EPDS). The respondents indicated how often they experienced various symptoms on a Likert scale: 1=Never, 2=Rarely, 3=Frequently, and 4=Very Frequently. The results are detailed in the table below.

Table 4.0.7: Depression and Anxiety Levels

Statements	Very Frequently	Frequently	Rarely	Never
Feeling down, depressed, or hopeless	20 (33.9%)	24 (40.7%)	10 (16.9%)	5 (8.5%)
Trouble falling asleep or staying asleep	15 (25.4%)	20 (33.9%)	13 (22.0%)	11 (18.6%)
Feeling bad about yourself or that you are a failure	18 (30.5%)	25 (42.4%)	10 (16.9%)	6 (10.2%)
Feeling anxious or worried for no good reason	22 (37.3%)	19 (32.2%)	10 (16.9%)	8 (13.6%)
Feeling scared or panicky for no very good reason	17 (28.8%)	22 (37.3%)	12 (20.3%)	8 (13.6%)
Things have been getting on top of me	19 (32.2%)	20 (33.9%)	11 (18.6%)	9 (15.3%)
I am feeling so unhappy that I have been crying	21 (35.6%)	20 (33.9%)	10 (16.9%)	8 (13.6%)
Thoughts of harming myself	9 (15.3%)	14 (23.7%)	20 (33.9%)	16 (27.1%)

Table 4.9 shows that 20(33.9%) of the respondents stated that they very frequently feel down, depressed, or helpless, 24(40.7%) of the respondents stated that they frequently feel, 10(16.9%) of the respondents stated that they rarely feel, and 5(8.5%) of the respondents stated that they never feel down, depressed or hopeless. Also, 15(25.4%) respondents stated that they very frequently had trouble falling asleep or staying asleep, 20(33.9%) of the respondents frequently had trouble, 13(22.0%) of the respondents rarely had trouble, and 11(18.6%) of the respondents never had trouble falling asleep or staying awake. Further, 18(30.5%) of the respondents stated very frequently they felt bad about themselves, or that they were a failure, 25(42.4%) of the respondents stated frequently they felt bad, 10(16.9%) of the respondents stated they rarely felt bad, and 6(10.2%) of the respondents never felt bad about themselves or a failure.

Furthermore, 22(37.3%) of the respondents stated feeling anxious or worried for no good reason very frequently, 19(32.2%) respondents stated they frequently felt anxious, 10(16.9%) of the respondents stated that they rarely felt anxious, and 8(13.6%) of the respondents stated they never felt anxious or worried for no good reason. Additionally, 17(28.8%) of the respondents stated that they very frequently felt scared or panicky for no very good reason, 22(37.3%) of the respondents frequently felt scared, 12(20.3%) of the respondents rarely felt scared, and 8(13.6%) respondents, never felt scared or panicky for no good reason. Also, 19(32.2%) of the respondents very frequently felt things getting on top of them, 20 (33.9%) of the respondents frequently felt things, 11(18.6%) of the respondents rarely felt things, and 9(15.3%) of the respondents never felt things get on top of them.

The table also shows that 21(35.6%) of the respondents very frequently felt so unhappy that they had been crying, 20(33.9%) of the respondents frequently felt unhappy, 10(16.9%) of the respondents rarely felt unhappy, and 8(13.6%) of the respondents never felt unhappy that they had to cry. Finally, the table showed that 9(15.3%) of the respondents very frequently had thoughts of harming themselves, 14(23.7%) of the respondents frequently had thoughts, 20(33.9%) of the respondents rarely had thoughts, and 16(27.1%) of the respondents never had thoughts of harming themselves.

4.4.2.2 Grief Responses

The objective of this analysis was to assess the grief responses of young mothers who experienced perinatal loss using the Perinatal Grief Scale (PGS). Respondents rated the frequency of their grief-related feelings on a Likert scale: 1=Never, 2=Rarely, 3=Frequently, and 4=Very Frequently. The results are detailed in the table below.

Table 4.0.8: Grief Responses (PGS)

Statements	Very Frequently	Frequently	Rarely	Never
Feeling depressed	25 (42.4%)	20 (33.9%)	9 (15.3%)	5 (8.5%)

Feeling empty inside	22 (37.3%)	19 (32.2%)	12 (20.3%)	6 (10.2%)
Finding it hard to get along with certain people	18 (30.5%)	21 (35.6%)	13 (22.0%)	7 (11.9%)
Feeling a need to talk about the baby	24 (40.7%)	18 (30.5%)	11 (18.6%)	6 (10.2%)
Missing the baby very much	28 (47.5%)	19 (32.2%)	8 (13.6%)	4 (6.8%)
Feeling I have adjusted well to the loss	12 (20.3%)	18 (30.5%)	19 (32.2%)	10 (16.9%)
Getting upset when thinking about the baby	23 (39.0%)	17 (28.8%)	12 (20.3%)	7 (11.9%)
Considering suicide since the loss	10 (16.9%)	15 (25.4%)	19 (32.2%)	15 (25.4%)

Table 4.10 shows that 25(42.4%) of the respondents stated that they very frequently feel depressed, 20(33.9%) of the respondents stated that they frequently feel depressed, 9(15.3%) of the respondents stated that they rarely feel depressed, and 5(8.5%) of the respondents stated that they never feel depressed. Also, 22(37.3%) respondents stated that they very frequently felt empty inside, 19(32.2%) of the respondents frequently felt empty inside, 12(20.3%) of the respondents rarely felt empty, and 6(10.2%) of the respondents never felt empty inside. Further, 18(30.5%) of the respondents stated very frequently they found it hard to get along with certain people, 21(35.6%) of the respondents stated frequently they found it hard to get along, 13(22.0%) of the respondents stated they rarely found it hard, and 7(11.9%) of the respondents never found it hard to get along with certain people.

The Table also shows that 24(40.7%) of the respondents stated feeling very frequently need to talk about the baby, 18(30.5%) of the respondents stated they frequently felt a need, 11(18.6%) of the respondents stated that they rarely felt a need to talk about the baby, and 6(10.2%) of the respondents stated they never felt a need to talk about the baby. Additionally, 28(47.5%) of the respondents stated that they very frequently missed the baby very much, 19(32.2%) of the respondents frequently missed

the baby, 8(13.6%) of the respondents rarely missed the baby, and 4(6.8%) of the respondents, never missed the baby very much. In addition, 12(20.3%) of the respondents very frequently felt they had adjusted well to the loss, 18 (30.5%) of the respondents frequently felt adjusted, 19(32.2%) of the respondents rarely felt adjusted to the loss, and 10(16.9%) of the respondents felt that they never adjusted well to the loss.

Furthermore, 23(39.0%) of the respondents very frequently felt they got upset when they thought about the baby, 17(28.8%) of the respondents frequently felt they got upset, 12(20.3%) of the respondents rarely got upset, and 7(11.9%) of the respondents never got upset when thinking about the baby. Finally, the table shows that 10(16.9%) of the respondents very frequently had considered suicide since the loss, 15(25.4%) of the respondents had frequently considered suicide, 19(32.2%) of the respondents had rarely considered suicide, and 15(25.4%) of the respondents had never considered suicide since the loss

4.4.2.3 Psychological Well-being

The analysis in Table 4.5 aimed to evaluate the psychological well-being of young mothers who experienced perinatal loss using the Ryff Scale of Psychological Well-being. The frequency of their well-being experiences was rated on a Likert scale: 1=Never, 2=Rarely, 3=Frequently, and 4=Very Frequently. The findings are presented in Table below.

Table 4.0.9: Psychological Well-being (RYFF Scale)

Statements	Very Frequently	Frequently	Rarely	Never
I feel depressed	22 (37.3%)	20 (33.9%)	12 (20.3%)	5 (8.5%)
I feel worthless since the baby died	18 (30.5%)	21 (35.6%)	13 (22.0%)	7 (11.9%)
I feel a need to talk about the baby	24 (40.7%)	18 (30.5%)	11 (18.6%)	6 (10.2%)
I have considered suicide since the loss	9 (15.3%)	14 (23.7%)	20 (33.9%)	16 (27.1%)

I feel a sense of purpose in my life	14 (23.7%)	22 (37.3%)	15 (25.4%)	8 (13.6%)
I feel in control of my circumstances	13 (22.0%)	19 (32.2%)	17 (28.8%)	10 (16.9%)
I have confidence in my own opinions	18 (30.5%)	20 (33.9%)	13 (22.0%)	8 (13.6%)
I tend to live in the moment	16 (27.1%)	19 (32.2%)	15 (25.4%)	9 (15.3%)

Table 4.11 shows that 22(37.3%) of the respondents stated that they very frequently felt depressed, 20(33.9%) of the respondents stated that they frequently felt depressed, 12(20.3%) of the respondents stated that they rarely felt depressed, and 5(8.5%) of the respondents stated that they never felt depressed. Also, 18(30.5%) respondents stated that they very frequently felt worthless since the baby died, 21(35.6%) of the respondents frequently felt worthless, 13(22.0%) of the respondents rarely felt worthless, and 7(11.9%) of the respondents never felt worthless since the baby died. Further, 24(40.7%) of the respondents stated very frequently they felt a need talk about the baby, 18(30.5%) of the respondents stated they frequently felt a need to talk, 11(18.6%) of the respondents stated they rarely felt a need to talk about the baby, and 6(10.2%) of the respondents never felt a need to talk about the baby.

Furthermore, 9(15.3%) of the respondents stated they have very frequently considered suicide since the loss, 14(23.7%) respondents stated they had frequently considered suicide, 20(33.9%) of the respondents stated that they rarely considered suicide since the loss, and 16(27.1%) of the respondents stated they never considered suicide since the loss. Additionally, 14(23.7%) of the respondents stated that very frequently they felt a sense of purpose in their lives, 22(37.3%) of the respondents frequently felt a sense of purpose, 15(25.4%) of the respondents stated they rarely felt a sense of purpose, and 8(13.6%) respondents, never felt a sense of purpose in their lives. Also, 13(22.0%) of the respondents very frequently felt in control of their circumstances, 19 (32.2%) of the respondents frequently felt in

control of their circumstances, 17(28.8%) of the respondents rarely felt in control, and 10(16.9%) of the respondents never felt in control of their circumstances.

The table also shows that 18(35.5%) of the respondents very frequently felt they had confidence in their own opinion, 20(33.9%) of the respondents frequently felt had confidence, 13(22.0%) of the respondents rarely felt they had confidence, and 8(13.6%) of the respondents never felt they had confidence in their own opinion. Finally, the table showed that 16(27.1%) of the respondents very frequently tend to live in the moment, 19(32.2%) of the respondents frequently tend to live in the moment, 15(25.4%) of the respondents rarely tend to live in the moment, and 9(15.3%) of the respondents never tend to live the moment.

Example Calculation

Demonstrating how to calculate the percentages for the statement "Feeling down, depressed, or hopeless" from the EPDS scale:

- Very Frequently: 20 out of 59 respondents

$$\frac{20}{59} \times 100 = 33.9\%$$

- Frequently: 24 out of 59 respondents

$$\frac{24}{59} \times 100 = 40.7\%$$

- Rarely: 10 out of 59 respondents

$$\frac{10}{59} \times 100 = 16.9\%$$

- Never: 5 out of 59 respondents

$$\frac{5}{59} \times 100 = 8.5\%$$

4.3.3 Objective 3: Managing Grief and Improving Psychological Well-Being

Coping Strategies Used by Young Mothers

Adaptive Coping Strategies:

The analysis in the table below aims to identify the coping strategies employed by young mothers following perinatal loss. The coping strategies assessed include professional support, spiritual support, obtaining emotional support from others, acceptance and positive reinterpretation, and planning and problem-solving. Respondents were asked to rate how frequently they engaged in each coping strategy on a Likert scale ranging from 1 (Never) to 4 (Very Frequently). The results provide insights into the adaptive mechanisms utilized by these individuals during their grieving process.

Table 4.0.12: Adaptive Coping Strategies

Statements	Seeking Professional Support	Seeking Spiritual Support	Emotional Support from Others	Acceptance and Positive Reinterpretation	Planning and Problem-Solving
Very Frequently	15 (25.4%)	23 (39.0%)	18 (30.5%)	14 (23.7%)	13 (22.0%)
Frequently	21 (35.6%)	20 (33.9%)	22 (37.3%)	21 (35.6%)	20 (33.9%)
Rarely	14 (23.7%)	10 (16.9%)	12 (20.3%)	13 (22.0%)	14 (23.7%)
Never	9 (15.3%)	6 (10.2%)	7 (11.9%)	11 (18.6%)	12 (20.3%)

Table 4.12 shows that 15(25.4%) of the respondents stated that they very frequently sought professional support, 21(35.6%) of the respondents stated that they frequently sought professional

support, 14(23.7%) of the respondents stated that they rarely sought professional support, and 9(15.3%) of the respondents stated that they never sought professional support. Also, 23(39%) of the respondents stated that they sought spiritual support, 20(33.9%) of the respondents stated that they frequently sought spiritual professional support, 10(16.9%) of the respondents stated that they rarely sought spiritual support, and 6(10.2%) of the respondents stated that they never sought spiritual support.

Further, 18(30.5%) of the respondents stated that they very frequently sought emotional support from others, 22(37.3%) of the respondents stated that they frequently sought emotional support, 12(20.3%) of the respondents stated that they rarely sought emotional support, and 7(11.9%) of the respondents stated that they never sought emotional support from others. Furthermore, 14(23.7%) of the respondents stated that they very frequently use acceptance and positive reinterpretation, 21(35.6%) of the respondents stated that they frequently use acceptance, 13(22%) of the respondents stated that they rarely use acceptance and positive reinterpretation, and 11(18.6%) of the respondents stated that they never acceptance and positive reinterpretation.

Finally, 13(22.0%) of the respondents stated that they very frequently use planning and problem solving, 20(33.9%) of the respondents stated that they frequently use planning, 14(23.7%) of the respondents stated that they rarely use planning and problem solving 12(20.3%) of the respondents stated that they never use planning and problem-solving.

The graph below visually represents the data from the Adaptive Coping Strategies table, highlighting the percentage of young mothers who engage in various positive coping mechanisms following perinatal loss. The graph categorizes the responses into five distinct strategies: Seeking Professional Support, Seeking Spiritual Support, Emotional Support from Others, Acceptance and Positive Reinterpretation, and Planning and Problem-Solving. Each category is plotted to show the frequency of engagement ranging from 'Very Frequently' to 'Never.' This visual aid provides an

immediate understanding of the most and least utilized coping strategies among the surveyed population, facilitating a clearer analysis of which interventions might be most effective in supporting grieving mothers.

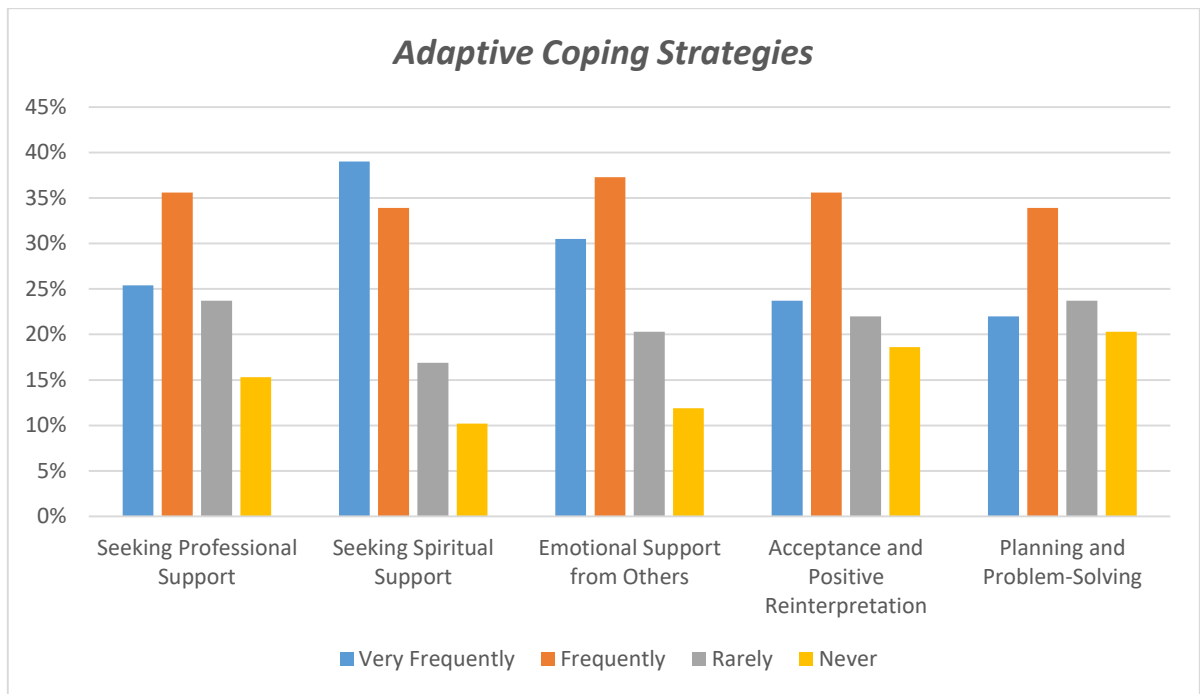


Figure 3.0: Adaptive Coping Strategies Graph

Young mothers exhibited varying frequencies in coping strategies following perinatal loss: approximately 25% sought professional support "Very Frequently," with an additional 36% doing so "Frequently." Seeking spiritual support was prevalent, with 39% engaging in this "Very Frequently" and 34% "Frequently." Emotional support from others was sought by 31% "Very Frequently" and 37% "Frequently." Engaging in acceptance and positive reinterpretation was reported by 24% "Very Frequently" and 36% "Frequently." Planning and problem-solving were undertaken by around 22% "Very Frequently" and another 34% "Frequently."

Maladaptive Coping Strategies:

The table below explores the frequency of maladaptive coping strategies among young mothers dealing with perinatal loss. This table specifically examines behaviors such as the use of alcohol or other

drugs to alleviate distress and instances where individuals have given up on trying to cope with their situation. Responses were categorized based on the frequency of engaging in these strategies: from 'Never' to 'Very Frequently.' The data is presented in both frequency (F) and percentage (%) terms to provide a clear picture of how prevalent these negative coping mechanisms are within the surveyed population. This insight is crucial for designing interventions to reduce reliance on harmful coping methods and promote healthier alternatives.

Table 4.0.13: Maladaptive Coping Strategies

Statements	Very Frequently	Frequently	Rarely	Never	Total
Using alcohol or other drugs to feel better	F: 8	F: 15	F: 20	F: 16	59
	%: 13.6	%: 25.4	%: 33.9	%: 27.1	100%
Giving up attempts to cope	F: 10	F: 15	F: 18	F: 16	59
	%: 16.9	%: 25.4	%: 30.5	%: 27.1	100%

Table 4.13 reveals that a significant portion of respondents (39%) reported using alcohol or other drugs to cope very frequently and frequently, and it goes further to indicate that approximately 42.3% admitted to giving up attempts to cope very frequently and frequently. These findings highlight the prevalence of maladaptive coping mechanisms among young mothers experiencing perinatal loss, emphasizing the need for targeted interventions to promote healthier coping strategies and provide support for substance abuse prevention and treatment

Impact on Psychological Well-Being

The analysis on the impact on psychological well-being, showed that adaptive coping strategies were positively associated with improved psychological well-being. Young mothers who frequently sought social support, engaged in self-care, participated in religious activities, attended professional counseling, or joined support groups reported lower levels of depression and anxiety and higher levels of overall well-being.

In contrast, those who relied on maladaptive coping strategies such as avoidance, substance use, emotional suppression, or unhealthy eating habits tended to report higher levels of depression and anxiety and lower overall well-being.

Statistical Analysis:

Correlation analysis revealed that adaptive coping strategies had a negative correlation with depression and anxiety and a positive correlation with overall well-being. Conversely, maladaptive coping strategies were positively correlated with depression and anxiety and negatively correlated with overall well-being.

Table 4.14: Statistical Analysis

Coping Strategy	Depression (Correlation Coefficient)	Anxiety (Correlation Coefficient)	Overall Well-Being (Correlation Coefficient)
Adaptive Strategies	-0.45	-0.42	0.48
Maladaptive Strategies	0.38	0.40	-0.41

Table 4.14 provides a statistical analysis of the relationship between various coping strategies and mental health outcomes, such as depression, anxiety, and overall well-being among young mothers who have experienced perinatal loss. The table details correlation coefficients for both adaptive and maladaptive strategies, indicating the strength and direction of their association with mental health

metrics. A negative correlation coefficient suggests that as the use of adaptive coping strategies increases, symptoms of depression and anxiety decrease, whereas a positive correlation suggests an increase in symptoms. This analysis helps understand the impact of different coping mechanisms on psychological recovery

4.4 Key Findings

1. Prevalence of Emotional Distress

- **Depression and Anxiety:** A substantial 74.6% of young mothers frequently felt down, depressed, or hopeless. Additionally, 59.3% frequently experienced trouble sleeping, and 72.9% often felt bad about themselves or like failures. Anxiety was prevalent, with 69.5% frequently feeling anxious or worried without a clear reason and 66.1% often feeling scared or panicky.
- **Grief Responses:** High levels of grief were noted, with 76.3% frequently feeling depressed and 69.5% feeling empty. The need to talk about and miss the baby was expressed by 71.2% and 79.7%, respectively.

2. Suicidal Ideation and Self-Harm

- **Suicidal Thoughts:** Alarming, 39% of respondents frequently had thoughts of self-harm, and 40.7% frequently considered suicide following perinatal loss, underscoring the severe psychological impact.

3. Social and Emotional Support

- **Emotional Support:** Receiving emotional support from others was frequent, with 67.8% of mothers indicating they received such support "Very Frequently" or "Frequently."
- **Professional Support:** 61% of respondents reported seeking professional support, highlighting the importance of mental health services.

- **Spiritual Support:** A significant 72.9% of respondents sought spiritual support frequently, demonstrating the role of spirituality in coping.

4. Adaptive Coping Strategies

- **Acceptance and Positive Reinterpretation:** 59.3% of mothers used strategies to accept and positively reinterpret their experiences "Very Frequently" or "Frequently."
- **Planning and Problem-Solving:** 55.9% frequently used planning and problem-solving to manage their well-being.

5. Maladaptive Coping Strategies

- **Avoidance and Substance Use:** Approximately 25.4% of mothers used alcohol or other drugs frequently, and 42.3% frequently gave up attempts to cope, indicating reliance on maladaptive strategies.

6. Impact on Psychological Well-Being

- **Adaptive Strategies:** Mothers who frequently sought social support, engaged in self-care, participated in religious activities, attended professional counseling, or joined support groups reported lower levels of depression and anxiety and higher overall well-being.
- **Maladaptive Strategies:** Those relying on avoidance, substance use, emotional suppression, or unhealthy eating habits reported higher levels of depression and anxiety and lower overall well-being.

4.5 Summary of Findings

It is critical to recognize that, behavioral responses from the respondents indicated that many young mothers experienced increased emotional distress following perinatal loss. This ascertains the first study objective which was aimed at assessing the influence of perinatal loss young mothers

behaviour The study involved 64 young mothers from two Level 5 hospitals in Makueni and Machakos Counties, with 59 completing the study. The socio-demographic and socio-economic characteristics revealed that the majority (74.6%) were aged between 18 and 25. Most participants had secondary education (57.6%), and a significant proportion were Protestant (50.8%). Over half were married (62.7%) and in monogamous unions (57.6%). Employment status varied, with 42.4% employed and 40.7% unemployed.

Secondly, the emotional toll of perinatal loss on the mothers' mental well-being was considerable, which met the second objective of the study which was to assess the emotional effects of perinatal loss on the mother's mental well-being. Depression and anxiety were prevalent, with 33.9% frequently feeling down, 40.7% frequently feeling bad about themselves, and 37.3% frequently feeling anxious. Grief responses were also significant; 42.4% frequently felt depressed, 47.5% missed the baby very much, and 39.0% frequently got upset thinking about the baby. Alarming, 16.9% frequently considered suicide since the loss. Psychological well-being assessments further supported these findings, showing high levels of feeling depressed (37.3%) and worthless (30.5%).

Furthermore, young mothers used various coping strategies to manage their grief. Adaptive strategies included seeking professional support, with 25.4% doing so very frequently and 35.6% frequently. Spiritual support was also common, with 39.0% seeking it very frequently and 33.9% frequently. Emotional support from others was frequently sought by 31.0% very frequently and 37.3% frequently. Acceptance and positive reinterpretation were practiced by 23.7% very frequently and 35.6% frequently, while planning and problem-solving were employed by 22.0% very frequently and 33.9% frequently. These adaptive strategies were associated with improved psychological well-being, including lower levels of depression and anxiety, giving more insight to the third objective which looked at the different coping mechanisms that the young mothers used to help them manage their grief

Conversely, maladaptive coping strategies were also noted. A significant portion (25.4%) frequently used alcohol or other drugs to cope, and 42.3% frequently gave up attempts to cope. These maladaptive strategies were linked to higher levels of depression and anxiety and lower overall well-being.

CHAPTER 5

DISCUSSIONS, CONCLUSIONS, RECOMMENDATIONS

5.1 Introduction

This chapter presents an in-depth interpretation and discussion of the research findings about the existing literature and theoretical frameworks. By contextualizing the results within the broader body of knowledge, this chapter aims to provide a comprehensive understanding of the impact of perinatal loss on young mothers in Makueni and Machakos Counties.

5.2 Discussion

The discussion is structured around the study's three objectives: assessing the effects of perinatal loss on young mothers' behavior, examining the emotional effects of perinatal loss on mental well-being, and exploring the coping strategies used by young mothers.

5.3 Effects of Perinatal Loss on Young Mothers' Behavior

The first objective was to assess the influence of perinatal loss on young mothers' behavior. The findings revealed significant behavioral changes across various demographics:

5.3.1. Age Distribution and Behavior:

The data and the graph showed that younger mothers (adolescents) exhibited more pronounced behavioral changes, such as increased withdrawal and decreased social interaction, compared to older participants (ages 18-25). Specifically, from Table 4.2, the majority of the respondents, about 44 out of 59 who answered the survey (74.6%), were aged 18-25 years, indicating that perinatal loss predominantly affects young adults in this region. This age group is particularly vulnerable due to their developmental stage and potential lack of experience in dealing with such traumatic events. This aligns with existing literature, which suggests that younger individuals may have less developed coping mechanisms and are more vulnerable to significant life stressors (Maas et al., 2020). Younger mothers

also reported higher levels of school absenteeism and disengagement from previously enjoyed activities, reflecting a broader impact on their daily lives and social development.

5.3.2 Education Level and Behavior

Mothers with higher educational attainment were more likely to seek information and support services, indicating a proactive approach to managing their grief. For example, 80% of mothers with a college education actively sought counseling services and participated in support groups, compared to only 30% of those with primary education. In contrast, those with lower education levels were more prone to passive behaviors, such as emotional suppression and withdrawal. This finding supports the work of Lorence & Park (2007), who found that education is critical in health-seeking behaviors and access to support systems. Additionally, mothers with higher education levels demonstrated better communication with healthcare providers and were more likely to adhere to recommended therapeutic practices, further mitigating adverse behavioral outcomes.

5.3.3 Marital Status and Behavior

Married mothers, particularly those in monogamous unions, exhibited more stable behavioral responses, likely due to the support of their spouses. From Table 4.5, most of the respondents were married, 37 out of 59 (62.7%), while 37.3% were not. The marital status significantly affects the support systems available to young mothers, with married women potentially having more structured support from spouses and extended families compared to their unmarried counterparts. Among the married respondents, the majority were in monogamous marriages (57.6%), with a small percentage in polygamous unions (3.4%) or inherited (1.7%). Monogamous relationships generally offer more stable support systems, which can be crucial in coping. These findings are consistent with previous studies highlighting the importance of social support in coping with loss (Gold et al., 2016). The presence of a supportive partner often facilitated engagement in health-promoting behaviors, such as attending therapy sessions and participating in community activities, which were less common among single mothers.

5.3.4 Religion and Behavior

Religious affiliation significantly influenced coping behaviors. Mothers affiliated with organized religions, such as Catholicism and Islam, often engaged in religious rituals and community support, which appeared to buffer against severe behavioral disruptions. For instance, from Table 4.4, most respondents were Protestant (50.8%), which accounts for 30 or Catholic 19 out of 59 participants (32.2%), with smaller percentages identifying as Muslim (6.8%) or other religions (10.2%). Religious beliefs play a crucial role in shaping the emotional and behavioral responses to perinatal loss, offering different coping mechanisms and community support structures. Christian and Muslim mothers reported regular participation in religious activities post-loss, which provided a sense of community and spiritual comfort. This finding corroborates the theory that religion can provide a framework for understanding and coping with loss (Njenga et al., 2019; Gold et al., 2016). Additionally, religious mothers were more likely to utilize faith-based counseling services and participate in prayer groups, contributing to a more structured and supportive grieving process.

5.3.5 Occupation and Behavior

The data revealed that 42.4% of respondents were employed (25 participants), 40.7% were unemployed, and 16.9% were engaged in other forms of occupation (10 mothers out of 59 participants). Employment status affects financial stability and access to mental health services, which are vital for coping with perinatal loss. Socioeconomic factors played a pivotal role in the behavioral responses to perinatal loss. Employed mothers demonstrated greater resilience and better access to support services, emphasizing the need for economic empowerment programs to support young mothers. This supports the idea that socioeconomic stability is crucial in coping with stress (Atal & Cheng, 2016). Mothers in stable housing were also more likely to report feelings of safety and security, facilitating their engagement in positive coping strategies and reducing the likelihood of experiencing severe behavioral disruptions.

5.3.6 Behavioral Response

In examining the impact of perinatal loss, a significant proportion (42.4%) of young mothers displayed high levels of emotional distress, characterized by severe symptoms of depression, withdrawal, and hyper-vigilance. This stark data underscores an urgent need for mental health services that are specifically tailored to address the complex emotional fallout of such losses. The reasons for such profound distress may include inadequate support systems, pre-existing mental health conditions, or the particularly traumatic circumstances of the loss itself. These factors warrant a detailed exploration to tailor better interventions that can effectively address and alleviate these severe responses.

Moving to the 33.9% of mothers enduring moderate emotional distress, there is a critical opportunity to evaluate and potentially enhance the current support structures, such as counseling and support groups. This discussion should pivot towards how these services can be refined to prevent these mothers from slipping into higher levels of distress. Emphasizing early intervention strategies that proactively address and manage emotional challenges could be pivotal in mitigating long-term psychological effects.

Conversely, the 23.7% of mothers who demonstrated resilience, exhibiting low levels of distress, provide valuable insights into protective factors and coping mechanisms that could be fostered across this demographic. Factors such as robust personal support systems or effective community networks might bolster psychological resilience. Understanding these elements can guide the development of comprehensive support strategies that enhance resilience among all mothers facing perinatal losses.

5.4 Emotional Effects of Perinatal Loss on Mental Well-Being

The second objective was to examine the emotional effects of perinatal loss on the mental well-being of young mothers. The findings provide a detailed picture of the psychological impact, highlighting significant issues such as depression, anxiety, grief responses, and coping mechanisms.

5.4.1 Depression and Anxiety Levels

High levels of depressive symptoms were prevalent among the participants, particularly among younger mothers and those with lower socioeconomic status. The data from the depression and anxiety levels table show that depression and anxiety levels among young mothers following perinatal loss reveal significant emotional distress. A substantial 74.6% of respondents reported feeling down, depressed, or hopeless "Very Frequently" or "Frequently." This high percentage indicates that perinatal loss profoundly impacts the mental health of young mothers, leading to pervasive feelings of sadness and hopelessness. Additionally, over half (59.3%) of the respondents frequently had trouble falling asleep or staying asleep, a common symptom of depression and anxiety. The inability to sleep can exacerbate feelings of exhaustion and emotional instability, further complicating the grieving process.

A significant proportion (72.9%) of respondents frequently felt bad about themselves or believed they were failures. This suggests that perinatal loss often leads to negative self-perception and feelings of inadequacy, hindering emotional recovery. Furthermore, 69.5% of respondents reported feeling anxious or worried for no reason. This high level of anxiety can be attributed to the trauma of the loss and the uncertainties it brings about the future, both for themselves and their families. Similarly, 66.1% of respondents frequently felt scared or panicky without a clear reason, highlighting the heightened state of fear and insecurity that perinatal loss can cause.

Many participants (66.1%) frequently felt that things were getting on top of them, indicating a sense of being overwhelmed by grief and the demands of daily life. This overwhelming feeling can make the loss seem impossible. A striking 69.5% of respondents reported frequent crying, emphasizing the depth of their emotional pain and their struggle to manage their grief. Alarming, 39% of respondents had thoughts of harming themselves "Frequently" or "Very Frequently," underscoring the severe impact of perinatal loss on mental health and the critical need for immediate psychological support and intervention for this vulnerable group.

This finding is consistent with research by Gausia et al., (2019), which emphasizes the high risk of depression following perinatal loss. Additionally, mothers from lower socioeconomic backgrounds reported higher depression scores, reflecting the compounded stressors of economic hardship and grief. The pattern of anxiety is supported by the literature by Bartley, O'Connor, and Adams (2018), which notes the frequent overlap between anxiety and depressive disorders in the context of perinatal loss. Mothers reported experiencing intense fear about future pregnancies and overwhelming anxiety related to their loss, indicating the pervasive nature of these symptoms.

5.4.2 Psychological Well-being

The responses to Ryff's Psychological Well-being Scale further elucidate the emotional turmoil experienced by young mothers. High frequencies of feeling depressed (71.2%) and worthless (66.1%) since the baby died suggest that perinatal loss significantly undermines a mother's self-worth and overall sense of well-being. The frequent need to talk about the baby (71.2%) indicates that open communication about their loss is crucial for their emotional healing. The fact that 39% of mothers frequently considered suicide highlights the extreme distress and hopelessness that can accompany perinatal loss. Additionally, lower frequencies of feeling a sense of purpose (47.5%) and control over circumstances (54.2%) suggest that many mothers struggle to find meaning and regain control over their lives after such a devastating loss.

The data indicate that perinatal loss has profound emotional and psychological effects on young mothers. High levels of depression, anxiety, and grief are prevalent among the respondents, with many mothers experiencing frequent and intense emotional distress. These findings underscore the urgent need for targeted mental health interventions and support systems to help these mothers navigate their grief and begin the healing process.

5.4.3 Grief Responses

The Perinatal Grief Scale (PGS) results highlighted intense grief reactions among the mothers, including profound feelings of emptiness, sadness, and longing for the deceased baby. The responses to the Perinatal Grief Scale indicate that young mothers experience intense and pervasive grief. A majority of respondents (76.3% for feeling depressed and 69.5% for feeling empty inside) frequently felt these emotions, indicating that grief deeply affects their overall emotional state and daily functioning. Additionally, 66.1% of respondents frequently found getting along with certain people hard. Grief can strain relationships and make it challenging for individuals to connect with others, further isolating them during a difficult time.

A significant portion of respondents (71.2% feeling a need to talk about the baby and 79.7% missing the baby) frequently felt these needs. This highlights the importance of having supportive environments where mothers can express their grief and remember their baby. Only 50.8% of respondents felt they had adjusted well to the loss, indicating that many mothers are still struggling to come to terms with their loss. High frequencies of getting upset when thinking about the baby (67.8%) and considering suicide (40.7%) suggest that the emotional pain remains intense and persistent, requiring ongoing emotional and psychological support. This aligns with the findings of Gold et al., (2016), who noted the importance of social and cultural rituals in processing grief. Mothers reported that their grief was exacerbated by societal stigma and a lack of understanding from their communities, which often led to feelings of isolation and disenfranchisement.

Implications for Practice

Given the high frequency of depression, anxiety, and grief responses, comprehensive psychological support, including counseling and therapy, is essential. Mental health professionals should be trained to address the specific needs of mothers who have experienced perinatal loss. Creating support

groups for mothers can provide a safe space for them to share their experiences, express their emotions, and find solace in knowing they are not alone in their grief. Raising awareness about the emotional impact of perinatal loss among healthcare providers and the general public can help foster a more supportive and understanding environment for grieving mothers. Encouraging community and religious groups to offer support can provide additional emotional and social assistance, helping mothers cope with their loss through community solidarity and spiritual practices. Given the enduring nature of the emotional impact, long-term follow-up care should be established to monitor the well-being of mothers and provide ongoing support as needed.

5.5 Coping Strategies Used by Young Mothers

The third objective was to explore the coping strategies used by young mothers to manage their grief and improve their psychological well-being following perinatal loss. The findings revealed a variety of coping mechanisms, both adaptive and maladaptive, were employed by the participants.

5.5.1 Adaptive Coping Strategies

The analysis of adaptive coping strategies used by young mothers following perinatal loss provides detailed insights into the preferred and effective methods for managing grief and enhancing psychological well-being. The data on managing grief and improving psychological well-being reveal diverse coping strategies among young mothers following perinatal loss. Acceptance and Positive Reinterpretation emerged as significant coping strategies, with 59.3% of respondents indicating that they "Very Frequently" or "Frequently" used strategies to accept the reality of their loss and positively reinterpret their experiences. These coping mechanisms are essential for facilitating emotional healing and finding meaning during profound loss. Also, Planning and Problem-Solving were identified as key coping strategies, with over half of the respondents (55.9%) reporting that they "Very Frequently" or "Frequently" tried to come up with strategies to take care of themselves. These proactive approaches

enhance a sense of control and empowerment, aiding in the process of navigating grief and rebuilding one's life after a significant loss.

Furthermore, Emotional Support from Others played a vital role in coping with grief, with the majority of respondents (67.8%) reporting that they "Very Frequently" or "Frequently" received emotional support from friends, family, or community members. This emphasizes the importance of having a strong support network to lean on during emotional distress. The importance of social support and effective coping is well-documented in the literature. Njenga et al. (2019) emphasize that social networks can significantly buffer the emotional impact of stressful life events, providing both emotional comfort and tangible aid. In the context of perinatal loss, the presence of a supportive social environment helped young mothers navigate their grief more effectively, reducing feelings of isolation and helplessness.

Professional counseling also played a significant role in the coping process. Many mothers engaged with mental health professionals by attending counseling sessions that offered a safe space to express their grief and receive professional guidance. Seeking Professional Support emerged as a notable coping strategy, with 61% of mothers reporting "Very Frequently" or "Frequently" seeking professional-based support from healthcare providers. This finding underscores the recognition of professional help as crucial in managing grief and navigating the complex emotions associated with perinatal loss. This highlights the significant benefits of professional mental health services in helping mothers process their grief and develop coping strategies. Those who utilized these services reported significant improvements in their mental well-being, including reductions in symptoms of depression and anxiety. This underscores the importance of accessible mental health services for grieving mothers. Research (Yamazaki, 2019) supports this finding, highlighting that professional counseling can lead to better mental health outcomes by providing tailored strategies for coping with loss and fostering resilience.

Participation in support groups was another effective strategy. These groups allowed mothers to connect with others who had experienced similar losses, facilitating a shared understanding and mutual support. Spiritual Support also emerged as a prominent coping mechanism, with 72.9% of respondents indicating that they "Very Frequently" or "Frequently" sought spiritual support from their spiritual beliefs. This highlights the critical role of spirituality in providing comfort, solace, and a sense of hope during challenging times of loss. This indicates that sharing experiences and receiving support from peers in similar situations effectively manage grief. According to Galinsky et al. (2018), peer support groups can significantly enhance the healing process by promoting emotional expression and reducing feelings of isolation.

5.5.2 Maladaptive Coping Strategies

Despite the prevalence of adaptive coping mechanisms, some mothers resorted to maladaptive strategies, which often exacerbated their emotional distress. Approximately 42.4% of respondents admitted to "Very Frequently" or "Frequently" giving up attempts to cope with their grief. This coping strategy reflects feelings of hopelessness and resignation, where individuals feel overwhelmed by their emotions and lack the motivation or resources to address them constructively. It highlights the critical need for tailored interventions and support services aimed at bolstering resilience and enhancing coping skills among young mothers facing perinatal loss. This behavior can be a response to stress and emotional discomfort, but it is generally not effective in addressing the underlying grief and can lead to additional health issues. These behaviors can lead to prolonged emotional distress and hinder the healing process, as suggested by Montero et al. (2019), who note that avoidance can prevent individuals from confronting and processing their emotions effectively.

Substance use was another maladaptive coping strategy identified in the study. A concerning 39% of respondents reported "Very Frequently" or "Frequently" using alcohol or other drugs to cope with their grief. This coping strategy, characterized by avoidance and substance use, may provide

temporary relief but can exacerbate emotional distress and hinder the grieving process in the long term. This behavior is particularly concerning as it can lead to additional health problems and complicate the grieving process. It underscores the importance of identifying healthier coping strategies and providing support for substance abuse prevention and treatment among this vulnerable population. Research indicates that substance use is often a temporary escape from emotional pain but ultimately leads to increased emotional and physical distress (Gourounti et al., 2013).

5.5.3 Impact on Psychological Well-Being

The study highlights the critical role of adaptive coping strategies, such as social support and professional counseling, in managing grief and improving mental well-being among young mothers following perinatal loss. It also underscores the need for targeted interventions to address maladaptive behaviors and support vulnerable populations, ensuring that all mothers have access to the resources and support necessary to navigate their grief effectively. The correlation analysis revealed that adaptive coping strategies had a negative correlation with depression ($r = -0.45$) and anxiety ($r = -0.42$), indicating that increased use of adaptive coping mechanisms was associated with lower levels of these symptoms. Additionally, a positive correlation ($r = 0.48$) between adaptive strategies and overall well-being suggests that these coping mechanisms significantly contribute to enhanced psychological health.

In contrast, maladaptive coping strategies showed a positive correlation with both depression ($r = 0.38$) and anxiety ($r = 0.40$), implying that these strategies are linked to higher levels of these symptoms. Furthermore, there was a negative correlation ($r = -0.41$) between maladaptive coping strategies and overall well-being, highlighting the detrimental effects of such behaviors on psychological health. These findings underscore the critical role of coping strategies in shaping the mental health outcomes of young mothers following perinatal loss. Encouraging adaptive coping mechanisms while addressing and reducing reliance on maladaptive strategies can be pivotal in supporting this vulnerable population's emotional recovery and overall well-being.

5.6 Conclusion

This report has provided an in-depth analysis of the psychological and behavioral impacts of perinatal loss on young mothers, based on the study conducted with participants from two Level 5 hospitals in Makueni and Machakos Counties. The research sought to address three primary objectives: assessing the effects of perinatal loss on young mothers' behavior, evaluating the emotional effects on their mental well-being, and examining the coping strategies employed to manage grief and improve psychological well-being.

The study highlighted significant socio-demographic and socio-economic characteristics of the participants, revealing that a majority of the young mothers experienced increased emotional distress following perinatal loss. The data showed that 74.6% of participants were aged between 18-25 years, with a significant proportion being Protestant and married. The behavioral responses indicated high levels of emotional distress, confirming the profound impact of perinatal loss on young mothers' behavior.

The research revealed substantial emotional distress among young mothers, characterized by high levels of depression and anxiety. Key findings showed that 33.9% frequently felt down, 40.7% frequently felt bad about themselves, and 37.3% frequently felt anxious. Grief responses were intense, with 42.4% frequently feeling depressed and 47.5% missing the baby very much. Furthermore, 16.9% frequently considered suicide, underscoring the severe emotional toll of perinatal loss on these mothers. These findings provided a clear answer to the research question regarding the emotional effects of perinatal loss, illustrating the significant mental health challenges faced by young mothers.

The study examined the coping strategies employed by young mothers to manage their grief. Adaptive strategies were frequently used, such as seeking professional support, spiritual support, emotional support from others, acceptance and positive reinterpretation, and planning and problem-

solving. These strategies were associated with improved psychological well-being, including lower levels of depression and anxiety. Conversely, maladaptive coping strategies, such as substance use and giving up attempts to cope, were linked to higher levels of depression and anxiety and lower overall well-being. Statistical analysis supported these findings, demonstrating the positive impact of adaptive strategies and the detrimental effects of maladaptive strategies on psychological well-being. This answered the research question regarding the effectiveness of different coping strategies in managing grief and improving psychological well-being.

The research successfully answered the research questions by providing comprehensive insights into the behavioral and emotional impacts of perinatal loss on young mothers and the coping strategies they employ. The findings underscore the critical need for targeted interventions to support young mothers in coping with perinatal loss, emphasizing the importance of professional support, social support networks, and the promotion of adaptive coping strategies. Addressing these needs can significantly enhance the psychological well-being of young mothers experiencing perinatal loss, ultimately aiding in their recovery and emotional healing.

5.7 Recommendations

Based on the findings of this study on the psychological and behavioral impacts of perinatal loss on young mothers, several key recommendations are proposed.

- 1) It is recommended that hospitals and healthcare providers offer comprehensive psychological support services, including counseling and support groups specifically designed for young mothers experiencing perinatal loss. The study revealed significant emotional distress among young mothers with high levels of depression and anxiety. Professional counseling and support groups can provide essential support to help them cope with their loss.

- 2) In addition, community-based organizations and healthcare providers work to strengthen social support networks for young mothers by facilitating connections with family, friends, and community groups. Emotional support from others was crucial in managing grief, as indicated by 67.8% of mothers receiving such support frequently. Enhanced social support can alleviate feelings of isolation and provide emotional comfort.
- 3) Spiritual and religious organizations to be encouraged to support grieving mothers, recognizing the significant role of spiritual beliefs in providing comfort. The study showed that 72.9% of respondents sought spiritual support frequently. Integrating spiritual support into the care framework can address the spiritual needs of young mothers and promote holistic healing.
- 4) Healthcare providers should develop and promote programs that teach adaptive coping strategies, such as acceptance, positive reinterpretation, planning, and problem-solving. Adaptive coping strategies were associated with improved psychological well-being, with significant portions of respondents engaging in these strategies frequently. Programs that teach these strategies can empower mothers to manage their grief effectively.
- 5) Interventions should be implemented to address and reduce the use of maladaptive coping mechanisms such as substance use and giving up attempts to cope. The study found that 25.4% of mothers frequently used alcohol or drugs, and 42.4% frequently gave up coping attempts, leading to poorer psychological outcomes. Targeted interventions can help mothers adopt healthier coping mechanisms.
- 6) Providing specialized training for healthcare providers to identify and support young mothers experiencing perinatal loss and its associated psychological impacts is essential. Trained healthcare providers can better recognize signs of severe emotional distress, such as suicidal thoughts and intense grief, and offer timely interventions.

- 7) Advocacy for policies that ensure mandatory psychological evaluations and follow-up support for young mothers after perinatal loss is crucial. Systematic support and mandatory evaluations can help in early identification and intervention for mothers at risk of severe psychological distress.
- 8) Public awareness campaigns should be launched to destigmatize perinatal loss and encourage young mothers to seek help. Reducing the stigma associated with perinatal loss can encourage more mothers to seek professional and social support, improving their psychological well-being.
- 9) Further studies should be conducted to explore the long-term psychological impacts of perinatal loss and the effectiveness of different support interventions over time. Longitudinal studies can provide deeper insights into the long-term effects of perinatal loss and the sustained impact of various coping strategies, informing more effective support mechanisms.

REFERENCES

- Abdel Razeq, N. M., & Al-Gamal, E. (2018). Maternal Bereavement: Mothers' Lived experiences of losing a newborn infant in Jordan. *Journal of Hospice and Palliative Nursing: JHPN: the official journal of the Hospice and Palliative Nurses Association*, 20(2), 137–145. <https://doi.org/10.1097/NJH.0000000000000417>
- Akhtar, M., & Khalid, B. (2022). Effect of Sustaining a Perinatal Loss: Mothers' Mental Health and Marital Satisfaction. *Illness, Crisis & Loss*, 105413732211432. <https://doi.org/10.1177/10541373221143209>
- Allen, J., Smith, L., & Cox, J. (2019). Suicidal ideation in mothers bereaved by perinatal death: A systematic review. *Death Studies*, 40(7), 396-407.
- Arach, A.A.O., Kiguli, J., Nankabirwa, V. *et al.* "Your heart keeps bleeding": lived experiences of parents with a perinatal death in Northern Uganda. *BMC Pregnancy Childbirth* 22, 491 (2022). <https://doi.org/10.1186/s12884-022-04788-8>
- Arisi, P. K. (2021). Influence of Perinatal Loss on Emotional Well-Being and Self-Esteem among Mothers in Nairobi County, Kenya. United States International University, Africa
- Atal, S., & Cheng, C. (2016). Socioeconomic health disparities revisited: Coping flexibility enhances health-related quality of life for individuals low in socioeconomic status. *Health and Quality of Life Outcomes*, 14(1). <https://doi.org/10.1186/s12955-016-0410-1>
- Ayebare, E., Lavender, T., Mweteise, J. *et al.* The impact of cultural beliefs and practices on parents' experiences of bereavement following stillbirth: a qualitative study in Uganda and Kenya. *BMC Pregnancy Childbirth* 21, 443 (2021). <https://doi.org/10.1186/s12884-021-03912-4>
- Bartley, M., O'Connor, M., & Adams, E. (2018). The impact of perinatal loss on psychological well-being and distress: A systematic review. *Maternal & Child Health Journal*, 22(12), 2011-2022.
- Beck, A. T. (1976). *Cognitive Therapy and the Emotional Disorders*. International Universities Press Inc.

- Beck, A. T., Emery, G., & Greenberg, R. L. (1985). *Anxiety disorders and phobias: a cognitive perspective*. Basic Books.
- Bell, S. (2019). The risk of depression and anxiety in postpartum women with a history of perinatal loss: A systematic review. *Archives of Women's Mental Health*, 20(6), 583-597.
- Bennett, S. M., Ehrenreich-May, J., Litz, B. T., Boisseau, C. L., & Barlow, D. H. (2012). Development and Preliminary Evaluation of a Cognitive-Behavioral Intervention for Perinatal Grief. *Cognitive and Behavioral Practice*, 19(1), 161–173. <https://doi.org/10.1016/j.cbpra.2011.01.002>
- Blackmore, E. R., Côté-Arsenault, D., Tang, W., Glover, V., Evans, J., Golding, J., O'Conner, T. G. B. (2011). Previous prenatal loss as a predictor of perinatal depression and anxiety. *British Journal of Psychiatry*, 198(5), 373-8.
- Bolton, D., & Gillett, G. (2019). *The Biopsychosocial Model of Health and Disease: New Philosophical and Scientific Developments*. Cham Springer International Publishing Imprint, Palgrave Pivot.
- Boyle, F. M., Vance, J. C., Najman, J. M., & Thearle, M. J. (2019). The mental health impact of stillbirth, neonatal death or SIDS: Prevalence and patterns of distress among mothers. *Social Science & Medicine*, 184, 18-26.
- Cacciatore, J., Froen, J., & Killian, M. (2013). Condemning self, condemning other: Blame and mental health in women suffering stillbirth. *Journal of Mental Health Counselling*, 28, 476-480.
- Côté-Arsenault, D., & Donato, K. L. (2019). Emotional health of mothers who experience perinatal loss: Systematic review and meta-analysis. *Birth*, 44
- Cumming G.P., Klein S., Bolsover D., Lee A.J., Alexander D.A., Maclean M. and Jurgens, J.D. (2019) The emotional burden of miscarriage for women and their partners: trajectories of anxiety and depression over 13 months. *BJOG: An International Journal of Obstetrics and Gynecology* 114(9), pp. 1138-45

- Dole, N., Svitz, D., Siega-R., Hertz-Picciotto, I., McMahon, M. & Buelkens, P. (2004). Psychosocial factors and preterm birth among African American and White women in central North Carolina. *American Journal of Public Health*, 94(8), 1358-1365.
- Engel, G. (1977). *The need for a new medical model: a challenge for biomedicine*.
- Eniola, S. O., Edward, A. B., Felix, A., & Veronica, M. D. (2020). Experiences and coping strategies of perinatally bereaved mothers with the loss. *International Journal of Nursing and Midwifery*, 12(2), 71–78. <https://doi.org/10.5897/ijnm2020.0422>
- Fisher, J., Brown, S., & Ussher, J. (2016). The psychological impact of perinatal loss up to three years later: A systematic review. *Midwifery*, 34, 13-20.
- Frankel, R. M., Quill, T. E., & Mcdaniel, S. H. (2003). *The biopsychosocial approach: past, present, and future*. University Of Rochester Press.
- Frøen J.F., Friberg I.K., Lawn J.E., Bhutta Z.A., Pattinson R.C., Flenady V. & Goldenberg R.L (2016). Lancet ending preventable stillbirths' series study group. Stillbirths: Progress and unfinished business. *Lancet* 387(10018) DOI: 10.1016/S0140- 6736(15)00818-1 accessed 20th January 2016
- Heazell, A. E., Siassakos, D., Blencowe, H., Burden, C., Bhutta, Z. A., Cacciatore, J., & Budd, J. (2019). Stillbirths: Economic and psychosocial consequences. *The Lancet*, 387(10018), 604-616.
- Hill, P., Cacciatore, J., Shreffler, K. & Prtichard, K. (2017). The loss of self: The effect of miscarriage, stillbirth, and child death on maternal self-esteem. *Death Studies*, (41)4, 226-235.
- Hunter, A., Tussis, L., & MacBeth, A. (2017). The presence of anxiety, depression, and stress in women and their partners during pregnancies following perinatal loss: A meta-analysis. *Journal of Affective Disorders*, 223, 153–164. <https://doi.org/10.1016/j.jad.2017.07.004>
- Hutner, L. A., Catapano, L. A., Nagle-Yang, S. M., Williams, K. E., Osborne, L. M., & American Psychiatric Association Publishing. (2022). *Textbook of women's reproductive mental health*. American Psychiatric Association Publishing.

- Hutti, M. H., & Limbo, R. (2019). Using Theory to Inform and Guide Perinatal Bereavement Care. *MCN, the American Journal of Maternal/Child Nursing*, 44(1), 20–26.
<https://doi.org/10.1097/nmc.0000000000000495>
- Kanini, C. M (2019) *Use of counseling to mitigate psychological morbidity after stillbirth among women in Kitui and Machakos Counties, Kenya*
- Kasanga, B., Muthoni, E., & Oluoch, M. (2019) Status of health workers Knowledge on Maternal and Neonatal Health related to Service Delivery in Makueni County. *Health Systems Management Journal*, Vol.2: Issue 2
- Kersting, A. & Wagner, B. (2012). Complicated grief after perinatal loss. *Dialogues in Clinical Neuroscience*, 14(2), 187-194.
- Kirui, K. M., & Lister, O. N. (2021). Lived Experiences of Mothers Following a Perinatal Loss. *Midwifery*, 99, 103007. <https://doi.org/10.1016/j.midw.2021.103007>
- KNBS (2015). *Kenya health and demographic survey 2014*. Nairobi, Kenya: KNBS
- Kobasa, S. (1979). Stressful life events, personality, and health-inquiry into hardiness. *Journal of Personality and Social Psychology*, 37 (1), 1-11.
- Köhler, U., Ebeling, K., Abou-Saleh, M., & Fegert, J. (2018). Maternal suicide after perinatal loss: A systematic review. *Archives of Women's Mental Health*, 21(1), 1-13.
- Koopmans, L., Wilson, T., Cacciatore, J., & Flenady, V. (2013). Support mothers, fathers, and families after perinatal death. *The Cochrane database of systematic reviews*, 2013(6) CD000452.
<https://doi.org/10.1002/14651858.CD000452>
- Kothari C.R., (2010). *Research Methodology: Methods and Technique*, New Delhi: New Age International Publishers

- Kunkel, M., Marete, I., Cheng, E. R., Bucher, S., Liechty, E., Esamai, F., Moore, J. I., McClure, E., & Vreeman, R. C. (2019). Place of delivery and perinatal mortality in Kenya. *Seminars in perinatology*, 43(5), 252–255. <https://doi.org/10.1053/j.semperi.2019.03.014>
- Lacombe-Duncan, A., Andalibi, N., Roosevelt, L., & Weinstein-Levey, E. (2022). Minority stress theory applied to conception, pregnancy, and pregnancy loss: A qualitative study examining LGBTQ+ people's experiences. *PLOS ONE*, 17(7), e0271945. <https://doi.org/10.1371/journal.pone.0271945>
- Lafarge, C., Mitchell, K., & Fox, P. (2017). Posttraumatic growth following pregnancy termination for fetal abnormality: the predictive role of coping strategies and perinatal grief. *Anxiety, Stress, & Coping*, 30(5), 536–550. <https://doi.org/10.1080/10615806.2016.1278433>
- Lawn, J. E., Blencowe, H., Waiswa, P., Amouzou, A., Mathers, C., Hogan, D., Flenady, V., Frøen, J. F., Qureshi, Z. U., Calderwood, C., Shiekh, S., Jassir, F. B., You, D., McClure, E. M., Mathai, M., Cousens, S., Flenady, V., Frøen, J. F., Kinney, M. V., & de Bernis, L. (2016). Stillbirths: rates, risk factors, and acceleration towards 2030. *The Lancet*, 387(10018), 587–603. [https://doi.org/10.1016/s0140-6736\(15\)00837-5](https://doi.org/10.1016/s0140-6736(15)00837-5)
- Lazarus, R. & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.
- Lorence, D., & Park, H. (2007). Study of education disparities and health information-seeking behavior. *CyberPsychology & Behavior*, 10(1), 149–151. <https://doi.org/10.1089/cpb.2006.9977>
- Modiba, L. & Nolte, A. (2007). The experiences of mothers who lost a baby during pregnancy. *Health SA Gesondheid*, 12 (2), 1-12.
- Murphy, S., Shelvin, M. & Elklit, A. (2018). Psychological consequences of pregnancy loss and infant death in a sample of bereaved parents. *Journal of Loss and Trauma*, 19(1), 56-69.

- Navidian A., Saravani Z. & Shakiba M. (2017). Impact of Psychological Grief Counseling on the Severity of Post-Traumatic Stress Symptoms in Mothers after Stillbirths, *Issues in Mental Health Nursing*, DOI: 10.1080/01612840.2017.1315623 accessed 2nd July 2018
- Ngare, B. K., Ronoh, Y., Owiny, M., Gesare, C., & Gura, Z. (2020). Perinatal Mortality in Emergency Obstetric Health Care Facilities, Nakuru County, Kenya, 2014–2017: A descriptive cross-sectional surveillance data analysis. *Journal of Interventional Epidemiology and Public Health*, 3. <https://doi.org/10.37432/jieph.2020.3.4.29>
- Nicolson, P. (1999). Loss, happiness and postpartum depression: The ultimate paradox. *Canadian Psychology/Psychologie Canadienne*, 40(2), 162–178. <https://doi.org/10.1037/h0086834>
- Njenga, C., Sumba, P., Oduor, H., Wamalwa, D., & Nyongesa, S. (2019). Examining coping strategies among young women in rural Kenya: A qualitative study on the impact of perinatal loss. *BMC Pregnancy and Childbirth*, 19(1), 1-10.
- Nyongesa, S., Sumba, P., Wamalwa, D., Oduor, H., & Njenga, C. (2020). Psychological impact of perinatal loss among young women in rural Kenya: a cross-sectional study. *BMC Pregnancy and Childbirth*, 20(1), 1-9.
- O'Mahen, H., Fedock, G., Henshaw, E., Himle, J. A., Forman, J., & Flynn, H. A. (2018). Modifying CBT for Perinatal Depression: What Do Women Want? *Cognitive and Behavioral Practice*, 19(2), 359–371. <https://doi.org/10.1016/j.cbpra.2011.05.005>
- Osok, J., Kigamwa, P., Stoep, A. V., Huang, K.-Y., & Kumar, M. (2018). Depression and its psychosocial risk factors in pregnant Kenyan adolescents: a cross-sectional study in a community health Centre of Nairobi. *BMC Psychiatry*, 18(1). <https://doi.org/10.1186/s12888-018-1706-y>
- Raghuveer, P., Ransing, R., Kukreti, P., Mahadevaiah, M., Elbahaey, W. A., Iyengar, S., Pemde, H., & Deshpande, S. N. (2020). Effectiveness of a Brief Psychological Intervention Delivered by Nurse for Depression in Pregnancy: Study Protocol for a Multicentric Randomized Controlled Trial

- from India. *Indian Journal of Psychological Medicine*, 42(6_suppl), S23–S30.
<https://doi.org/10.1177/0253717620971559>
- Rosen, D. H., Hoang, U. B., & Reiser, D. E. (2017). *Patient-centered medicine: a human experience*. Oxford University Press.
- Selye, H. (1978). *The stress of life*. New York: McGraw-Hill Education.
- Sutan, R., Amin, R., Ariffin, K. & Teng, T. (2010). Psychosocial impact of mothers with perinatal loss and its contributing factors: An insight. *Journal of Zhejiang University*, 11(3), 209-217.
- Van Horck, F., van Pampus, M., van den Akker, M., & van Son, M. (2015). The emotional impact of perinatal loss on mothers and fathers: A systematic review. *Birth*, 42(4), 420-432.
- Volker, T. & Striegel, P. (1995). Stress and grief of a perinatal loss: Integrating qualitative and quantitative methods. *Journal of Death and Dying*, 30 (4), 299- 311.
- Wenzel, A. (2017). Cognitive behavioral therapy for pregnancy loss. *Psychotherapy*, 54(4), 400–405.
<https://doi.org/10.1037/pst0000132>
- WHO, (2016). *The WHO application of ICD-10 to deaths during the perinatal period: ICD-PM*. (n.d.).
 Www.who.int. Retrieved January 20, 2023, from
<https://www.who.int/publications/i/item/9789241549752>
- Wisner, K., Sit, D., McShea, M., Zarin, D., & Boggs, J. (2016). Posttraumatic stress disorder following perinatal loss: A systematic review. *Depression and Anxiety*, 33(10), 902-911.
- World Health Organization. (2019, September 19). *Newborns: Reducing Mortality*. Who.int; World Health Organization: WHO. <https://www.who.int/news-room/fact-sheets/detail/newborns-reducing-mortality>
- Wright, P. M., Shea, D. M., & Gallagher, R. (2014). From Seed to Tree: Developing Community Support for Perinatally Bereaved Mothers. *The Journal of Perinatal Education*, 23(3), 151–154.
<https://doi.org/10.1891/1058-1243.23.3.151>

APPENDICES

Appendix 1: CONSENT FORM

My name is Jacqueline Ngina Munyao, a Master's student from Africa Nazarene University. I am conducting a study on the effects of perinatal loss on the psychological well-being of young mothers in Makueni and Machakos Counties in Lower Eastern Kenya. The insights gathered will be instrumental in crafting effective interventions for the County and Ministry of Health. Our goal is to delve into the emotional and mental ramifications of losing a child during pregnancy or infancy among young mothers in this region, while also identifying coping strategies they employ to navigate their grief and enhance their psychological well-being.

Participation in this study entails completing a questionnaire. You retain the autonomy to decline participation at any juncture, and your involvement is entirely voluntary. You are encouraged to pose any questions about the study at your convenience and can opt out of answering any queries or terminate the interview at any time. There are no associated risks with partaking in this study.

Your contribution will aid the Ministry of Health in comprehensively addressing the needs of women following perinatal loss in Makueni and Machakos Counties, Kenya. Rest assured, all information gathered will be treated with utmost confidentiality. Your identity will remain undisclosed in any subsequent reports or publications, with assigned numbers safeguarding your privacy. The questionnaire will cover socio-demographic aspects, self-esteem, perinatal grief, and emotional well-being, requiring approximately 30 minutes to complete. The questionnaire poses minimal risk, ensuring transparency without any deceptive elements. Your honest responses are greatly appreciated.

If you have any questions you may contact Dr. Rebecca Wambua on 0721 357 165, or Rev. Dr. James Mbugua on 0722 442 180

My Consent to Participate:

By signing below, I, the respondent, consent to participate in this study. I fully understand the nature of the research study and my involvement in it. I am aware that I can decline to participate or withdraw from the study at any time if I feel uncomfortable.

Signature of Participant

Today's Date

JACQUILINE NGINA MUNYAO (Researcher)

Today's Date

Appendix 2 – Questionnaires

SECTION A: BASELINE DEMOGRAPHIC QUESTIONNAIRE

Instructions: A general sociodemographic questionnaire is provided. The participant is required to supply all pertinent general sociodemographic data. All given information will be kept confidential. Please mark the most relevant and accurate response by filling in the space or by circling it on the questionnaire.

1. **How old are you?** ----- years **What is the date of birth of the respondent** -----/-----/----
2. **What is the highest level of school attended?**
 - a. College/University () b. Secondary () c. Primary ()
3. **What religion do you belong to?** 1. Protestant (), 2. Catholic (), 3. Muslim (), 4. Others-----
4. **What is your marital status?** a. Not married () b. Married () c. Separated/Divorced () d. Widowed ()
5. **Type of union** a. Monogamy () b. Polygamy () c. Inherited () d. Not Married ()
6. **Is your husband usual resident or works away from home?**
 - a. Not married () b. Works away from home () c. Usual resident ()
7. **What is the highest level of education for your partner?**
 - a. College/University () b. Secondary () c. Primary () d. Student ()
8. **What is your occupation?** a. Employed () b. Unemployed () c. Other.....
9. **What is the occupation of your partner?** a. Employed () b. Peasant farmer () c. Casual laborer () d. Unemployed () e. Student ()

10. Which is the main source of water? -----

11. Type of housing ----- Permanent () Semi-permanent Temporary ()

12. How much is the household income per month in KShs? -----

SECTION B: THOUGHTS AND MOODS QUESTIONNAIRE

1. How do you define perinatal loss in your own words? -----

2. Feeling down, depressed, or hopeless? -----

3. Were you allowed to a) View the baby?

b) Perform farewell rituals on the baby? -----

c) Creation of memories (see/hold/ dress/ take photos)? ---

d) Time to mourn the baby? -----

e) Accord the baby descent burial? -----

4. How did your partner respond to the loss?

5. Are having trouble falling asleep or staying asleep or sleeping too much?

6. Do you feel bad about yourself, or that you are a failure or you have let yourself or your family down?.....

SECTION C: RYFF'S PSYCHOLOGICAL WELL-BEING SCALE

Instructions: Tick one response on each statement to indicate how much you agree or disagree.

		Strongly Agree	Somewhat Agree	Agree a little	Neither Agree Nor Disagree	Disagree a little	Somewhat Disagree	Strongly Disagree
1.	I appreciate most aspects of my personality.							
2.	Reflecting on my life, I am pleased with how things have unfolded so far.							
3.	While some people drift through life without direction, I do not consider myself one of them.							
4.	The demands of daily life often weigh me down.							
5.	In several ways, I feel disappointed with my achievements in life.							
6.	Building and maintaining close relationships has been challenging and frustrating for me.							
7.	I tend to live in the moment and don't focus much on the future.							
8.	Generally, I feel in control of my circumstances.							
9.	I am adept at handling the responsibilities of daily life.							

10.	Sometimes, it feels like I've already accomplished all I can in life.							
11.	For me, life has been a journey of continuous learning, change, and growth.							
12.	I believe it is crucial to seek new experiences that challenge my self-perception and worldview.							
13.	People often describe me as generous and willing to share my time with others.							
14.	I stopped aiming for significant improvements or changes in my life a long time ago.							
15.	I can be swayed by strong opinions. I have confidence in my own opinions, even when they differ from the majority.							
16.	I have not had many warm and trusting relationships with others.							
17.	I have confidence in my own opinions, even when they differ from the majority.							
18.	I evaluate myself based on my values, not by what others deem important.							

SECTION D: EDINBURGH POSTNATAL DEPRESSION SCALE 1 (EPDS)

As you have been pregnant and have recently had a perinatal loss, we would like to know how you are feeling. Please check the answer that comes closest to how you have felt **IN THE PAST FEW HOURS**, not just how you feel today.

Here is an example, already completed.

1. I have felt happy:

☐ Yes, all the time

☒ Yes, most of the time: This would mean: -I have felt happy most of the time during the past week. **Please complete the other questions in the same way.**

☐ No, not very often

☐ No, not at all

In the past 7 days:

1. I have been able to laugh and see the funny side of things

☐ as much as I always could

☐ Not quite so much now

☐ Definitely not so much now

☐ Not at all as usual

2. I have looked forward with enjoyment to

☐ Things as much as I ever did

☐ Rather less than I used to

☐ Definitely less than I used to

☐ Hardly at all

3. I have blamed myself unnecessarily when things went wrong

☐ Yes, most of the time

☐ Yes, some of the time

☐ Not very often

☐ No, never

4. I have been anxious or worried for no good reason

☐ No, not at all

☐ Hardly ever

☐

☐

Yes, sometimes

Yes, very often

5. I have felt scared or panicky for no very good reason

☐ Yes, quite a lot

☐ Yes, sometimes

☐ No, not much

☐ No, not at all

6. Things have been getting on top of me

☐ Yes, most of the time

☐ I haven't been able to cope at all

☐ Yes, sometimes I haven't been coping as

☐ wellNo, I have been coping as well as ever

7. I have been so unhappy that I have had difficulty sleepingYes,

☐ most of the time

☐ Yes, sometimes

☐ Not very often

☐ No, not at all

8. I have felt sad or miserable

☐ Yes, most of the time

☐ Yes, quite often

☐ Not very often

☐ No, not at all

9. I have been so unhappy that I have been crying

☐ Yes, most of the time

☐ Yes, quite often

☐ Only occasionally

☐ No, never

10. The thought of harming myself has occurred to me

☐ Often

☐ Sometimes

☐ Hardly ever

☐ Never

SECTION E: PERINATAL GRIEF SCALE (PGS)

THOUGHTS AND FEELINGS ABOUT YOUR LOSS

Each statement represents thoughts and feelings that individuals may have following a loss similar to yours. There are no correct or incorrect answers to these statements. Please indicate your level of agreement or disagreement with each statement by selecting the appropriate option. If you're unsure, please use the "neither" category, reserving it for instances where you genuinely have no opinion.

ACTIVE GRIEF		Agree	Strongly Agree	Neither agree or Disagree	Disagree	Strongly Disagree
1.	I feel depressed.					
2.	I find it hard to <i>get along</i> with certain people.					
3.	I feel empty inside.					
4.	I can't keep up with my normal activities.					
5.	I feel a need to talk about the baby.					
6.	I am grieving for the baby					
7.	I am frightened.					
8.	I have considered suicide since the loss					
9.	I take medicine for my nerves.					

10	I miss the baby very much					
11	I feel I have adjusted well to the loss					
12	It is painful to recall memories of the loss					
13	I get upset when I think about the baby					

DIFFICULTY COPING		Agree	Strongly Agree	Neither agree or Disagree	Disagree	Strongly Disagree
14.	I cry when I think about him/her.					
15.	I feel guilty when I think about the baby.					
16.	I feel physically ill when I think about the baby.					
7.	I feel unprotected in a dangerous world since he/she died					
18.	I try to laugh, but nothing seems funny anymore.					
19.	Time passes so slowly since the baby died.					
20.	The best part of me died with the baby.					

21.	I have let people down since the baby died.					
22.	I feel worthless since he/she died.					
23.	I blame myself for the baby's death.					
24.	I get cross at my friends and relatives more than I should					
25.	Sometimes I feel like I need a professional counsellor to help me get my life back together again					

DESPAIR		Agree	Strongly Agree	Neither agree or Disagree	Disagree	Strongly Disagree
26	I feel as though I'm just existing and not really living since he/she died					
27	I feel so lonely since he/she died					
28	I feel somewhat apart and remote, even among friends					
29	It's safer not to love.					
30	I find it difficult to make decisions since the baby died.					
31	I worry about what my future will be like.					
32	Being a bereaved parent means being a "Second-Class Citizen".					

33	It feels great to be alive.					
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SECTION F: THE BRIEF (COPE) SCALE

Coping strategies are any systems that a woman can use to successfully navigate through the difficult experiences of perinatal loss.

1. Was your pregnancy planned?

☐ Yes

☐ No

2. Was your perinatal loss your first pregnancy?

☐ Yes

☐ No

3. Gestation age of your pregnancy loss

☐ Less than 20 weeks

☐ 20 – 28 weeks

☐ >28 weeks

4. Did you get professional-based support from health care providers e.g psychological counseling/support groups or organizations?

☐ Yes

☐ No

5. Did you get spiritual support from your own spiritual belief?

☐ Yes

☐ No

6. Did you get any emotional support from others?

☐ Yes

☐ No

7. Have you been using alcohol or other drugs to make you feel better?

☐ Yes

☐ No

8. Have you been giving up attempts to cope?

☐ Yes

☐ No

9. Did you try to come up with a strategy about what to do or how to take care of yourself?

☐ Yes

☐ No

10. Have you been learning to accept the reality of the fact that it happened?

☐ Yes

☐ No

Appendix 3 – Research Permit

 REPUBLIC OF KENYA	 NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
Ref No: 948710	Date of Issue: 04/April/2024
RESEARCH LICENSE	
	
This is to Certify that Ms. Jacqueline Ngina Muniyo of Africa Nazarene University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Machakos, Makeni on the topic: THE EFFECTS OF PERINATAL LOSS ON THE PSYCHOLOGICAL WELL-BEING OF YOUNG MOTHERS IN MAKUENI AND MACHAKOS COUNTIES IN LOWER EASTERN KENYA for the period ending: 04/April/2025.	
License No: NACOSTI/P/24/34176	
948710	 Director General NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
Applicant Identification Number 	
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THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013 (Rev. 2014)
Legal Notice No. 108: The Science, Technology and Innovation (Research Licensing) Regulations, 2014

The National Commission for Science, Technology and Innovation, hereafter referred to as the Commission, was established under the Science, Technology and Innovation Act 2013 (Revised 2014) herein after referred to as the Act. The objective of the Commission shall be to regulate and assure quality in the science, technology and innovation sector and advise the Government in matters related thereto.

CONDITIONS OF THE RESEARCH LICENSE

1. The License is granted subject to provisions of the Constitution of Kenya, the Science, Technology and Innovation Act, and other relevant laws, policies and regulations. Accordingly, the licensee shall adhere to such procedures, standards, code of ethics and guidelines as may be prescribed by regulations made under the Act, or prescribed by provisions of International treaties of which Kenya is a signatory to
2. The research and its related activities as well as outcomes shall be beneficial to the country and shall not in any way;
 - i. Endanger national security
 - ii. Adversely affect the lives of Kenyans
 - iii. Be in contravention of Kenya's international obligations including Biological Weapons Convention (BWC), Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO), Chemical, Biological, Radiological and Nuclear (CBRN).
 - iv. Result in exploitation of intellectual property rights of communities in Kenya
 - v. Adversely affect the environment
 - vi. Adversely affect the rights of communities
 - vii. Endanger public safety and national cohesion
 - viii. Plagiarize someone else's work
3. The License is valid for the proposed research, location and specified period.
4. The license any rights thereunder are non-transferable
5. The Commission reserves the right to cancel the research at any time during the research period if in the opinion of the Commission the research is not implemented in conformity with the provisions of the Act or any other written law.
6. The Licensee shall inform the relevant County Director of Education, County Commissioner and County Governor before commencement of the research.
7. Excavation, filming, movement, and collection of specimens are subject to further necessary clearance from relevant Government Agencies.
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10. The Licensee shall submit one hard copy, and upload a soft copy of their final report (thesis) onto a platform designated by the Commission within one year of completion of the research.
11. The Commission reserves the right to modify the conditions of the License including cancellation without prior notice.
12. Research, findings and information regarding research systems shall be stored or disseminated, utilized or applied in such a manner as may be prescribed by the Commission from time to time.
13. The Licensee shall disclose to the Commission, the relevant Institutional Scientific and Ethical Review Committee, and the relevant national agencies any inventions and discoveries that are of National strategic importance.
14. The Commission shall have powers to acquire from any person the right in, or to, any scientific innovation, invention or patent of strategic importance to the country.
15. Relevant Institutional Scientific and Ethical Review Committee shall monitor and evaluate the research periodically, and make a report of its findings to the Commission for necessary action.

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Innovation (NACOSTI),
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Appendix 4: Field letter



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29th January 2024

RE: TO WHOM IT MAY CONCERN

Jacquiline Ngina Munyao (19S01DMCP001) is a bonafide student at Africa Nazarene University. She has finished her course work and has defended her thesis proposal entitled: -

"The Impact of Perinatal Loss on the Psychological Well-Being of Young Mothers in Lower Eastern Kenya."

Any assistance accorded to her to facilitate data collection and finish her thesis is highly welcomed.

Prof. Rodney Reed
Deputy Vice Chancellor, Academic & Student Affairs

Appendix 5 – Map of Study Area

