



ADDIS ABABA UNIVERSITY

COLLEGE OF HEALTH SCIENCES

SCHOOL OF NURSING & MIDWIFERY

**THE PREVALENCE AND CONTRIBUTING FACTORS OF GRIEF
IN WOMEN EXPERIENCING ABORTION IN SELECTED
PUBLIC HOSPITALS, ADDIS ABABA, ETHIOPIA 2025.**

BY: TSION BEWKETU (BSc in Nursing)

**A THESIS SUBMITTED TO THE SCHOOL OF NURSING AND
MIDWIFERY, COLLEGE OF HEALTH SCIENCES, ADDIS
ABABA UNIVERSITY, FOR PARTIAL FULFILMENT OF THE
REQUIREMENT FOR THE DEGREE OF MASTER
OF SCIENCE IN MATERNITY AND REPRODUCTIVE HEALTH
NURSING**

June, 2025

Addis Ababa, Ethiopia.

ADDIS ABABA UNIVERSITY
COLLEGE OF HEALTH SCIENCES
SCHOOL OF NURSING & MIDWIFERY

Name of investigator	Tsion Bewketu Mekonen
Name of advisers	Dr. Leul Deribe (PhD, Assistant Prof) Niguse Tadele(Msc, Associate prof)
Full title of the research project	The prevalence and contributing factors of grief in women experiencing abortion in selected public hospitals, Addis Ababa, Ethiopia 2025
Duration of the study	November- June 2025
Study area	Addis Ababa, Ethiopia
Total cost of the project	32,301.50 Ethiopian birr
Address of investigator	Phone : +251966739640 E-mail : tsionbewketu111@gmail.com
Address of advisor	Phone: +251911973983 E-mail: leul.deribe@gmail.com
Address of advisor	Phone : +251913163130 E-mail : nigusie.tadele@aau.edu.et

Acknowledgment

I sincerely thank Addis Ababa University College of Health Sciences, School of Nursing and Midwifery, for permitting me to conduct this study and sponsoring my enrollment in this master's program.

I want to thank my advisers, Dr. Leul Deribe and Niguse Tadele, for their invaluable guidance, support, and encouragement throughout this study. Their insightful feedback and constructive criticism have been pivotal in shaping this thesis.

I also want to thank the study participants for their time and willingness to share their experience, and the data collectors team for their tireless efforts in gathering the necessary information for this study.

List of Acronyms and Abbreviations

AAU- Addis Ababa University

BSc: Bachelor of Science

HC- Health Center

MCH- Maternal and Child Health

MSc: Master of Science

PAC: Post-Abortion Care

PTSD- Post-Traumatic Stress Disorder

SDG- Sustainable Development Goal

SPSS- Statistical Package for the Social Sciences

SRH- Sexual and Reproductive Health

WHO- World Health Organization

Contents

Acknowledgment	ii
List of Acronyms and Abbreviations	iii
List of Tables	vi
List of Figures	vii
Abstract	viii
Chapter One: Introduction.....	1
1.1 Background	1
1.2 Statement of the Problem.....	3
1.3 Significance of the Study	6
Chapter Two: Literature Review.....	7
2.1 Prevalence of grief in women with abortion.....	7
2.2 Factors Contributing to grief in Women with abortion	8
2.2.1 Socio-demographic factors	8
2.2.2 Reproductive Health History	8
2.2.3 Support Systems and Lifestyle Factors	9
2.2.4 Pregnancy related Factor.....	9
2.3 Conceptual Framework	11
2.4 Hypothesis.....	12
2.5 Expected outcomes	12
Chapter Three: Objectives.....	13
3.1 General objectives.....	13
3.2 Specific objectives	13
Chapter Four: Methodology.....	14
4.1 Study area.....	14
4.2 Study design and period.....	14
4.3 Source of population and study population.....	14
4.3.1 Source of Population.....	14
4.3.2 Study population	14
4.4 Inclusion and exclusion criteria	15
4.4.1 Inclusion criteria	15
4.4.2 Exclusion criteria	15

4.5 Sample size determination and sampling procedure	15
4.5.1 Sample size determination	15
4.5.2 Sampling procedure	16
4.6 Study variable	17
4.6.1 Dependent variable	17
4.6.2 Independent variable	17
4.7 Operational definitions.....	18
4.8 Data collection instrument and procedure	19
4.9 Data Quality Assurance.....	20
4.10 Data Analysis	20
4.11 Ethical Consideration	20
4.12 Dissemination Plan of Study Results	21
Chapter Five: Results	22
5.1 Socio-demographics characteristics of the participants	22
5.2 Reproductive health history characteristics of the participants	24
5.3 Support system and life style characteristics of the participants	26
5.4 Pregnancy related characteristics of the participants	27
5.5 Prevalence of grief	27
5.6 Contributing factors of grief	28
Chapter Six: Discussion, Strength and Limitations	31
6.1 Discussion	31
6.2 Strengths and Limitations	33
Chapter Seven: Conclusion	34
Chapter Eight: Recommendation	35
Reference	36
Annex 1: Consent.....	40
Annex 2: Questionnaire	41
Annex 3: Consent in Amharic version	49
Annex 4 : Questionnaire in Amharic version.....	50

List of Tables

Table 1 Proportional allocation of the total sample size from selected hospitals based on the previous three months.....	16
Table 2 The socio-demographic characteristics of women experiencing abortion in selected public hospitals, Addis Ababa, Ethiopia 2025(n=422).	23
Table 3 Reproductive history characteristics of women experiencing abortion in selected public hospitals, Addis Ababa, Ethiopia 2025(n=422)	25
Table 4 Subscale scores for PGS-33 of women experiencing abortion in selected public hospitals, Addis Ababa, Ethiopia 2025(n=422).....	28
Table 5 Bi-variable and multivariable logistic regression analysis to determine the contributing factors of grief in women experiencing abortion in the selected public hospitals in Addis Ababa, 2025(n=422) ...	30

List of Figures

Figure 1 Conceptual framework designed to explore how different factors contribute to the grief experienced by women following abortion(46).....	11
Figure 2. Schematic diagram of sampling procedure on women experiencing abortion in Addis Ababa public hospitals	17
Figure 3 Social support characteristics of women experiencing abortion in selected public hospitals, Addis Ababa, Ethiopia 2025(n=422).....	26
Figure 4 Partner violence characteristics of women experiencing abortion in selected public hospitals, Addis Ababa, Ethiopia 2025(n=422)	27

Abstract

Background: Grief, a common emotional response to loss, is linked to negative psychological effects, and higher gestational age and decisional conflict can lead to greater pain after termination. This study aimed to address several critical gaps in current research. There is limited understanding of the emotional impact of abortion, particularly grief, which remains underexplored in existing literature.

Objective: To assess the prevalence and contributing factors of grief in women experiencing abortion in selected public hospitals in Addis Ababa, Ethiopia, 2025.

Methods: A cross-sectional study design was used to assess the prevalence and contributing factors of grief in women experiencing abortion. A total sample size of 422 participants was selected through a simple random sampling method from public hospitals in Addis Ababa, Ethiopia. Data collection occurred from January to March 2025. Face-to-face interviews were conducted, and data analysis was performed using SPSS version 26, applying bi-variable and multivariable binary logistic regression to identify contributing factors associated with grief.

Result: The PGS-33 was used to assess grief severity, with a significant proportion scoring above the clinical cutoff. The study found a significant difference in grief scores across educational status groups. Lower support was associated with higher grief severity. Pregnancy-related factors also contributed to grief symptoms.

Conclusion: The study reveals that 76% of the participants experience severe grief, with sociodemographic factors contributing to higher levels. Support systems can reduce grief severity.

Recommendation: Healthcare providers should screen for grief symptoms, provide psychological support, and provide clear referrals to specialized services. Community-level informational materials and collaboration with religious leaders can manage grief. National guidelines should integrate grief training.

Keywords: Grief, Abortion, Women's health, Reproductive health.

Chapter One: Introduction

1.1 Background

The World Health Organization (WHO) defines abortion as pregnancy termination before twenty weeks of gestation. Abortion happens everywhere, whether it is legal or illegal, safe or unsafe, widely accessible or difficult to obtain(1). Many countries still restrict access to abortion despite conclusive evidence that induced abortion is safe and effective and is linked to a number of positive outcomes for the pregnant person and their families(2).

A spontaneous abortion is defined as a pregnancy loss that occurs before 20 weeks of gestation and is diagnosed by pelvic examination, measurement of the beta subunit of human chorionic gonadotropin, and ultrasonography(3).

Induced abortion refers to the intentional termination of a pregnancy through medical or surgical means, aimed at preventing a live birth(4). This procedure is commonly performed for various reasons, including health concerns, personal circumstances, or socioeconomic factors(5). Medical abortion involves medications like mifepristone and misoprostol to terminate a pregnancy(1). Surgical abortion includes procedures such as suction aspiration or dilation and curettage(5). While induced abortion is a critical option for many, it also raises ethical and emotional considerations that can impact individuals and society.

The significance of sexual and reproductive health is emphasized by the Sustainable Development Goals (SDGs), especially when it comes to addressing problems like abortion among women. According to the most recent estimate of the worldwide maternal mortality ration, which stands at 210 maternal deaths per 100,000 live births, the 2030 aim asks for two-thirds reduction in maternal mortality. The international community has acknowledged that access to safe, legal abortion is a crucial component of a comprehensive package of sexual and reproductive health services that all women, regardless of age, socioeconomic status, gender identity, race, religion, marital status, geographic location, or migration status, should have(6).

Spontaneous abortion is a significant reproductive health issue affecting 15% of clinically recognized pregnancies (7). The emotional impact of such loss can be profound, leading to various psychological challenges that may persist long after the event. Understanding these emotional

repercussions is crucial for providing adequate support to affected women. Women may experience heightened levels of anxiety (8).

The rate of acceptance of spontaneous abortion varies greatly around the world, with estimates ranging from 10% to 20% of recognized pregnancies ending in spontaneous abortion. This number represents a more comprehensive understanding of pregnancy loss, which encompasses both recognized and unrecognized pregnancies(9) .

The prevalence of induced abortion is estimated at 30.89% among women in Ethiopia(10). Factors contributing to repeat-induced abortion include alcohol consumption, lack of fertility awareness, and multiple sexual partners(10, 11). Adolescents are particularly vulnerable, with significant declines in unintended pregnancies linked to age, marital status, and media exposure. The high rates of repeat-induced abortions highlight ongoing public health challenges in Ethiopia, necessitating targeted interventions to address the underlying determinants and improve reproductive health education(12).

Grief is the feeling of melancholy over some loss or tragedy. It particularly dominates the emotional side of grieving, and it exaggerates the powerful emotions of suffering, agony, and desire that come along with experiencing a loss(13). It is a typical response to the sense of loss and is thought to be an instinctual and physiological reaction. Within a year of death, normal mourning transforms into an integrated phase; this is a non-pathological state that doesn't call for particular therapeutic measures. If this integrated phase is not reached, the person may experience pathological grief-related symptoms(14).

Abortion stigma is linked to negative psychological effects, such as grieving, in studies of women who had abortions for any reason (i.e., not especially for a fetal abnormality). While acceptance and positive reframing were protective against grieving, higher gestational age and decisional conflict were linked to greater pain following termination(15). The grieving process is often complex and requires tailored therapeutic support to help women navigate their emotions(16). The prevalence of grief is 31% (17).

The prevalence of grief among women in Ethiopia experiencing abortion is a significant concern, particularly given the high rates of both induced and spontaneous abortions. Research indicates that a considerable number of women face emotional distress following pregnancy termination,

which can lead to severe grief. Women often experience grief due to societal stigma, lack of support, and the emotional toll of unintended pregnancies. Factors such as educational status, marital satisfaction, and support systems significantly influence coping mechanisms. Only 51.4% of women reported positive coping mechanisms following perinatal loss, highlighting the need for better emotional and psychological support. Support from partners, family, and healthcare providers is crucial in mitigating grief(18).

Women employ various coping strategies, including spiritual practices, engaging in hobbies, and seeking social support(19). Providing emotional support significantly reduces stress levels, highlighting the importance of psychological care. While the emotional toll of abortion is significant, some women may find resilience through supportive relationships and effective coping strategies. However, the need for comprehensive mental health support remains critical, especially for those in vulnerable situations.

1.2 Statement of the Problem

Grief is a serious but little-studied emotional issue that has a big impact on women's mental health and general well-being after they have an abortion. Grief from perinatal loss negatively affects marital satisfaction, with significant correlations found between mental health deterioration and relationship quality(20).

Pregnancy termination has a profound emotional impact on the woman and her partner, changing their emotional landscape. Rethinking the work of the specialties that care for the perinatal population is necessary to recognize the significance of a frequent but especially silent grieving process, given the high percentage of women who experience perinatal loss and the emotional consequences it entails in the short and long-term(21). The goal of the essential but infrequent professional accompaniment is to help the woman and her partner deal with their loss, ease their present symptoms, and, in the event of a second pregnancy, lower the risk of emotional imbalance in the mother, her partner, and the unborn child, which can result in perinatal grief in the parents or emotional development issues in the child(16).

A study showed that the rate of spontaneous abortion in Ethiopia is 10 per 1000 births. This rate coupled with limited access to quality reproductive healthcare in certain regions, contributes to

significant physical and emotional distress for women, impacts family planning efforts, and hinders efforts to enhance the nation's maternity and pediatric health outcomes in the country (22).

The research of grief following abortion necessitates an understanding of various risk factors that can significantly impact women's mental health. Women with low socioeconomic status are more vulnerable to mental health issues post-abortion. The absence of children can exacerbate feelings of loss and grief(8). Traits such as developmental or personality disorders increase the risk of complicated grief (23). The quality of the conjugal relationship plays a crucial role; supportive relationships can mitigate grief. Family support and community resources are vital for coping with grief(24). Studies suggest that societal stigma surrounding pregnancy loss may hinder open discussions about grief, potentially leading to prolonged suffering and isolation for bereaved parents(7, 25).

Women who have abortions may experience unique emotional challenges related to social stigma, marital problems, and personal beliefs about family and parenting. To develop targeted therapies to help these women, it is essential to understand the prevalence of grief following abortion and identify the underlying factors(26). There are significant implications for the creation of interventions meant to assist women who have undergone abortions. Healthcare professionals should be able to reduce the risk of embitterment and encourage more flexible coping mechanisms among these women by fostering a feeling of coherence through interventions that improve meaningfulness, manageability, and comprehensibility(13).

Women frequently report intense feelings of sadness and loss following an abortion, which can lead to prolonged grief and emotional distress. The grieving process is often complicated by societal expectations and a lack of recognition of the loss, leading to feelings of isolation(27). Research indicates that women may experience significant grief, with studies showing that interventions like cognitive behavioral counseling can effectively reduce grief intensity(17). Positive self-talk has also been shown to decrease anxiety and grief levels among women after abortion, highlighting the importance of psychological support(28). Health professionals play a critical role in addressing the emotional needs of grieving women, providing necessary support and therapeutic interventions to facilitate the grieving process(16).

Women with pre-existing mental illness may experience more intense, prolonged, complex grief due to overlapping symptoms. This could inflate overall grief prevalence estimates if mental illness and grief are not disentangled. Mental health conditions may act as confounders, making it harder to isolate grief specific to the abortion versus pre-existing or comorbid psychological distress(29). The emotional turmoil experienced by women post-abortion can vary widely; those with mental health challenges may face additional layers of grief, such as feelings of guilt or shame(15). Studies indicate that women with a history of mental health issues report higher levels of grief and psychological distress following abortion compared to their mentally healthy counterparts(17).

Despite improvements in reproductive health services, the psychological repercussions of abortion remain a major problem, particularly when cultural stigma and individual parenting ideas are taken into account. The current research reveals a knowledge gap on the frequency and underlying causes of grief in this population. The absence of detailed research limits healthcare practitioners' ability to provide effective support and therapies tailored to the specific emotional requirements of women going through this experience(24).

The existing literature on the grief experienced by women following abortion reveals several gaps that warrant further investigation. There is limited understanding of the emotional impact of abortion, particularly grief, which remains underexplored in existing literature(30). The influence of socio-demographic factors and social support on the grieving process has not been sufficiently investigated. Many studies highlight the lack of emotional support from healthcare providers and caregivers, which exacerbates feelings of grief and isolation among women. Pieces of literature emphasize the resilience and coping strategies women develop post-loss, suggesting a potential for growth and adaptation that could be further examined(25).

By examining the prevalence and contributing factors of grief in women experiencing abortion, the importance of this study is to give important information that can enhance healthcare practices and inform policy decisions to address their emotional health. The study seeks to close a gap in the literature and offer information that may help guide healthcare procedures and policy decisions to better meet the emotional needs of these women.

1.3 Significance of the Study

Abortion is a significant public health concern in Ethiopia. Understanding the grief experienced by women who have an abortion is crucial for providing appropriate emotional and psychological support, improving healthcare delivery, reducing stigma, and promoting healing. By acknowledging and addressing this grief, we can better support women, improve their mental health outcomes, and reduce the stigma surrounding this common yet often overlooked experience. This study examined the emotional and psychological impact of abortion, particularly grief after abortion. It suggested that health professionals provide psychological needs of bereaved parents, guiding appropriate therapeutic interventions or counseling services. The study advanced our knowledge of the psychological effects of perinatal loss, contributing to a broader understanding of grief. The findings could help legislators develop evidence-based legislation that considers the psychological health of abortion patients, leading to more comprehensive reproductive health regulations. The study also aimed to reduce the stigma associated with abortion by highlighting the emotional experiences of women and filling gaps in the literature on the grief of women experiencing abortion.

Chapter Two: Literature Review

2.1 Prevalence of grief in women with abortion

Some psychological issues, including smoking, drug misuse, eating disorders, depression, attempted suicide, guilt, regret, nightmares, low self-esteem, and worries about future fertility, can be brought on by abortion, one of the most prevalent health issues. There are several psychological effects of abortion, including post-traumatic stress disorder, anxiety, and bereavement.(17).

The process of grieving after a loss is very personal and emotional, and can be challenging. When a woman's pregnancy ends, she typically feels shocked, depressed, and in need of explanations. A woman may experience worry, depression, lack of social interaction, and psychological and physical problems as a result of these emotions. More emotional suffering and sadness are frequently experienced when grieving the loss of a fetus. People may experience overwhelming sadness, loss, and longing for the child they had hoped to have in their lives. Feelings of guilt, humiliation, or inadequacy may overpower this grief as people wonder what went wrong or why this occurred to them(13).

Research indicates that a substantial percentage of women experience complicated grief following an abortion. In one study, 54.2% of women met the criteria for complicated grief six to ten weeks after the loss(31). A systematic review found that 81% of studies reported markedly elevated grief levels in women after miscarriages. Most studies documented intense grief reactions, which tend to decrease over time, but many women continue to experience significant grief(32).

The prevalence of grief among women experiencing induced abortion in Ethiopia is a significant concern, particularly given the high rates of induced abortion reported in various studies. A study in Gondar town reported a prevalence rate of 40 per 1000 women, indicating a notable incidence of abortion(33). Women often experience grief post-abortion, particularly when the pregnancy is desired or when societal stigma is involved. Factors such as single marital status and unwanted pregnancies are associated with higher emotional distress(33, 34).

Post-abortion grief is a significant emotional response that can affect women who undergo abortion procedures. In about 31% of pregnancies that end in miscarriage, one of the psychological reactions that takes place is grief. Compared to other losses, post-abortion sorrow is distinct, and it might result from an

abrupt and unanticipated death or from a loss of memories. After a miscarriage, grieving is a common reaction that can develop into complicated grief. About 10% of persons experienced complicated grief, a syndrome brought on by inability to go from acute to adaptive mourning(26). After a spontaneous abortion, the majority of women suffer grief. While many grieving people recover on their own, some will endure clinical depression that needs to be treated(31).

Following perinatal loss, a wide range of mourning symptoms can manifest, including cognitive, emotional, psychological, and physical manifestations. Common physical symptoms of mourning include headache, stomach, and arm pains, changes in heart and breathing patterns, tightness in the throat, decreased appetite, difficulty sleeping, poor energy, fatigue, and weeping. Isolation, trouble with everyday tasks, anger, denial, guilt, failure, sadness, and self-blame are psychological and emotional manifestations of grief. Accepting the truth of the loss, processing the grief, adjusting to the new circumstances, and rearranging are the four stages of the typical grieving process(35).

2.2 Factors Contributing to grief in Women with abortion

Various psychological and emotional factors and societal and cultural factors influence postabortion grief in women. Understanding these factors is crucial for developing effective interventions to support women during this challenging time.

2.2.1 Socio-demographic factors

The majority of recent research on abortion stigma either presents a conceptual framework or looks at the relationships between stigma and demographic traits(36). Women over 40 years are at a higher risk of experiencing spontaneous abortion, which correlates with increased grief levels due to societal expectations and personal aspirations for motherhood(37). Younger women, when compared to older ones, showed significantly higher grief scores(38, 39).

2.2.2 Reproductive Health History

A significant amount of research indicated that women who had previously lost fetuses were more likely to experience feelings of worry and sadness. Women with a history of miscarriage suffer more from pregnancy-specific anxieties in the first trimester of a new pregnancy than pregnant women with no history of miscarriage (40, 41). Coherence can reduce the link between grief and embitterment, implying that women with a stronger sense of coherence may cope better with grief(13). Women often experience a range of psychological issues post-abortion, including

grief(17). Feelings of self-blame and sadness are prevalent, particularly when the abortion is due to fetal malformation. The intensity of grief can correlate with feelings of embitterment, suggesting that unresolved grief may lead to deeper emotional distress. Symptoms of grief and anxiety can persist for years, with many women reporting ongoing psychological distress even three years post-loss(42).

2.2.3 Support Systems and Lifestyle Factors

The presence of supportive relationships can mitigate feelings of grief. Women who feel supported are less likely to experience severe emotional distress. Cognitive behavioral counseling has been shown to significantly reduce post-abortion grief, indicating the importance of therapeutic interventions(17). Self-talk therapy is a non-pharmacological treatment for psychological issues. Self-talk is an internal dialogue that allows individuals to interpret their thoughts and feelings, change their views, and teach or promote themselves. It can be silent, low-voiced, or loud-voiced. Emotional regulation is crucial for coping with challenging situations(28). Societal attitudes towards abortion can exacerbate feelings of guilt and grief. Women may feel pressured by cultural norms that stigmatize abortion, leading to increased emotional turmoil. The pro-choice community's reluctance to acknowledge post-abortion grief can leave women feeling isolated in their experiences. Cultural beliefs can dictate the support women receive from family and community, impacting their grieving process(43). The importance of providing emotional support and structured bereavement interventions for women experiencing pregnancy loss is a significant aid in coping with grief(44). Abortion stigma plays a crucial role in shaping grief responses. Women who experience self-judgment during the abortion process report higher levels of post-abortion grief(15).

2.2.4 Pregnancy related Factor

Miscarriage can induce grief for women owing to an unexpected pregnancy, emotional investment in assisted reproductive technologies, past miscarriages, problems, underlying health concerns, lack of support, and societal shame, accentuated by emotions of loneliness and dread(45).

Literature explores the multifaceted dimensions of abortion, highlighting the complex psychological, emotional, and social experiences of women. Psychologically, abortion triggers profound emotional distress characterized by intense feelings of loss, potential post-traumatic stress symptoms, and psychological vulnerability. Emotionally, women experience varying grief

intensities influenced by factors such as gestational age and personal circumstances, with grief manifesting as a dominant emotional response that can have long-term mental health implications. Socially, the experience is significantly shaped by support systems, with marital relationships and cultural perceptions playing crucial roles in women's grieving processes. These emphasize the need for a comprehensive understanding of the interconnected dimensions to develop targeted interventions that address the holistic impact of abortion on women's well-being.

Existing research on grief following abortion reveals significant gaps in understanding the comprehensive emotional landscape of women experiencing pregnancy loss. Current studies lack an in-depth exploration of how different socio-demographic factors specifically influence grief responses, with minimal research investigating the prevalence of grief across diverse demographic groups. The psychological dimensions remain incompletely understood.

Moreover, there is a critical absence of localized research that provides context-specific insights into grief experiences. Most existing studies fail to adequately examine how social support systems and individual coping mechanisms interact to shape emotional responses to pregnancy loss. Researches are limited in understanding the variations in grief prevalence among different age groups, marital statuses, and social contexts, highlighting the need for comprehensive studies that can develop targeted intervention strategies tailored to women's specific emotional and psychological needs following abortion.

Several theoretical models can support the study of grief among women experiencing abortion. A prominent model is the sense of coherence (SOC), which moderates the relationship between grief and embitterment, suggesting that a strong SOC can alleviate negative emotional outcomes following fetal demise. SOC helps buffer the effects of grief, reducing embitterment in women post-abortion. It emphasizes understanding and managing stressors related to loss(13).

2.3 Conceptual Framework

This conceptual framework is designed to explore how different factors contribute to the grief experienced by women following abortion. Grief as a central concept is a significant emotional response to abortion, impacting women's mental health and overall well-being. Focusing on the elements enhances understanding of grief in women post-abortion, ultimately informing better healthcare practices and policies to support these vulnerable women.

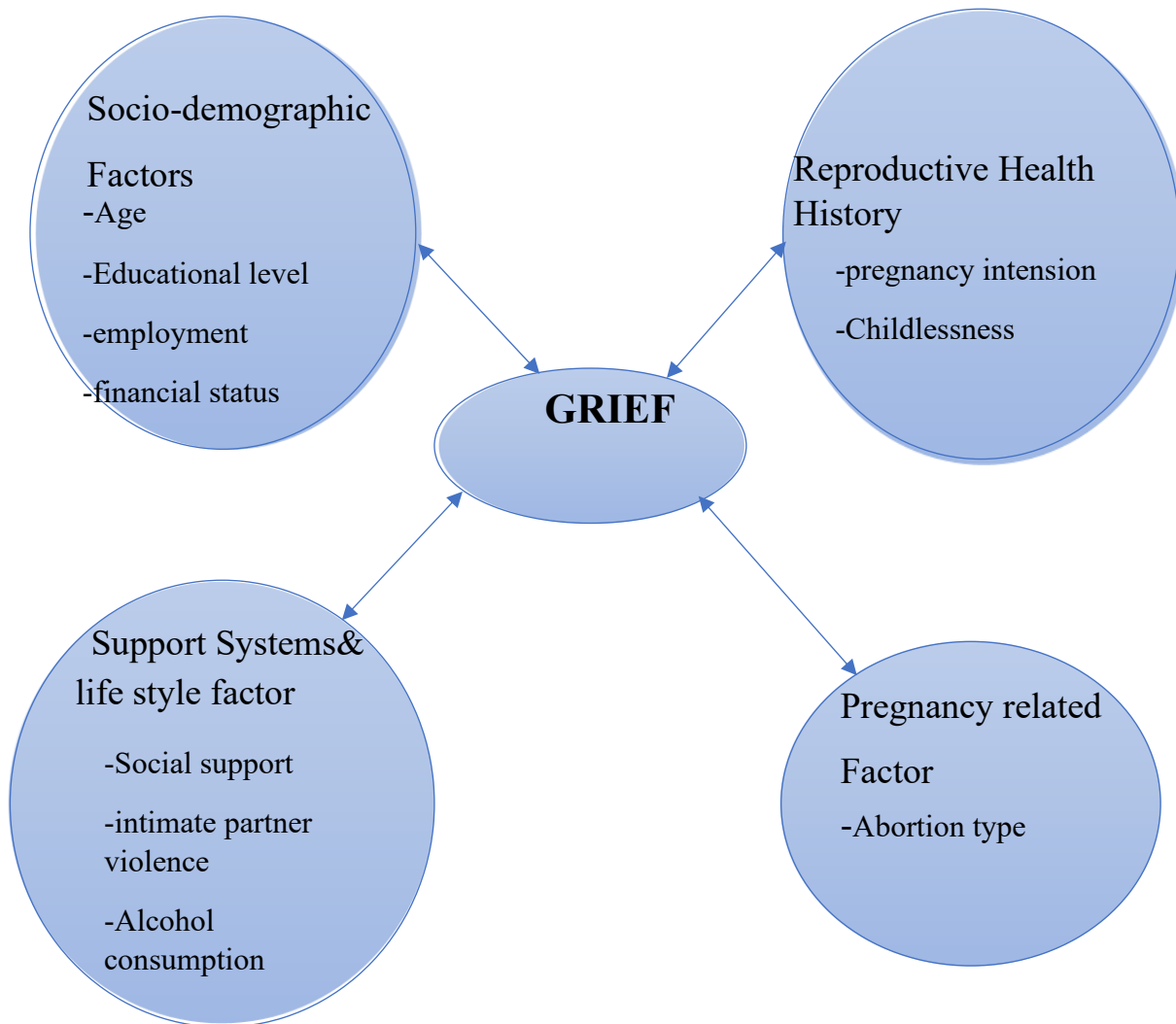


Figure 1 Conceptual framework designed to explore how different factors contribute to the grief experienced by women following abortion(46).

2.4 Hypothesis

- What is the prevalence of grief among women who have experienced abortion?
- What socio-demographic factors are associated with grief?
- What roles does social support play in moderating grief responses?

2.5 Expected outcomes

Identifying factors associated with more severe grief can help clinicians proactively identify women at higher risk and offer early interventions. These findings can be used to develop training programs for healthcare providers on how to effectively address grief and provide appropriate emotional support to women. The findings will support the development and implementation of effective group therapy programs for women experiencing abortion. The research findings will be used to advocate for policies that ensure access to comprehensive reproductive healthcare, including grief counseling and mental health support services for women who have experienced abortion. This will raise awareness about the prevalence and impact of grief following abortion, helping to reduce stigma and encourage open conversations about these sensitive topics.

Chapter Three: Objectives

3.1 General objectives

To assess the prevalence and contributing factors of grief in women experiencing abortion in selected public hospitals, Addis Ababa, Ethiopia, 2025.

3.2 Specific objectives

- ❖ To assess the prevalence of grief in women experiencing abortion
- ❖ To determine the contributing factors of grief in women experiencing abortion

Chapter Four: Methodology

4.1 Study area

Ethiopia, a rich and diverse nation in the Horn of Africa, is known for its unique heritage and independence from colonization. Its capital, Addis Ababa, is the political, cultural, and economic hub, with a diverse population and a temperate climate. Despite rapid urbanization, Ethiopia faces housing shortages, traffic congestion, and infrastructure development challenges. The city has 15 public hospitals. Therefore, this study will be conducted in four randomly selected public hospitals in Addis Ababa. Addis Ababa is the capital city of Ethiopia, covering 527 square kilometers. There are 5 hospitals under the Addis Ababa Health Bureau and 8 hospitals under the federal government. These are five hospitals under the Federal Ministry of Health and three hospitals under the defense force and police. All 14 public hospitals provide postabortion care(47). From those public hospitals, Abebech Gobena Hospital, Gandhi Memorial Hospital, St. Paul's Hospital Millennium Medical College, and Tirunesh Beijing General Hospital will be chosen using a simple random sampling method.

4.2 Study design and period

A cross-sectional study design was used to assess the prevalence and contributing factors of grief in women experiencing abortion. A total sample size of 422 participants were selected through a simple random sampling method from public hospitals in Addis Ababa, Ethiopia, from March to April 2025.

4.3 Source of population and study population

4.3.1 Source of Population

All women aged 18-49 who are experiencing abortion and receiving care in public hospitals in Addis Ababa.

4.3.2 Study population

All women who are experiencing abortion and receiving care in the selected public hospitals at the time of study in Addis Ababa.

4.4 Inclusion and exclusion criteria

4.4.1 Inclusion criteria

- ✓ Women who have experienced an abortion
- ✓ Women receiving care in public hospitals, Addis Ababa

4.4.2 Exclusion criteria

- ✓ Women with previous mental illness

4.5 Sample size determination and sampling procedure

4.5.1 Sample size determination

The sample size for the first specific objective was calculated using a single population proportion formula by considering the assumed 50% prevalence of grief after abortion. With 95% confidence interval certainty, 5% confidence limits (degree of precision). By anticipating a 10% non-response rate, the sample size for the first objective of the study became 422.

$$n = [z (1-\alpha/2)]^2 * p*(1-p)/d^2 \text{ Where:}$$

n = Sample size.

p = assumed prevalence of grief, 50%.

z (1- α /2) at 95% confidence interval =1.96

d = tolerable error = 0.05

$$= (1.96)^2 * 0.5(0.5) / (0.05)(0.05) = 384$$

By adding a 10% non-respondent rate, the final sample size becomes 384+38=422, so the sample size is 422.

4.5.2 Sampling procedure

From the 15 public hospitals in Addis Ababa, four public hospitals were selected by simple random sampling: Abebech Gobena Hospital, Gandhi Memorial Hospital, St. Paul's Hospital Millennium Medical College, and Tirunesh Beijing General Hospital. The number of participants was allocated proportionally by using the population proportion formula based on the previous three-month report data from HMIS. Women who met the inclusion criteria were selected by consecutive sampling until the required sample size was obtained.

Table 1 Proportional allocation of the total sample size from selected hospitals based on the previous three months

The previous 3-month number of admissions and proportional allocation show that.

Previous 3-month number of admissions and proportional allocation	SPHMMC	GMH	TBH	AG
Number of admissions	537	630	594	663
Proportional allocation	94	110	103	115

NB:

AG- Abebech Gobena Hospital

GMH- Gandhi Memorial Hospital

SPHMMC- St. Paul's Hospital Millennium Medical College

TASH- Tikur Anbessa Specialized Hospital

TBGH- Tirunesh Beijing General Hospital

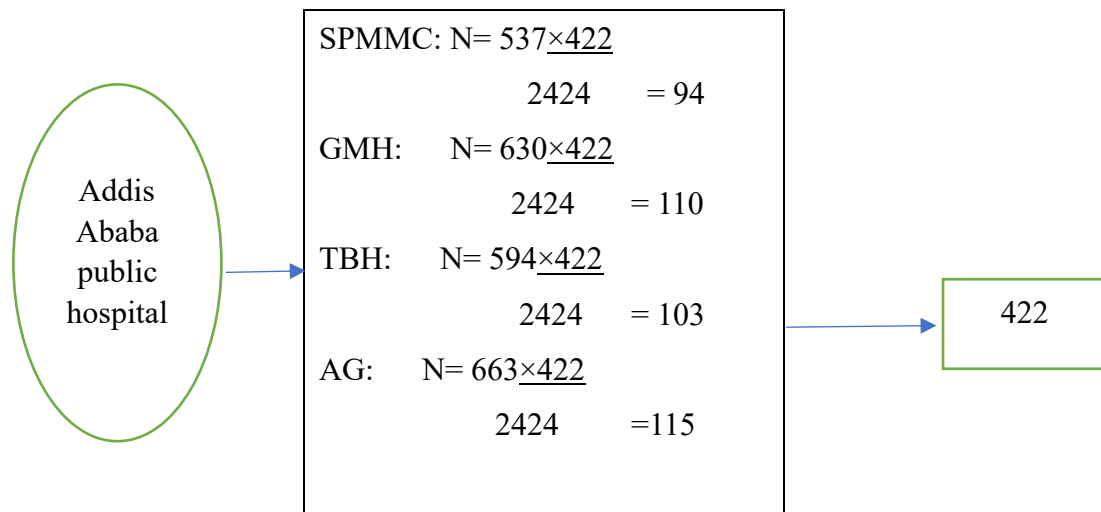


Figure 2. Schematic diagram of sampling procedure on women experiencing abortion in Addis Ababa public hospitals

4.6 Study variable

4.6.1 Dependent variable

Grief in abortion

4.6.2 Independent variable

Socio-demographic factor Age Educational level Employment Financial status Reproductive health history Pregnancy intention Childlessness	Support systems and lifestyle factors Social support Intimate partner violence Alcohol consumption Pregnancy-related factor Abortion type
---	--

4.7 Operational definitions

- ✓ **Grief:** the feeling of melancholy over some loss or tragedy, particularly the emotional side of grieving that includes suffering, agony, and desire associated with experiencing loss. Scores above >90 are indicative of significant grief (48).
 - Mild to Moderate Grief: A score between 33 and 90 might suggest that the individual is experiencing mild to moderate grief.
 - Moderate to High Grief: A score between 91 and 120 might suggest moderate to high levels of grief.
 - Severe Grief: A score above 120 (especially closer to the maximum score of 165) suggests severe grief.
- ✓ **Induced abortion:** refers to the intentional termination of a pregnancy through medical or surgical means, aimed at preventing a live birth(4).
- ✓ **Reversed scoring:** certain items (all except items 11 and 33) are reversed in scoring to ensure that higher total scores reflect more intense grief. This means that lower responses indicate a stronger feeling of grief for those specific items(49).
- ✓ **Scoring items:** Each item on the PGS is a statement reflecting thoughts and feelings related to grief. Respondents indicate their level of agreement on a scale from 1 (strongly agree) to 5 (strongly disagree)(50).
- ✓ **Spontaneous abortion:** the natural end of a pregnancy before the 20th week of gestation, also known as a miscarriage(6).

4.8 Data collection instrument and procedure

It is a cross-sectional study where the researcher and research assistant interviewed the participant. Those managed at the gynecology emergency and gynecology ward were recruited. The interview was a face-to-face interview after the occurrence of an abortion. The questionnaire were pre-tested in Tikur Anbesa hospital among 21 (5%) women to ensure, clarity of terminology and the security and orderliness of the questions. The PGS consists of 33 items designed to measure the emotional responses of individuals who have experienced perinatal loss. Each item is a statement related to thoughts and feelings about the loss, rated on a 5-point Likert scale ranging from 1 (Strongly Agree) to 5 (Strongly Disagree). Research indicates that the most significant grief responses occur shortly after the loss, particularly within the first 48 hours, and can persist for months. Therefore, conducting interviews soon after the abortion can provide valuable insights into the immediate emotional impact(51). In various studies, the PGS has demonstrated good reliability, with high internal consistency (Cronbach's alpha typically above 0.90) (52-54). This indicates that the item on the scale consistently measures the same underlying construct of perinatal grief. It is a valuable tool for researchers investigating the psychological impact of perinatal loss(55). Active grief is the visible expression of sorrow and mourning associated with the loss. This includes feelings of sadness, crying, and the desire to talk about the baby. Despair is a profound sense of hopelessness and helplessness experienced after the loss. This may manifest as feelings of worthlessness, isolation, and suicidal thoughts. Difficulty coping is the challenges individuals face in managing their emotional responses and resuming daily activities after a loss(48). And also used the Received Social Support Scale (R3S) response to assess the level of social support received by the women, where low support is less than 2.5, moderate support is between 2.5-3.5, and high support is greater than 3.5(56). Used Financial self-efficacy scale to measure the ability to have a greater sense of self-assuredness in their financial management capacities to approach any financial difficulties, with a mean value of 18, greater than 18 indicates high confidence, and less than 17 indicates low confidence(57). Humiliation, afraid, rape, kick(HARK) is 4 item screening tool used to detect intimate partner violence where 0 is no possible violence, 1-2 is moderate risk and ≥ 3 is high risk(58). London measure of unplanned pregnancy(LMUP) used to assess pregnancy intention across a continuum, ranging from planned to unplanned, where unplanned is 0-3, ambivalent: 4-9, planned: 10-12(59). Then identify the participants and obtain informed consent from them, explaining the purpose of the study, the use of the PGS, and ensuring confidentiality.

4.9 Data Quality Assurance

To ensure data quality, a pretested structured questionnaire was used. Training about the purpose of the study, how to approach study participants, and how to use the questionnaire was given to the data collectors. The pre-test was conducted on 5% of the actual sample size in Tikur Anbessa Specialized Hospital (TASH), a week before data collection. The collected data was checked for completeness, accuracy, and clarity by the principal investigator daily after data collection and corrections had been made before the next data collection measure.

Finally, data cleanup and cross-checking were done before analysis.

4.10 Data Analysis

Data was entered into the Kobo toolbox, and the data obtained from the structured interviewer-administered questionnaire was exported to SPSS software version 26 for data cleaning and analysis. Data from the interviews was cleaned and organized. Variables were coded systematically. Missing or inconsistent data points were checked. The relationship between each independent variable and the dependent variable was ascertained using bivariate and multivariable binary logistic regression analysis. In the bivariate analysis, factors that had a p-value < 0.25 were selected as candidate variables for the multivariable analysis. Multiple logistic regression models were used to alter the impact of confounders on the prevalence of grief in abortion by incorporating variables with a p-value of 0.25 in the analysis. Model fitness was assessed using the Hosmer-Lemeshow test, yielding a p-value of 0.299, indicating that the logistic model fits the data well. Then to identify the most significant predictors in the multivariable analysis, backward variable selection was applied. Descriptive statistics were used to show the results, and statistical significance was proclaimed if a p-value was less than 0.05. The odds ratio with 95% CIs was calculated to determine the existence and strength of the association.

4.11 Ethical Consideration

Before the study began, the Addis Ababa University (AAU) School of Nursing and Midwifery Ethical Review Committee approved this research proposal. The research and ethics committee of the AAU School of Nursing and Midwifery first provided ethical clearance. The ethical clearance was sent to the Addis Ababa Health Bureau, and received an ethical approval formal acceptance letter for the hospitals for the study to be done. A formal letter was sent to every hospital that was

chosen. Participants informed verbal consent were provided after receiving approval from each hospital, and they were given a brief description of the study's goal before their consent was sought. At any time throughout the interview, the respondents were free to decline participation or end their involvement. They were told that taking part in this study would not result in any harm or incentives. If a participant experiences distress during or after completing the question, they were offered immediate emotional support and reassurance, provided contact information for local grief support groups and therapists, and offered to connect them with appropriate resources. Provide referrals to participants identified with mental health needs during screening. The information provided by each respondent was kept confidential by not writing the participant's name in the questionnaire.

4.12 Dissemination Plan of Study Results

The findings of this study will be shared with the nursing department at Addis Ababa University College of Health Sciences, School of Nursing and Midwifery. Additionally, the Addis Ababa Health Bureau will receive it. In addition, the findings will be discussed with specific stakeholders during the yearly review meeting. Lastly, efforts will be made to publish in scholarly journals.

Chapter Five: Results

5.1 Socio-demographics characteristics of the participants

A total of 422 women participated in the study, where the majority of the participants were aged 26-30 years (28.4%) followed by those aged 21-25 years old (27.5%). 14.7% of the participants had no formal education. 36.5% were housewives, 36% were employed, 19.4% were unemployed and 8.1% were students. 89.3% have regular sexual partner. The majority 293 (69.4%) of them were currently married and 174 (41.2%) had been in relationship with the father of their current pregnancy for 2-5 years. 211 (50%) of the participants had family size of less than 3, Majority of participants (74.4%) were having low financial confidence (Table 2).

Table 2 The socio-demographic characteristics of women experiencing abortion in selected public hospitals, Addis Ababa, Ethiopia 2025(n=422).

<u>Variable</u>	<u>Category</u>	<u>Frequency</u>	<u>Percentiles</u>
Age	15-20	51	12.1
	21-25	116	27.5
	26-30	120	28.4
	31-35	83	19.7
	36-40	44	10.4
	41-45	8	1.9
Educational status	No formal education	62	14.7
	Grade 1-8	121	28.7
	Grade 9-12	153	36.3
	College and above	86	20.4
Employment status	Unemployed	82	19.4
	Housewife	154	36.5
	Employee	152	36
	Student	34	8.1
Regular sexual partner	Yes	377	89.3
	No	45	10.7
Marital status	Living apart	90	21.3
	Living together	30	7.1
	Currently married	293	69.4
Length of stay with partner	Not living together	56	13.3
	Less than 6 months	17	4
	6 months to 1 year	78	18.5
	2-5 years	174	41.2
	More than 5 years	96	22.7
Family size	Less than 3	211	50
	Between 4-6	192	45.5
	Greater than 7	19	4.5
Financial confidence group	High financial confidence	108	25.6
	Low financial confidence	314	74.4

5.2 Reproductive health history characteristics of the participants

The majority (61.4%) of the respondents reported having been pregnant before the current pregnancy. 236 (55.9%) had at least one living child, whereas 280 (%) did not. 373 (99.5%) pregnancies were conceived spontaneously. Upon discovering their pregnancy, 265(62.8%) felt very happy. When their partners were informed, 207(49.1%) reacted with happiness. A small proportion (0.9%) reported abusive or violent reactions. 89(21.1%) had experienced a previous abortion, with 373(88.4%) being spontaneous and 49(11.6%) induced. 333(78.9%) of the participants have informed their partners about having an abortion. Of the participants, 50 (11.8%) had experienced recurrent abortion. Among those who had an abortion, 279 (66.1%) occurred in the first trimester. 231 (54.7%) underwent medical abortion, where most of them (79.9%) initiated the abortion in the same facility. Only 13 (3.1%) discussed post-abortion mental health, while 175 (41.5%) received counseling on healthy timing and spacing of pregnancies. 97 (23%) discussed family planning 9methods, and 76 (18%) reported no counseling on any of the topics above (Table 3).

Table 3 Reproductive history characteristics of women experiencing abortion in selected public hospitals, Addis Ababa, Ethiopia 2025(n=422)

<u>Variable</u>	<u>category</u>	<u>Frequency</u>	<u>Percent</u>
Previous pregnancy			
	Yes	259	61.4
	No	163	38.6
Number of children			
	none	280	66.4
	1	90	21.3
	More than 1	51	12.1
Previous abortion or stillbirth			
	Yes	89	21.1
	No	333	78.9
Type of abortion			
	Spontaneous	373	88.4
	Induced	49	11.6
Information of the partner about having abortion			
	Yes	333	78.9
	No	89	21.1
Recurrent pregnancy loss			
	Yes	50	11.8
	No	372	88.2
Weeks of pregnancy			
	1-12 week	279	66.1
	13-27 week	131	31
	28-40 week	12	2.8
Type of abortion procedure			
	Medical Abortion	231	54.7
	Surgical Abortion	191	45.3
Place of abortion			
	In this health facility	337	79.9
	In another health facility and referred	81	19.2
	Bout drug by myself	4	0.9
Information from health care providers			
	Post-abortion mental health	13	3.1
	Return to fertility	7	1.7

5.3 Support system and life style characteristics of the participants

A significant majority (69.9%) reported low emotional support. More than half (54.5%) reported high instrumental support, compared to 45.5% with low instrumental support. 51.7% reporting low informational support. 16.1% of the participants reported being physically hurt by a partner or ex-partner. 13.5% experienced emotional abuse, indicating a significant psychological toll on a portion of the participants. 6.9% disclosed experiencing rape or forced sexual activity and a small but concerning percentage (3.1%) reported being afraid of their partner (Figure 3)(Figure 4).

The majority of the participants (96%) reported that they haven't used any substance in the past 12 month. Alcohol was the most commonly used substance (3.8%), while cigarette use was rare(0.2%). Most participants (96.2%) never drank alcohol, but among the drinkers 2.8% were drinking occasionally, and 0.4% were frequent users. Health issues were most common problem consisting 2.1% and financial, social, and legal problems were reported by 0.5% of the participants.

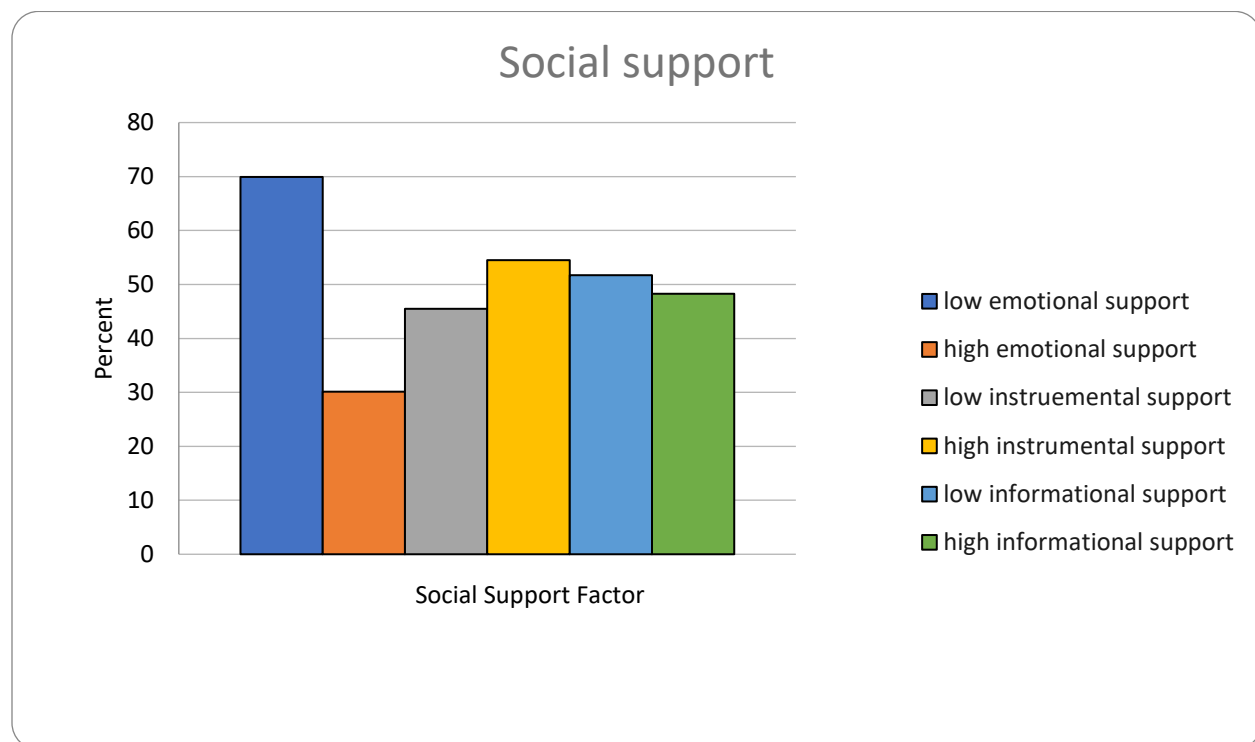


Figure 3 Social support characteristics of women experiencing abortion in selected public hospitals, Addis Ababa, Ethiopia 2025(n=422)

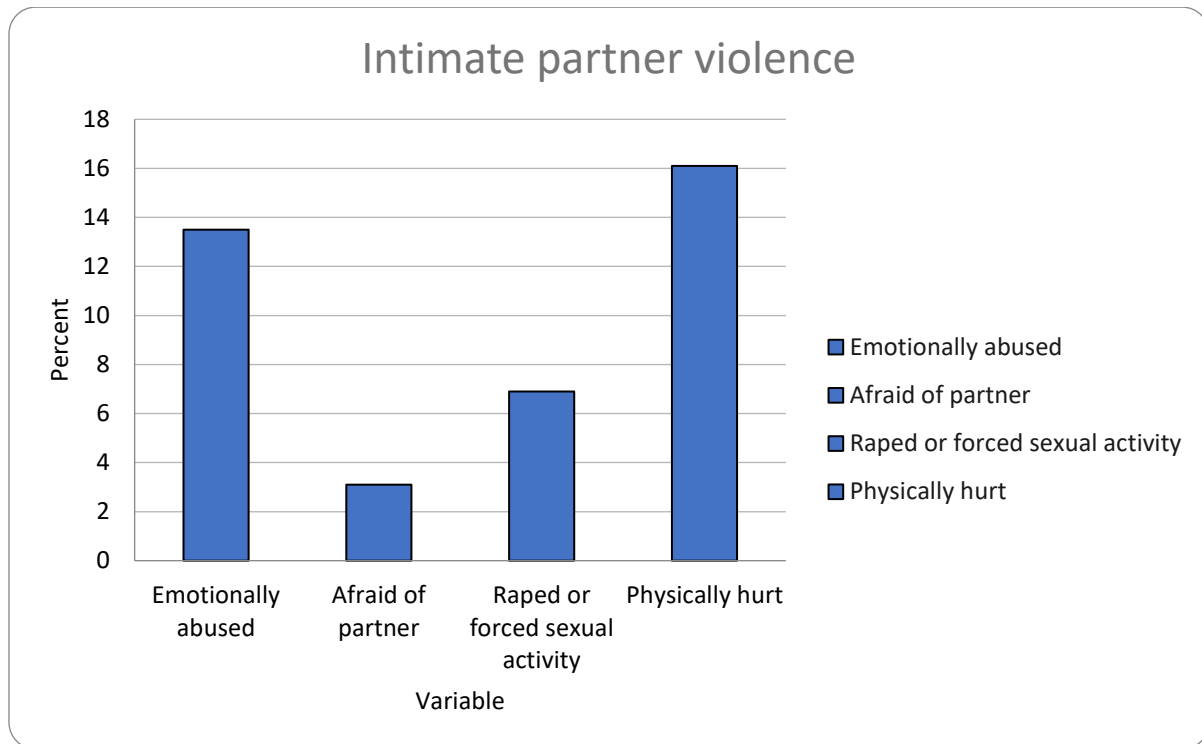


Figure 4 Partner violence characteristics of women experiencing abortion in selected public hospitals, Addis Ababa, Ethiopia 2025(n=422)

5.4 Pregnancy related characteristics of the participants

The study found that vast majority of abortions (88.4%) were spontaneous, while a smaller proportion (11.6%) were induced abortions.

5.5 Prevalence of grief

A substantial proportion of participants (76%) scored above the clinical cutoff (>91), indicating severe grief. The Prolonged Grief Scale (PGS-33) was used to assess grief severity, with total grief scores ranging from 33 to 140 ($M=96.9$, $SD=21.2$). Subscales analysis revealed that difficult coping was the most psychological response, followed by active grief and despair (Table 4).

Table 4 Subscale scores for PGS-33 of women experiencing abortion in selected public hospitals, Addis Ababa, Ethiopia 2025(n=422)

Scale	Mean	Standard deviation
Active grief	32.3	8.7
Difficult coping	33.4	6.4
Despair	31.1	7.0

5.6 Contributing factors of grief

To determine the contributing factors of grief in women experiencing abortion in the selected public hospitals in Addis Ababa, bi-variable and multivariable binary logistic regression analyses were used. Age, educational status, current employment status, regular sexual partner, family size, frequent contact with religious leaders, ever been pregnant before current pregnancy, type of abortion, recurrent pregnancy loss (two or more consecutive miscarriage), number of weeks pregnant at the time of abortion, type of abortion procedure the respondent underwent, social support, and financial self-efficacy were selected as a candidate variable for multivariable logistic regression model.

The results showed that educational status, regular sexual partner, frequent contact with religious leaders, had ever been pregnant before the current pregnancy, type of abortion procedure, social support, and financial self-efficacy were determined as the contributing factors of grief in women experiencing abortion in the selected public hospitals in Addis Ababa.

Women with no formal education were 3.53 times more likely to experience grief compared to those with college and above education [AOR=3.85, 95% CI: 1.31-9.52], while those with Grade 1-8 and Grade 9-10 education were 3.31 times[AOR= 3.31, 95% CI: 1.39-7.89] and 3.85 times more likely [AOR= 3.85, 95% CI:1.44-10.3], respectively. Women who had a regular sexual partner were 5.94 times more likely to report grief than those without a partner [AOR= 5.94, 95% CI: 2.17-16.2]. Those who did not have frequent contact with religious leaders were 2.22 times more likely to experience grief compared to those who did [AOR= 2.22, 95% CI: 1.03-4.78], and

women who had been pregnant before were 2.16 times more likely to experience grief than those with no prior pregnancy [AOR=2.16, 95% CI: 1.06-4.32]. In terms of social support, women with low support were 12.6 times more likely [AOR=12.6, 95% CI: 4.78-33.1], and those with moderate support were 4.41 times more likely [AOR= 4.41, 95% CI: 1.94-9.99] to experience grief than women with high social support. Financial self-efficiency also had a significant effect: women with low financial self-efficiency were 10.7 times more likely [AOR = 10.7, 95% CI: 3.63-31.5], and those with moderate self-efficiency were 7.31 times more likely [AOR= 7.31, 95% CI: 2.59-20.7] to experience grief compared to women with high financial self-efficiency (Table 5).

Table 5 Bi-variable and multivariable logistic regression analysis to determine the contributing factors of grief in women experiencing abortion in the selected public hospitals in Addis Ababa, 2025(n=422)

Variables	Category	Grief abortion			AOR(95%CI)	P-value
		High	Low	COR(95%CI)		
Educational status	No formal	51(83.6)	10(16.4)	5.34(2.40,11.9)	3.53(1.31,9.52)	.013*
	Grade 1-8	101(84.2)	19(15.8)	5.57(2.92,10.6)	3.31(1.39,7.89)	.007*
	Grade 9-10	82(86.3)	13(13.7)	6.61(3.21,13.6)	3.85(1.44,10.3)	.007*
	Grade 11 -12	45(77.6)	13(22.4)	3.63(1.72,7.66)	2.67(.980,7.26)	.055
	College & above	42(48.8)	44(51.2)		1	
Regular sexual partner	Yes	306(81.)	71(18.8)	8.62(4.40,16.9)	5.94(2.17,16.2)	.001*
	No	15(33.3)	30(66.7)		1	
Frequent contact with religious leaders	Yes	87(63.0)	51(37.0)		1	
	No	233(82.3)	50(17.7)	2.73(1.72,4.33)	2.22(1.03,4.78)	.041*
Ever been pregnant before current pregnancy	Yes	219(84.6)	40(15.4)	3.27(2.06,5.20)	2.16(1.06,4.32)	.030*
	No	102(62.6)	61(37.4)		1	
Type of abortion procedure	Medical	206(80.5)	50(19.5)		1	
	Surgical	113(68.9)	51(31.1)	.538(.342,.846)	526(.268,1.03)	.062
Social support	Low	149(95.5)	7(4.5)	25.2(10.7,59.3)	12.6(4.78,33.1)	.000*
	Moderate	128(75.3)	42(24.7)	3.60(2.12,6.13)	4.41(1.94,9.99)	.000*
	High	44(45.8)	52(54.2)		1	
Financial self-efficiency	Low	226(82.2)	49(17.8)	14.2(6.75,30.1)	10.7(3.63,31.5)	.000*
	Moderate	84(82.4)	18(17.6)	14.4(6.12,33.7)	7.31(2.59,20.7)	.000*
	High	11(24.4)	34(75.6)		1	

**indicates significance at 5% level, COR: Crude odd ratio, AOR: Adjusted odd ratio, 1: reference categories, CI: Confidence interval.*

Chapter Six: Discussion, Strength and Limitations

6.1 Discussion

A notable finding is lower educational status increased the likelihood of experiencing grief. Women with lower educational levels have a higher score of grief, which is due to limited access to information, resources for coping, or social support networks(39). Women with no formal education (AOR=3.53) are more likely to experience grief compared to those with a college and above. Therefore, there is a need for interventions focused and responsive to the specific needs of more vulnerable subgroups, particularly older women and those with lower educational levels. Limited education may lead to reduced awareness of family planning, requiring targeted interventions.

Thirty six percent were housewives, and only 5.5% engaged in paid work outside home duties. 89.3% reported a regular sexual partner, resulting in a need for the pregnancy to have a family, leading to grief in not being able to accomplish this. 69.4% were married, but 21% lived apart, which affected maternal support systems, warranting psychosocial interventions. The 25.6% with low financial confidence struggle with financial stress and economic instability. Lower financial self-efficacy has been linked to higher levels of financial anxiety, which can increase grief severity. For instance, individuals with low financial self-efficacy may struggle to cope with financial hardships, leading to emotional distress(60). Lower financial self-efficacy is a very strong predictor, increasing the odds of high grief.

A critical role of social support was strongly evidenced, with women reporting low social support being 12.6 times more likely to experience grief compared to women with high social support. As in previous studies, this study discovered a considerable negative connection between the degree of sadness and perceived social support(24). Studies emphasize the critical influence of family as a primary source of support in culturally conservative contexts(61). The protective works of social networks in decreasing the emotional pain are shown by the fact that women with more family support expressed lower levels of mourning. These findings showed how important it is to incorporate mental health and social support services into post abortion care.

The results of this study show important insights into the prevalence and contributing factors of grief among women experiencing abortion in selected public hospitals in Addis Ababa, Ethiopia.

The results highlight the deep emotional impact of abortion, with 76% of participants scoring above the clinical cutoff for severe grief. This high prevalence emphasizes the urgent need for focused psychological support and interventions for women undergoing abortion, whether it is spontaneous or induced abortion.

This study shows that grief is a prevalent emotional response. This line up with previous research showing that abortion can activate emotional distress, including feelings of loss, guilt, and despair(15, 31). Abortion's emotional toll is frequently underestimated, especially in situations when psychological suffering is made worse by social stigma and a lack of social support, as seen by the high percentage of women who experience severe loss.

Assuming the subscales, the active grief of the participants are relatively high indicating that the participants are experiencing a notable degree of acute grief symptoms. This means the emotional pain, sadness, and thoughts related to their loss are quite present and intense for many in the sample. Difficult coping has the highest mean score among the three subscales suggesting the participants had reported the most significant challenge in coping with their grief. This implies that many women are actively struggling to manage the emotional and practical aspects of their grief, possibly experiencing disruptions in their daily lives or finding it hard to adapt to their situation. While despair has the lowest mean showing feelings of hopelessness and meaninglessness are present.

Notably, spontaneous abortion were associated with significantly higher grief than induced abortions, likely due to their unexpected nature, which can leave women emotionally unprepared for the loss(21). These findings highlight the nuanced psychological impact of pregnancy loss, which varies depending on individual circumstances and prior experiences. Having a regular sexual partner is associated with a significantly higher likelihood of high grief. This could indicate complexities within relationships, or perhaps the nature of the abortion which is going to be a needed pregnancy experienced within such relationships. Having a regular sexual partner was also associated with increased grief experience (AOR=5.94). this suggests that within the context of a regular partnership, the abortion might represent the loss of a desired pregnancy.

6.2 Strengths and Limitations

The study focuses on a significant and often overlooked public health issue addressing the gap in local research. The use of a quantitative methodology with a substantial sample size and validated tools gives it credibility to its findings on prevalence and contributing factors.

However, the paper has also limitations. Its cross-sectional design means it can only establish associations, not causality, regarding grief factors. The reliance on self-reported data may introduce recall and social desirability biases. The findings are specific to public hospitals in Addis Ababa, potentially not representing women in other settings.

Chapter Seven: Conclusion

This study aimed to assess the prevalence and contributing factors of grief among women experiencing factors of grief among women experiencing abortion in selected public hospitals in Addis Ababa, Ethiopia. The findings revealed that 76% of women exhibited sever grief, indicating that abortion, whether spontaneous or induced, has a profound emotional impact.

The contributing factors identified through multivariable logistic regression include lower educational status, having a regular sexual partner, infrequent contact with religious leaders, a history of previous pregnancy, and low to moderate levels of social support and financial self-efficacy. Specifically, women with no formal education is at high risk of experiencing grief. Furthermore, a history of prior pregnancy, lower levels of social support, and diminished financial self-efficacy were powerful predictors of increased grief.

In conclusion, addressing post-abortion grief effectively requires recognizing its complex determinants and integrating comprehensive psychological and social support into routine reproductive healthcare services in Ethiopia. By doing so, the well-being of women navigating the challenging experience of abortion can be significantly improved.

Chapter Eight: Recommendation

Healthcare providers: implementing mandatory and systematic screening for grief symptoms among all women attending post-abortion care is important. Ensure the basic psychological first aid and emotional support are offered immediately post-abortion. Which can be empathetic listening, normalizing grief responses, and providing reassurance. Establish clear referral pathways to specialized mental health services, psychologists, or social workers for women with severe or persistent grief symptoms, especially those indicating despair or difficult coping.

Community level: there must be simple and accessible informational material in local languages for health centers and community spaces about managing grief after abortion and where to seek help. And also, collaborate with local religious leaders to raise awareness about post-abortion grief and encourage them to offer compassionate support within their communities, recognizing their potentially protective role. Explore the development and implementation of community-based support groups or peer counseling programs for women experiencing post-abortion grief.

The ministry of health and policy makers: they have to develop national guidelines or policies for comprehensive post-abortion care that explicitly integrate mental health and psychosocial support services. This should include protocols for grief assessment, counseling, and referral.

Academic and health training institutions: integrated comprehensive training on post-abortion grief and counseling into nursing, midwifery, and medical curricula.

Future research: conduct longitudinal studies to track the trajectory of grief over time, identify factors influencing resolution or complication, and assess the long-term mental health outcomes. Explore the lived experiences of grief in women post-abortion through qualitative methods to gain a deeper understanding of the nuances, meanings, and coping strategies, especially regarding the complexities of grief in the context of a regular sexual partner.

Reference

1. Reynolds-Wright JJ, Norrie J, Cameron ST. UTAH: using Telemedicine to improve early medical abortion at home: a protocol for a randomised controlled trial comparing face-to-face with telephone consultations for women seeking early medical abortion. *BMJ open*. 2021;11(6):e046628.
2. Turesheva A, Aimagambetova G, Ukybassova T, Marat A, Kanabekova P, Kaldygulova L, et al. Recurrent pregnancy loss etiology, risk factors, diagnosis, and management. Fresh look into a full box. *Journal of clinical medicine*. 2023;12(12):4074.
3. Melo P, Dhillon-Smith R, Islam MA, Devall A, Coomarasamy A. Genetic causes of sporadic and recurrent miscarriage. *Fertility and Sterility*. 2023;120(5):940-4.
4. Gordon K, Johnstone R. Abortion Anarchy? The Case for Abortion Decriminalization. *Social & Legal Studies*. 2024:09646639241256011.
5. Akhter K, Nahar S, Najma A, Khan S. Clinico-Pathological Outcome of Induced Abortion among the Patient Admitted in DMCH. *Sch Int J Obstet Gynec*. 2022;5(3):121-9.
6. Summerfield J, Regan L. How can we achieve sustainable development goal-5: Gender equality for all by 2030? *Clinical Obstetrics and Gynecology*. 2021;64(3):415-21.
7. Pollie MP, Romanski PA, Bortoletto P, Spandorfer SD. Combining early pregnancy bleeding with ultrasound measurements to assess spontaneous abortion risk among infertile patients. *American Journal of Obstetrics and Gynecology*. 2023;229(5):534. e1-. e10.
8. deMontigny F, Verdon C, Meunier S, Gervais C, Coté I. Protective and risk factors for women's mental health after a spontaneous abortion. *Revista latino-americana de enfermagem*. 2020;28:e3350.
9. Hristova M, Angelova M. International Miscarriage Rates: A Comprehensive Overview of Prevalence and Causes. *Journal of IMAB*. 2024;30(3):5703-9.
10. Seyoum K, Mengistu S. Prevalence and determinants of repeat induced abortion in Ethiopia: A systematic review and meta-analysis. *Heliyon*. 2023.
11. Geta G, Seyoum K, Gomora D, Kene C, Tsegaye B, Tenaw Z. Repeat-induced abortion and associated factors among reproductive-age women seeking abortion services in South Ethiopia. *Women's Health*. 2022;18:17455057221122565.
12. Amare T, Tessema F, Shaweno T. Determinants of unintended pregnancy and induced abortion among adolescent women in Ethiopia: Evidence from multilevel mixed-effects decomposition analysis of 2000–2016 Ethiopian demographic and health survey data. *Plos one*. 2024;19(3):e0299245.
13. Samreen R, Rashid S, Nadeem B. Moderating Role of Sense of Coherence on the Relationship between Grief and Embitterment among Women's Experiences Fetal Demise/Spontaneous Abortion. *Qlantic Journal of Social Sciences*. 2024;5(2):424-32.
14. De Stefano R, Muscatello MRA, Bruno A, Cedro C, Mento C, Zoccali RA, et al. Complicated grief: A systematic review of the last 20 years. *International Journal of Social Psychiatry*. 2021;67(5):492-9.
15. Kerns J, Cheeks M, Cassidy A, Pearlson G, Mengesha B. Abortion stigma and its relationship with grief, post-traumatic stress, and mental health-related quality of life after abortion for fetal anomalies. *Women's Health Reports*. 2022;3(1):385-94.
16. Becerra Gordo M. Pregnancy Loss and the Grieving Process. What Women and Their Partners Share. *Journal of Infant, Child, and Adolescent Psychotherapy*. 2022;21(3):252-61.

17. Bagheri L, Chaman R, Ghiasi A, Motaghi Z. Cognitive behavioral counselling in post abortion grief: A randomized controlled trial. *Journal of Education and Health Promotion*. 2023;12(1):120.
18. Yeshambel A, Alene T, Asmare G, Asnake G, Anmut W, Abebe K, et al. Maternal Coping Mechanism and Its Associated Factors Following Perinatal Loss in Hospitals of Wolaita Zone, South Ethiopia 2021. *OBM Neurobiology*. 2023;7(1):1-16.
19. Kartika EABD, Pratiwi CS. QUALITATIVE STUDY: COPING OF THE MOTHERS AFTER SPONTANEOUS ABORTIONS. *Jurnal Aisyah: Jurnal Ilmu Kesehatan*. 2023;8(4).
20. Akhtar M, Khalid B. Effect of Sustaining a Perinatal Loss: Mothers' Mental Health and Marital Satisfaction. *Illness, Crisis & Loss*. 2024;32(2):286-96.
21. Dawood Y, de Vries JM, van Leeuwen E, van Eekelen R, de Bakker BS, Boelen PA, et al. Psychological sequelae following second-trimester termination of pregnancy: A longitudinal study. *Acta Obstetrica et Gynecologica Scandinavica*. 2024;103(9):1868-76.
22. Regassa LD, Tola A, Daraje G, Dheresa M. Trends and determinants of pregnancy loss in eastern Ethiopia from 2008 to 2019: analysis of health and demographic surveillance data. *BMC Pregnancy and Childbirth*. 2022;22(1):671.
23. Kishimoto M, Yamaguchi A, Niimura M, Mizumoto M, Hikitsuchi T, Ogawa K, et al. Factors affecting the grieving process after perinatal loss. *BMC women's health*. 2021;21:1-6.
24. Flach K, Machado WDL, Centenaro Levandowski D. Maternal mental health, marital adjustment, and family support in the grieving process after a pregnancy loss. *Death Studies*. 2024;1-11.
25. Bramble EA. Integrating Clinical Psychologists Into Obstetrics and Gynecology Settings to Treat Perinatal Grief Following Miscarriage a Comprehensive Literature Review: The Chicago School of Professional Psychology; 2024.
26. Demontigny F, Verdon C, Meunier S, Dubeau D. Women's persistent depressive and perinatal grief symptoms following a miscarriage: the role of childlessness and satisfaction with healthcare services. *Archives of women's mental health*. 2017;20:655-62.
27. Duarte M, Torres A, Carvalho P. Parental Experiences of Grief after Pregnancy Loss: systematic review of qualitative studies. *European Psychiatry*. 2024;67(S1):S235-S.
28. Rezaee N, Afhami H, Navvabi-Rigi S-D. The Effects of Positive Self-Talk on Anxiety and Grief Among Women with Spontaneous Abortion: A Quasi-Experimental Study. *Shiraz E-Medical Journal*. 2024;25(2).
29. Díaz-Pérez E, Haro G, Echeverria I. Psychopathology present in women after miscarriage or perinatal loss: A systematic review. *Psychiatry International*. 2023;4(2):126-35.
30. Facão R, Madeira L. Interpretative Phenomenology of Grief following Reproductive Loss: A Narrative Review and Considerations on Improving Support. *Psychopathology*. 2024;57(1):45-52.
31. Kulathilaka S, Hanwella R, de Silva VA. Depressive disorder and grief following spontaneous abortion. *BMC psychiatry*. 2016;16:1-6.
32. Mergl R, Quaat SM, Edeler L-M, Allgaier A-K. Grief in women with previous miscarriage or stillbirth: a systematic review of cross-sectional and longitudinal prospective studies. *European Journal of Psychotraumatology*. 2022;13(2):2108578.
33. Oumer M, Manaye A. Prevalence and associated factors of induced abortion among women of reproductive age group in Gondar Town, Northwest Ethiopia. *Int J Public Health*. 2019;7(3):66.

34. Jamie AH, Abdosh MZ. Prevalence of induced abortion and associated factors among women of reproductive age in Harari region, Ethiopia. *Public Health of Indonesia*. 2020;6(2):35-40.
35. Corless IB, Limbo R, Bousso RS, Wrenn RL, Head D, Lickiss N, et al. Languages of grief: A model for understanding the expressions of the bereaved. *Health Psychology and Behavioral Medicine: An Open Access Journal*. 2014;2(1):132-43.
36. Shellenberg KM, Tsui AO. Correlates of perceived and internalized stigma among abortion patients in the USA: an exploration by race and Hispanic ethnicity. *International Journal of Gynecology & Obstetrics*. 2012;118:S152-S9.
37. Giotta M, Bartolomeo N, Trerotoli P. A Retrospective Observational Study Using Administrative Databases to Assess the Risk of Spontaneous Abortions Related to Environmental and Socioeconomic Conditions. *Life*. 2023;13(9):1853.
38. Curley M, Johnston C. The characteristics and severity of psychological distress after abortion among university students. *The journal of behavioral health services & research*. 2013;40:279-93.
39. Pun KM, Silwal K, Poudel A, Panthee B. Predictors of spontaneous abortion among reproductive-aged women at tertiary level hospital, Kathmandu. *Journal of Patan Academy of Health Sciences*. 2021;8(1):73-83.
40. McCarthy FP, Moss-Morris R, Khashan AS, North RA, Baker PN, Dekker G, et al. Previous pregnancy loss has an adverse impact on distress and behaviour in subsequent pregnancy. *BJOG: An International Journal of Obstetrics & Gynaecology*. 2015;122(13):1757-64.
41. Feizollahi N, Nahidi F, Sereshti M, Nasiri M. The correlation between post-abortion grief and quality of life in females with a history of abortion visiting health centers and hospitals of Shahid Beheshti University of Medical Sciences, Iran during year 2016. *Advances in Nursing & Midwifery*. 2019;28(1):55-60.
42. Mendes DCG, Fonseca A, Cameirão MS. The psychological impact of Early Pregnancy Loss in Portugal: incidence and the effect on psychological morbidity. *Frontiers in Public Health*. 2023;11:1188060.
43. Pack M. Women's grief in induced abortion (IA) and later loss of pregnancy: Themes from a narrative literature review with implications for counselling. *New Zealand Journal of Counselling*. 2020;40(2).
44. Ho AL, Hernandez A, Robb JM, Zeszutek S, Luong S, Okada E, et al. Spontaneous miscarriage management experience: a systematic review. *Cureus*. 2022;14(4).
45. Druguet M, Nuño L, Rodó C, Arévalo S, Carreras E, Gómez-Benito J. Emotional effect of the loss of one or both fetuses in a monochorionic twin pregnancy. *Journal of Obstetric, Gynecologic & Neonatal Nursing*. 2018;47(2):137-45.
46. Pack M. Women's grief in induced abortion (IA) and later loss of pregnancy: Themes from a narrative literature review with implications for counselling. *New Zealand Journal of Counselling*. 2020;40(2):69-80.
47. Adane T, Tadesse T, Endazenaw G. Assessment on utilization of health management information system at public health centers Addis Ababa City administrative, Ethiopia. *Internet Things Cloud Comput*. 2017;5(1):7-18.
48. Adolfsson A. Meta-analysis to obtain a scale of psychological reaction after perinatal loss: focus on miscarriage. *Psychology Research and Behavior Management*. 2011:29-39.
49. Lee S, Mathis A, Jobe M, Pappalardo E, Neimeyer R. Screening for dysfunctional Covid-19 grief: A replication and extension. *Bereavement*. 2024;3.

50. Ravaldi C, Bettiol A, Crescioli G, Lombardi N, Biffino M, Romeo G, et al. Italian translation and validation of the perinatal grief scale. *Scandinavian Journal of Caring Sciences*. 2020;34(3):684-9.
51. Gozuyesil E, Manav AI, Yesilot SB, Sucu M. Grief and ruminative thought after perinatal loss among Turkish women: one-year cohort study. *Sao Paulo Medical Journal*. 2022;140(2):188-98.
52. Maniatelli E, Zervas Y, Halvatsiotis P, Tsartsara E, Tzavara C, Briana DD, et al. Translation and validation of the Perinatal Grief Scale in a sample of Greek women with perinatal loss during the 1st and 2nd trimester of pregnancy. *The Journal of Maternal-Fetal & Neonatal Medicine*. 2018;31(1):47-52.
53. Kones MO, Kaydirak MM, Aslan E, Yildiz H. The Perinatal Grief Scale (33-item Short Version): Validity and reliability of the Turkish/Perinatal Yas Olcegi (33 maddeli Kisa Surum): Turkce gecerlilik ve guvenilirlik calismasi. *Anadolu Psikiyatri Dergisi*. 2017;18(3):231-7.
54. Xu J, Gu S, Su S. Validity and Reliability of the Perinatal Grief Intensity Scale in a Chinese Clinical Sample: A Prospective Cross-Sectional Study. *Clinical and Experimental Obstetrics & Gynecology*. 2023;50(9):189.
55. Setubal M, Bolibio R, Jesus R, Benute G, Gibelli MA, Bertolassi N, et al. A systematic review of instruments measuring grief after perinatal loss and factors associated with grief reactions. *Palliative & supportive care*. 2021;19(2):246-56.
56. Wang Y, Chung MC, Wang N, Yu X, Kenardy J. Social support and posttraumatic stress disorder: A meta-analysis of longitudinal studies. *Clinical psychology review*. 2021;85:101998.
57. Farrell L, Fry TR, Risse L. The significance of financial self-efficacy in explaining women's personal finance behaviour. *Journal of economic psychology*. 2016;54:85-99.
58. Sarawagi A, Vang M, Yan K, Piacentine L, Gecsi K, Chelimsky G, et al. Intimate partner violence screening in an obstetrics clinic: a retrospective study. *WMJ*. 2024;123(6):441-5.
59. Akpakan A. Pregnancy intendedness in a high-risk obstetric population in a regional hospital. 2024.
60. Lee JM, Rabbani A, Heo W. Examining financial anxiety focusing on interactions between financial knowledge and financial self-efficacy. *Journal of financial therapy*. 2023;14(1):2.
61. Yadollahi P, Doostfateme M, Khalajinia Z, Karimi Z, Ghavi F. Perceived social support, marital satisfaction, and resilience in women with abortion experience through structural equation modeling. *Scientific Reports*. 2025;15(1):332.

Annex 1: Consent

ADDIS ABABA UNIVERSITY COLLEGE OF HEALTH SCIENCE SCHOOL OF NURSING
AND MIDWIFERY

QUESTIONNAIRE PREPARED TO ASSESS THE PREVALENCE AND CONTRIBUTING
FACTORS OF GRIEF IN WOMEN EXPERIENCING ABORTION IN ADDIS ABABA
SELECTED PUBLIC HOSPITALS, ETHIOPIA, 2025

My name is _____ I am a member of a research team to assess the prevalence and contributing factors of grief in women experiencing abortion from public hospitals of Addis Ababa 2025, by Tsion Bewketu who is studying for her Master's degree at Addis Ababa University, Collage of Health Science Department of Nursing and Midwifery. If you decide to participate in the study, you will be asked some questions. Any information you provide will be kept confidential. Your name will not appear on the questionnaires. Any information you provide will not be used against you. Your response will not bring any harm to you.

Have you been recently diagnosed with any mental illness?

Yes ☐ No ☐

Having stated the information above, would you like to participate in this study?

Yes ☐ No ☐

Thank you for your collaboration!

Name of interviewer _____ signature _____ date _____

Name of supervisor _____ signature _____ date _____

Annex 2: Questionnaire

Section 1: Socio demographic Information

101. How old were you?	_____ Years
102. What is your educational status	1. No formal education 2. Grade 1-8 3. Grade 9-10 4. Grade 11 -12 5. College and above
103. What is your current employment status?	1. Unemployed 2. Housewife 3. Private business 4. Government employe 5. Student 6. Daily laborer 7. Others _____
104. Aside from your own housework, are you currently participated in any work in which you paid in cash or kind?	1. No 2. Yes, in cash 3. Yes, in kind 4. Yes, both in cash and kind
105. Do you currently have regular sexual partner	1. Yes (I am in regular sexual relation) 2. No (I am engaged in multiple sexual relation)
106. What is your marital status?	1. Living apart 2. Living together, not formally married 3. Currently married 4. Divorced/Separated/broken up 5. Widowed/partner died
107. For how long you have been in relationship with the father of your current pregnancy?	1. Not living together 2. Less than 6 months 3. 6 months to 1 year 4. 2-5 years 5. More than 5 years
108. What is your family size? Number of individuals permanently living in your household. (Crowding index)	Family size _____
109. Do you have frequent contact with religious leaders	1. Yes 2. No

110. In the past 12 months have you used any substance?	1. No 2. Yes Alcohol 3. Yes Chat 4. Yes cigarette 5. Yes, Others _____
111. During the past 12 months how often do you drink alcohol? Would you say:	1. Every day or nearly every day 2. Once or twice a week 3. 1 – 3 times a month 4. Occasionally, less than once a month 5. Never
112. In the <u>past 12 months</u> , have you experienced any of the following problems, related to your drinking?	1. Money problems 2. Health problems 3. Conflict with family or friends 4. Problems with authorities (bar owner/police, etc) 5. Other, specify. _____
113. Regarding expense of your income and expenses. From provided choices select a statement that best describe your houses use of income	1. Your household can save money 2. Your household spends what it earns 3. Your household eats into its assets and savings 4. Your household gets into debt

Section 2: financial self-efficacy scale

Financial Self-Efficacy Scale	Not true at all	Hardly true	Moderately true	Exactly true
201 It is hard to stick to my spending when unexpected expenses arise	1	2	3	4
202 It is challenging to make progress towards my financial goals	1	2	3	4
203 When unexpected expenses occur, I usually have to use credit	1	2	3	4
204 When faced with a financial challenge, I have a hard time figuring out a solution	1	2	3	4
205 I lack confidence in my ability to manage my finances	1	2	3	4
206 I worry about having enough money	1	2	3	4

Section 3: History of Reproductive Health

301	Have you ever been pregnant before the current pregnancy?	1. Yes 2. No
302	How was the current pregnancy conceived? Was it through natural or assisted reproductive technology	1. Spontaneous 2. Assisted
303	When you found out you were pregnant, how did you feel?	1. Very happy 2. Sort of happy 3. Mixed happy and unhappy 4. Sort of unhappy 5. Very unhappy
304	Have you told your partner about your current pregnancy?	1. Yes 2. No
305	If yes at the time you told your partner about your pregnancy; what was his first reaction?	1. He was Happy/supportive 2. He was abusive or violent 3. He throws me out of home/He left me 4. Mixed happy and unhappy 5. Unhappy 6. Others _____
306	If you did not tell your partner about pregnancy what is/was your main reason?	1. Fear of rejection or abandonment 2. Fear of violence or abuse 3. Lack of support 4. Uncertainty about the partner's reaction 5. Infidelity or paternity concerns 6. Financial dependency 7. Others _____
307	Have you informed your partner your plan of having abortion	1. Yes 2. No
308	If yes what was his reaction about you having abortion	1. He was supportive 2. He was abusive or violent 3. He throws me out of home 4. He was unsupportive 5. Others _____
309	Do you have a child	1. Yes 2. No
310	How many children do you have, who are alive now?	Number of children _____

311	Have you had a pregnancy that miscarried, was aborted, or ended in a stillbirth?	1. Yes 2. No
312	If yes what was the type of abortion	1. Spontaneous 2. Induced
313	Have you experienced recurrent pregnancy loss?	1. Yes 2. No
314	How many times have you experienced abortion?	Spontaneous _____ Induced _____
315	How many months pregnant were you at the time of abortion?	_____ months
316	Is your current abortion induced or spontaneous?	1. Spontaneous 2. Induced
317	What type of abortion procedure you had?	1. Medical Abortion 2. Surgical Abortion
318	Where did you initiate the abortion?	1. In this health facility 2. In another health facility and referred 3. Bought drug by myself 4. Other nonmedical methods
319	Have you been diagnosed with a mental illness in the past and have received any medical treatment (past history of mental health)	1. Yes 5. No
320	Which of the following is discussed with your health care providers?	1. Post-abortion mental health 2. Return to fertility 3. Healthy timing and spacing of pregnancies 4. Long-acting method options 5. Family planning methods 6. None of the above

Section 4. London measure of unplanned pregnancy (LMUP) response to assess pregnancy intention

401	In the month that I become pregnant	0. I always used contraception 1. I was using contraception, but not on every occasion 2. I was not using contraception
402	In terms of becoming a mother, I feel that my pregnancy happened at the	0. Right time 1. Ok, but not quite right time

403	2. Wrong time Just before I became pregnant
404	0. I did not intend to get pregnant 1. My intention kept changing 2. I intended to get pregnant Just before I became pregnant
405	0. I did not want to have a baby 1. I had mixed feelings about having a baby 2. I wanted to have a baby Before I became pregnant.....
406	0. We never discussed having children together 1. My partner and I discussed having children together, but hadn't agreed for me to get pregnant 2. My partner and I had agreed that we would like me to be pregnant Before you become pregnant, did you do anything to improve your health in preparation for pregnancy 0. No preparatory lifestyle changes 1. Did one preparatory lifestyle changes 2. Did two or more preparatory lifestyle changes If the answer is "I had preparation" what kind of preparation did you make 1. Took folic acid 2. Stopped or cut down smoking 3. Stopped or cut down drinking alcohol 4. Ate more healthily 5. Sought medical/ health advice

Section 5 Humiliation, afraid, rape, kick(HARK) response to assess Intimate partner violence

	Question	Yes	No
501	H: have you been humiliated or emotionally abused by your partner or ex-partner within the last year?		
502	A: have you been afraid of your partner or ex-partner within the last year?		
503	R: have you been raped or forced to have any kind of sexual activity by your partner or ex-partner within the last year?		
504	K: have you been kicked, hit, slapped, or otherwise physically hurt by your partner or ex-partner within the last year?		

Section 6 Received social support scale (R3S) response to assess the level of social support received by the women

	Question	Strangely agree	Agree	Neutral	Disagree	Strangely disagree
601	Someone was available to listen openly when you talked about you with the abortion					
602	Someone was available with whom you could share your private worries and fears about your pregnancy?					
603	Someone expressed empathy about or understood your situation?					
604	Someone was available who helped you pay for costs associated with abortion service?					
605	Someone was available who assisted you with transportation to seek care?					
606	Someone was available to help you with things you were not able to do on your own while seeking care?					
607	Someone was there for you who helped you get your mind off things?					
608	Someone encouraged you not to give up on your desire to end your pregnancy?					
609	Someone was there for you to turn to for suggestions about how to make decision about your pregnancy?					

Section 7: Each item is a statement of thoughts and feelings that some people have concerning a loss such as yours. There are no right or wrong responses to these statements. For each item, thick that best indicates the extent to which you agree or disagree with it. If you are not certain, use the "neither" category.

1. Strongly agree 2. Agree 3. Neither Agree or Disagree 4. Disagree 5. Strongly Disagree

No	Statement	Strongly agree	Agree	Neither agree or Disagree	Disagree	Strongly Disagree
701	I feel depressed					
702	I find it hard to get along with certain people					
703	I feel empty inside					
704	I can't keep up with my normal activities					
705	I feel a need to talk about the baby					
706	I am grieving for the baby					
707	I am frightened					
708	I have considered suicide since the loss					
709	I take medicine for my nerves					
710	I very much miss the baby					
711	I feel I have adjusted well to the loss					
712	It is painful to recall memories of the loss					
713	I get upset when I think about the baby					
714	I cry when I think about him/her					
715	I feel guilty when I think about the baby					
716	I feel physically ill when I think about the baby					

I feel unprotected in a dangerous world
717 since he/she died
I try to laugh, but nothing seems funny
718 anymore
719 Time passes so slowly since the baby died
720 The best part of me died with the baby
721 I have let people down since the baby died
722 I feel worthless since he/she died
723 I blame myself for the baby's death
I get cross at my friends and relatives more
724 than I should
Sometimes I feel like I need a
professional counselor to help me get my
725 life back together again
I feel as though I'm just existing and not
726 really living since he/she died
727 I feel so lonely since he/she died
I feel somewhat apart and remote, even
728 among friends
729 It's safer not to love
I find it difficult to make decisions since
730 the baby died
731 I worry about what my future will be like
Being a bereaved parent means being a
732 "Second-Class Citizen"
733 It feels great to be alive

Annex 3: Consent in Amharic version

የአዲስ አበባ ዩኒቨርሲቲ የጤና ሳይንስ ኮሌጅ የነርስ እና አዋላጅ ነርስ ትምህርት ኮሌጅ በአዲስ አበባ 2025 ፅንሰ ማስወረድ በሚደርስባቸው ሴቶች ላይ ያለውን ስርጭት እና አስተዋፅዖ የሚያበረክተውን የሀዘን መንስኤ ለመገምገም የተዘጋጀ ጥያቄ

ስሜ _____ እኔ ጥናቱን ለማካሄድ ተሳታፊ ስሆን በአዲስ አበባ ዩኒቨርሲቲ የማስተርስ ድግሪዎን የምትማረው አጥኚዎ ፅዮን በእውቀቱ በጤና ሳይንስ ኮሌጅ የነርስና አዋላጅ ነርስ ክፍል ፅንሰ ማስወረድ በሚደርስባቸው ሴቶች ላይ ያለውን ስርጭት እና አስተዋፅዖ የሚያበረክተውን የሀዘን መንስኤ ለመገምገም የተዘጋጀ ነው። በጥናቱ ለመሳተፍ ከወሰኑ አንዳንድ ጥያቄዎች ይጠየቃሉ። የሚያቀርቡት ማንኛውም መረጃ በሚስጥር ይጠበቃል። ስሞት በመጠይቁ ላይ አይታይም። የሚያቀርቡት ማንኛውም መረጃ በእርስዎ ላይ ጥቅም ላይ አይውልም። ምላሶት ምንም ጉዳት አያስከትልብህም።

ከዚህ ቀደም የስነ አእምሮ ህክምና ተደርጎልሽ ያቃል?

አዎ ☐ አይደለም ☐

ከላይ ያለውን መረጃ ከገለጹ በኋላ በዚህ ጥናት መሳተፍ ይፈልጋሉ?

አዎ ☐ አይደለም ☐

ስለ ትብብርዎ እናመሰግናለን!

የጠያቂው ፊርማ ቀን _____

ፊርማ ቀን ስም _____

Annex 4 : Questionnaire in Amharic version

መጠይቅ

ክፍል 1: ስለ ስነ ሕዝብ አወቃቀር መረጃ

ት. ቁ	ጥያቄ	የምላሽ አማራጮች
101	ዕድሜሽ ስንት ነው?	
102	የትምህርት ደረጃዎ ምን ያህል ነው?	1. መደበኛ ትምህርት ያልተማረች 2. 1-8 ክፍል 3. 9-10 ክፍል 4. 11-12 ክፍል 5. ኮሌጅ እና ከዚያ በላይ
103	አሁን ያለሽበት የስራ ሁኔታ ምንድነው?	1. የማይሰራ 2. የቤት እመቤት 3. የግል ንግድ 4. የመንግስት ሰራተኛ 5. ተማሪ 6. የጉልበት ሠራተኛ 7. ሌሎች
104	ከራስዎ የቤት ስራ በተጨማሪ በጥሬ ገንዘብ ወይም በዕቃ የሚከፈል ስራ ውስጥ እየሰራችሁ ነው?	1. አይ 2. አዎ በጥሬ ገንዘብ 3. አዎ በዕቃ 4. አዎ በሁለቱም
105	አሁን የተወሰነ የጾታዊ አጋር አሎት?	i. አዎ (በወሳኝ ግንኙነት ውስጥ ነኝ) ii. አይ (በብዙ ግንኙነቶች ውስጥ ነኝ)
106	የጋብቻ ሁኔታዎ ምንድን ነው?	1. ለሰባቸው መኖር 2. አብረው መኖር፣ ግን በይፋ ያላገቡ 3. በይፋ ያገቡ 4. ተፋትተዋል 5. አጋር ሞተ
107	ከአሁኑ የእርግዝናዎ አባት ጋር ስንት ጊዜ ነበራችሁ?	1. አብረው አልኖሩም 2. ከ6 ወር በታች 3. 6 ወር እስከ 1 ዓመት 4. 2-5 ዓመት

		5. ከ5 ዓመት በላይ	
108	የቤተሰብ መጠንዎ ስንት ነው? (በቋሚነት በቤትዎ ውስጥ የሚኖሩ ቤተሰብ መጠን----- ሰዎች ቁጥር)		
109	በየጊዜው ከሃይማኖት መሪዎች ጋር ግንኙነት አሎት?	1. አዎ	
		2. አይ	
110	ባለፈው 12 ወራት ውስጥ ማንኛውንም ንጥረ ነገር ተጠቀሙ?	1. አይ	
		2. አዎ፣ አልኮል	
		3. አዎ፣ ሻት	
		4. አዎ፣ ሲጋራ	
		5. አዎ፣ ሌሎች	
112	ባለፈው 12 ወራት ውስጥ ምን ያህል ጊዜ አልኮል ታጠጣለህ?	1. በየቀኑ	
		2. አንድ ወይም ሁለት ጊዜ በሳምንት	
		3. 1-3 ጊዜ በወር	
		4. ከወር አንድ ጊዜ በታች	
		5. በጭራሽ	
113	ባለፈው 12 ወራት ውስጥ ከመጠጥ ጋር የተያያዙ ችግሮች ነበሩዎት?	1 የገንዘብ ችግሮች	
		2 የጤና ችግሮች	

ክፍል 2፡ የፋይናንሺያል እራስ-ውጤታማነት መለኪያ

ተ/ቁ	የፋይናንሺያል እራስ-ውጤታማነት መለኪያ	በፍፁም እውነት አይደለም።	እውነት ለማለት ይከብዳል	ነው በመጠኑ እውነት ነው	በትክክል እውነት
201	የገንዘብ ገቢዬ ላይ ማሻሻያ (ጭማሬ) ማድረግ ከባድ ነው።				
202	ያልተጠበቁ ወጪዎች በሚገጥሙኝ ጊዜ መወጣት ይከብደኛል				
203	አብዛኛውን ጊዜ ያልተጠበቁት (ያላሰብኩት) ወጪዎች ሲያጋጥሙኝ መበደር ይኖርብኛል።				
204	ከገንዘብ ጋር በተያያዘ ችግር ሲያጋጥመኝ፣ መፍትሄ ለማግኘት እቸገራለሁ።				
205	የገንዘብ አጠቃቀም ችሎታዬ ላይ እምነት የለኝም				
206	በቂ ገንዘብ ስለማግኘት እጨነቃለሁ				

ክፍል 3፡ የስነ ተዋልዶ ጤና ታሪክ

ተ ቁ	ጥያቄ	
301	ከዚህ እርግዝና በፊት ሌላ እርግዝና ተፈጥሮ ያቃል?	1 አዎ 2 አይ
302	እርግዝናው በተፈተር ሰአት እርጉዝ መሆን ትፈልጊ ነበር፤ መቆየት ትፈልጊ ነበር፤ ወይስ ሌላ ልጅ አትፈልጊም ነበር?	1 ፈልግ ነበር 2 ቆይቼ 3 አልፈልግም
303	እርጉዝ መሆንሽን ስታቂ ምን ተስማሽ?	1. በጣም ደስተኛ 2. ትንሽ ደስተኛ 3. የተቀላቀለ ደስታ እና ቅሬታ 4. ትንሽ ቅር 5. በጣም ቅር
304	ስለ አሁኑ እርግዝናዎ ለትዳር ጓደኛዎ ነግረዋል?	1. አዎ 2. አይ
305	አዎ ከሆነ፤ ለትዳር ጓደኛዎ ስለ እርግዝናዎ ሲነግሩት የመጀመሪያ ምላሹ ምን ነበር?	1. ደገፈኝ 2. በደል ወይም ጥቃት ፈጸሙብኝ 3. ከቤት አስወጣኝ/ተወኝ 4. ደስተኛ 5. የተቀላቀለ ደስታ እና ቅሬታ 6. ቅር 7. ሌሎች_____

306	ስለ እርግዝናዎ ለትዳር ጓደኛዎ ካልነገሩት፣ ዋናው ምክንያትዎ ምንድን ነው/ነበር?	1. ውድቅት ወይም መተው ፍርሃት 2. የጥቃት ወይም በደል ፍርሃት 3. የድጋፍ እጦት 4. ስለ አጋር ምላሽ እርግጠኛ አለመሆን 5. ታማኝ አለመሆን ወይም የአባትነት ጉዳዮች 6. የገንዘብ ጥገኝነት 7. ሌሎች _____
307	ለአጋርዎ ስለ ፅንሰ ማስወረድ እቅድዎ ነግረዋል?	1. አዎ 2. አይ
308	አዎ ከሆነ፣ ስለ ፅንሰ ማስወረድዎ የእሱ ምላሽ ምን ነበር?	1. ደገፊኝ 2. በደል ወይም ጥቃት ፈጸሙብኝ 3. ከቤት አስወጣኝ 4. አልደገፊኝም 5. ሌሎች _____
309	አሁን በሕይወት ያሉ ስንት ልጆች አሉዎት?	የልጆች ብዛት _____
310	የሚቋረጥ፣ የሚቋረጥ ወይም በሞት የተወለደ እርግዝና አጋጥሞዎት ያውቃል?	1. አዎ 2. አይ
311	አዎ ከሆነ፣ የፅንሰ ማስወረዱ አይነት ምን ነበር?	1. ድንገተኛ 2. የተነሳሳ
312	ስንት ጊዜ ፅንሰ አስወርደዋል?	ድንገተኛ _____ የተነሳሳ _____
313	በፅንሰ ማስወረድ ጊዜ ስንት ወር እርጉዝ ነበሩ?	_____ ወሮች

314	የአሁኑ ፅንሰ ማስወረድ የተነሳሳ ወይም ድንገተኛ ነው?	1. ድንገተኛ 2. የተነሳሳ
315	ምን ዓይነት የፅንሰ ማስወረድ ሂደት ነበረዎት?	1. የሕክምና ፅንሰ ማስወረድ 2. የቀዶ ጥገና ፅንሰ ማስወረድ
316	ፅንሰ ማስወረዱን የት ጀመሩት?	1. በዚህ የጤና ተቋም 2. በሌላ የጤና ተቋም እና ተላክ 3. መድሃኒት በራሴ ገዛሁ 4. ሌሎች የሕክምና ያልሆኑ ዘዴዎች
317	በዚህ ጊዜ የአእምሮ ሕመም እንዳለብዎት ታውቀዋል እና ማንኛውንም የሕክምና ሕክምና (የአእምሮ ጤና ያለፈ ታሪክ) አግኝተዋል?	1. አዎ 2. አይ
318	ከሚከተሉት ውስጥ ከጤና እንክብካቤዎችዎ ጋር የትኛው ተብራርቷል?	1. ከፅንሰ ማስወረድ በኋላ የአእምሮ ጤና 2. ወደ መራባት መመለስ 3. ጤናማ ጊዜ እና የእርግዝና ክፍተት 4. የረጅም ጊዜ ዘዴ አማራጮች 5. የቤተሰብ ምጣኔ ዘዴዎች 6. ከላይ ከተጠቀሱት ውስጥ አንዳቸውም አይደሉም

ክፍል 4: የለንደን ልኬት ያልታቀደ እርግዝና (LMUP) የእርግዝና ዓላማን ለመገምገም ምላሽ

401	ባረገዝኩበት ወር	1 የወሊድ መከላከያ መንገዶችን ሁሌ እጠቀም ነበረ። 2 አልፎ አልፎ እጠቀም ነበረ። 3 የወሊድ መከላከያ መንገዶችን እየተጠቀምኩ አልነበረም
-----	------------	---

402	እናት መሆንን በተመለከተ፣ ይህ እርግዝና የተከሰተው	1 በትክክለኛ ጊዜ ነው 2 ይሁን ግን ፍጹም ትክክለኛ ነው የሚባል ጊዜ አይደለም 3 በትክክለኛ ጊዜ አይደለም
403	እርግዝና ከመከሰቱ በፊት የማርገዝ ፍላጎትን በተመለከተ...	1 ለማርገዝ አላሰብኩም ነበር 2 በየጊዜው ፍላጎቴ ይቀያየር ነበር 3 የማርገዝ ፍላጎት ነበረኝ
404	እርግዝና ከመከሰቱ በፊት ልጅ የመውለድ ፍላጎትን በተመለከተ...	1 ልጅ የመውለድ ፍላጎት አልነበረኝም ነበር 2 ለመውለድም ለመተወም መወሰን አቅቶኝ ነበር 3 ልጅ ለመውለድ እፈልግ ነበር
405	እርግዝና ከመከሰቱ በፊት ልጅ ስለመውለድ በተመለከተ ከባልሽ/ከወንድ ጓደኛሽ ጋር ተወያይተሻል ?	1 ልጅ ስለመውለድ በጭራሽ ተወያይተን አናቅም 2 ተወያይተናል ግን እንዳረግዝ አልተስማማንም ነበር ከባለቤቴ/ከወንድ ጓደኛዬ ጋር ተስማምተን ነው ያረገዝኩት
406	ከማርገዝሽ በፊት ለእርግዝናሽ ለመዘጋጀት የሚረዳ ያደረግሽዉ የጤና ዝግጅት አለ?	1 ምንም ለዝግጅት የሚረዳ የኑሮ ዘይቤ ለዉጥ አልነበረኝም 2 1አይነት ለርግዝና ዝግጅት የሚረዳ የኑሮ ዘይቤ ለዉጥ ነበረኝ 3 2 የተለያየ አይነት ለርግዝና ዝግጅት የሚረዳ የኑሮ ዘይቤ ለዉጥ

ክፍል 5 ውርደት፣ ፍርሃት፣ መደፈር፣ መምታት(HARK) የቅርብ አጋር ጥቃትን ለመገምገም

501	ባለፈው ዓመት ውስጥ የአሁኑ(በቀድሞ) የትዳር አጋርሽ ወይም የወንድ ጓደኛሽ አንቺን የሚያዋርድ ወይም ስሜትሽን የሚጎዳ ነገር አድርጎብሽ ያወቃል?	1 አዎ 2 አይ
502	ባለፈው ዓመት ውስጥ የአሁኑ(የቀድሞ) የትዳር አጋርሽን ወይም የወንድ ጓደኛሽን ፈርተሽዉ ታወቂ ነበር?	1 አዎ 2 አይ
503	ባለፈው ዓመት ውስጥ የአሁኑ(የቀድሞ) የትዳር አጋርሽ ወይም የወንድ ጓደኛሽ አስገድዶ የግብረሰጋ ግኑኝነት አድርጎ ወይም ማንኛውንም ዓይነት ወሲባዊ ድርጊት እንድትፈፅሟ አስገድዶሽ ያወቃል?	1 አዎ 2 አይ
504	ባለፈው ዓመት ውስጥ በአሁኑ(በቀድሞ) የትዳር አጋርሽ ወይም የወንድ ጓደኛሽ የመመታት፣ የመደብደብ፣ በጥፊ የመመታት ወይም ሌላ አይነት የአካል ጉዳት አድርሶብሽ ያወቃል?	1 አዎ 2 አይ

ክፍል 6: በሴቶች የተቀበሉትን የማህበራዊ ድጋፍ ደረጃ ለመገምገም የማህበራዊ ድጋፍ ልኬት (R3S) ምላሽ።

ተ ቁ	ጥያቄ	በጣም እስማማለሁ ሁ	እስማማለሁ	ገለልተኛ	አልስማማም	በጣም አልስማማም
601	በድንገት ስለ ፅንሰ ማስወረድዎ ሲናገሩ አንድ ሰው በግልፅ ለማዳመጥ ዝግጁ ነበር።					
602	ስለ እርግዝናዎ ያለዎትን የግል ጭንቀቶች እና ፍራቻዎች የሚያካፍሉት ሰው ነበረ?					
603	የሆነ ሰው ስለ ሁኔታዎ ያለውን ስሜት ገልጿል ወይም ተረድቷል?					
604	ከውርጃ አገልግሎት ጋር ለተያያዙ ወጪዎች እንዲከፍሉ የረዳዎት ሰው ተገኝቷል?					
605	እንክብካቤ ለመፈለግ በመጓጓዣ የረዳዎት ሰው አለ?					
606	እንክብካቤ በሚፈልጉበት ጊዜ በራስዎ ማድረግ ያልቻላችሁትን አንድ ሰው ሊረዳዎ ነበር?					
607	አእምሮህን ከነገሮች እንድታወጣ የረዳህ አንድ ሰው ነበር?					
608	እርግዝናዎን ለማቋረጥ ያለዎትን ፍላጎት እንዳትተዉ አንድ ሰው አበረታቶዎታል?					
609	ስለ እርግዝናዎ ውሳኔ እንዴት እንደሚወስኑ ጥቆማዎችን ለማግኘት አንድ ሰው እንዲያነጋግርዎት ነበር?					

ክፍል 7፡ እያንዳንዱ ምርጫዎች አንዳንድ ሰዎች እንደ እርስዎ ያለ ማጣት በተመለከተ ያላቸው ሀሳብ እና ስሜት መግለጫ ነው። ለእነዚህ መግለጫዎች ትክክለኛ ወይም የተሳሳቱ ምላሾች የሉም። ለእያንዳንዱ ምርጫ የተሰማሙበትን ወይም የማይሰማሙበትን በጥሩ ሁኔታ የሚጠቁመውን ይምረጡ። የአሁኑ ጊዜ አርግጠኛ ካልሆኑ “ገለልተኛ” የሚለውን ምድብ ይጠቀሙ።

ተቁ	መጠይቅ	በጣም እስማማለሁ	እስማማለሁ	ገለልተኛ	አልሰማማም	በጣም አልሰማማም
701	የመንፈስ ጭንቀት ይሰማኛል					
702	ከተወሰኑ ሰዎች ጋር መግባባት ይከብደኛል					
703	ውስጤ ባዶ ሆኖ ይሰማኛል					
704	መደበኛ እንቅስቃሴዎቼን ማድረግ አልችልም					
705	ስለ ሕፃኑ ማውራት እንደሚያስፈልገኝ ይሰማኛል					
706	ለህፃኑ አዝኛለሁ					
707	ፈርቻለሁ					
708	ከጥፋቱ በኋላ ራስን ማጥፋትን አስቤያለሁ					
709	ለሚሰማኝ ስሜት መድሃኒት እወስዳለሁ					
710	ሕፃኑን በጣም ናፈቀኝ					
711	ከውርጃው በሃላ ስሜቴ ተስተካክላለሁ					
712	ውርጃውን ማስታወስ ያማል					
713	ስለ ሕፃኑ ሳስብ አበሳጫለሁ					
714	ስለ ሕፃኑ ሳስብ አለቅሳለሁ					
715	ስለ ሕፃኑ ሳስብ የጥፋተኝነት ስሜት ይሰማኛል					
716	ስለ ህፃኑ ሳስብ የአካል ህመም ይሰማኛል					
717	እሱ /እሷ ከሞቱበት ጊዜ ጀምሮ በአደገኛ ዓለም ውስጥ ጥበቃ እንዳልተደረገ ይሰማኛል					
718	ለመሳቅ እሞክራለሁ, ግን ምንም አያስደስተኝም					
719	ህጻኑ ከሞተ በኋላ ጊዜው በጣም በዝግታ ያልፋል					
720	ከእኔ ትሩ ነገሬ ከህፃኑ ጋር ሞተ					
721	ሕፃኑ ከሞተ ጀምሮ ሰዎችን አሳዝኛለሁ					
722	ህፃኑ ከሞተበት ጊዜ ጀምሮ ዋጋ እንደሌለኝ ይሰማኛል					
723	ለህፃኑ ሞት እራሴን እወቅሳለሁ					

ከሚገባኝ በላይ በጓደኞቼ እና በዘመዶቼ ላይ አጉል
 724 እናገራለሁ
 አንዳንድ ጊዜ ባለሙያ እንደሚያስፈልገኝ
 ይሰማኛል እኔን ለመርዳት አማካሪ ሕይወቴን
 725 እንደገና አንድ ላይ እንዲመልሰኝ
 ህፃኑ ከሞተ ጀምሮ መኖር አሁን ያለሁ እና
 726 የእውነት እየኖርኩ እንዳልሆነ ሆኖ ይሰማኛል
 ህፃኑ ከሞቱበት ጊዜ ጀምሮ በጣም ብቸኝነት
 727 ይሰማኛል
 በጓደኞቼ መካከልም ቢሆን በተወሰነ ደረጃ
 728 የመለየት እና የመራቅ ስሜት ይሰማኛል።
 729 አለመውደድ የበለጠ አስተማማኝ ነው
 ከሕፃኑ ሞት ጀምሮ ውሳኔ ለማድረግ አስቸጋሪ
 730 ሆኖ አግኝቼዋለሁ
 731 የወደፊት ሕይወቴ ምን እንደሚሆን እጨነቃለሁ
 የሞቱ ወላጅ መሆን ማለት ያልተመረጠ ሰው
 732 እንደመሆን ነው
 በህይወት መኖር በጣም ደስ ይላል
 733

APPROVAL SHEET
ADDIS ABABA UNIVERSITY
COLLEGE HEALTH SCIENCE SCHOOL OF ALLIED SCIENCES DEPARTMENT OF
NURSING AND MIDWIFERY

I, the undersigned MSc student, declare that I have submitted my original work on a title of The prevalence and contributing factors of grief in women experiencing abortion in selected public hospitals, Addis Ababa, Ethiopia 2025 for the examination.

Submitted by:

_____	_____	_____
Name of student	Signature	Date

This thesis work has been submitted for examination with my approval as an advisor.

Approved by:

1. _____	_____	_____
Name of Major Advisor	Signature	Date

2. _____	_____	_____
Name of Co-Advisor	Signature	Date

APPROVAL BY THE BOARD OF EXAMINATION

This thesis by Tsion Bewketu is accepted in its present form by the board of examiners as satisfying thesis requirement for the degree of master of science in maternity and reproductive health nursing.

INTERNAL EXAMINER:

_____ NAME	_____ RANK	_____ SIGNATURE	_____ DATE
---------------	---------------	--------------------	---------------

External EXAMINER:

_____ NAME	_____ RANK	_____ SIGNATURE	_____ DATE
---------------	---------------	--------------------	---------------

RESEARCH ADVISORS:

_____ NAME	_____ RANK	_____ SIGNATURE	_____ DATE
---------------	---------------	--------------------	---------------

_____ NAME	_____ RANK	_____ SIGNATURE	_____ DATE
---------------	---------------	--------------------	---------------

DEPARTMENT HEAD

_____ NAME	_____ RANK	_____ SIGNATURE	_____ DATE
---------------	---------------	--------------------	---------------

Statement of DECLARATION

By my signature below, I declare and affirm that this thesis is my own work. I have followed all ethical principles of scholarship in the preparation, data collection, data analysis and completion of this thesis. All scholarly matter that is included in the thesis has been given recognition through citation. I affirm that I have cited and referenced all sources used in this document. Every effort has been made to avoid plagiarism in the preparation of this thesis.

This thesis is submitted in partial fulfillment of the requirement for a graduate degree from the Addis Ababa University at College of Health Sciences, School of Allied Health Sciences department of Nursing and Midwifery. The thesis is deposited in the Addis Ababa University Digital Library and is made available to local, national and international scientific community. I solemnly declare that this thesis has not been submitted to any other institution anywhere for the award of any academic degree, diploma or certificate.

Brief quotations from this thesis may be used without special permission provided that accurate and complete acknowledgement of the source is made. Requests for permission for extended quotations from, or reproduction of, this thesis in whole or in part may be granted by the Head of the Department or all advisers of the theses when in his or her judgment the proposed use of the material is in the interest of scholarship and publication. In all other instances, however, permission must be obtained from the author of the thesis.

STUDENT

Name: _____ Signature: _____ Date: _____

RESEARCH ADVISORS:

_____ NAME	_____ RANK	_____ SIGNATURE	_____ DATE
_____ NAME	_____ RANK	_____ SIGNATURE	_____ DATE