EXPLORING THE PHYSICAL AND PSYCHOLOGICAL EFFECTS OF MATERNAL DEATHS ON MIDWIVES IN A SELECTED HOSPITAL OF VHEMBE DISTRICT LIMPOPO PROVINCE

By

NANCY MOFE

DISSERTATION

Submitted in the fulfilment of the requirement for the degree of

MASTER OF NURSING

In

NURSING SCIENCE

In the

FACULTY OF HEALTH SCIENCES

(School of health care sciences)

At the

UNIVERSITY OF LIMPOPO

SUPERVISOR: Prof TI Ramavhoya

CO-SUPERVISOR: Dr MN Kgatla

FEBRUARY 2024

DECLARATION

I, Nancy Mofe, affirm that the full-dissertation hereby submitted to the University of Limpopo for the degree of Master of Nursing (MNurs) titled "Exploring the physical and psychological effects of maternal death on midwives in a selected hospital of Vhembe district, Limpopo Province", has not been previously submitted by me for a degree at any other university, that it is my work in design and implementation, and that all the material contained herein has been duly acknowledged.

Signature: Date: 29 February 2023

DEDICATION

This dissertation is dedicated to my family for their support during this academic study. My mother, husband and child for their support during the study.

ACKNOWLEDGEMENTS

First and foremost, praises to God for his showers of blessing throughout the research and its successful completion. I would like to express my deep and sincere gratitude to my supervisor Prof T.I Ramavhoya for providing me invaluable supervision, support and tutelage during my research study and my co-supervisor Dr M.N Kgatla for all the corrections and guidance during the study. The Limpopo Department of Health for allowing me to conduct my study in one of their facilities. My thanks and appreciation also go to the respondents who willingly participated with full cooperation which made the study achieve its smooth completion.

ABSTRACT

BACKGROUND

Maternal mortality is a global problem mostly influenced by pregnancy related conditions or its management. Regardless of the availability of resources in some institutions, maternal death results in midwives exhibiting signs of physical, emotional, and psychological trauma.

METHOD

The study adopted qualitative explorative descriptive research designed to explore the physical and psychological effects of maternal deaths among midwives working in a selected public hospital at Vhembe district, Limpopo Province. A non-probability snowball sampling was used to select participants who participated in this study. Data in this study was collected through semi structured interviews. The interviews were recorded, transcribed, and analysed using a thematic content analysis method. The data collected was further submitted to the independent coder to confirm the study findings. Measures of Trustworthiness were maintained in the study.

RESULTS

From the study, three themes and 16 sub-themes emerged. The findings of this study indicate that midwives experienced physical and psychological health issues manifested as loss of appetite, insomnia, social isolation, avoidant behaviour, depression, and anger.

CONCLUSION

The physical and psychological effects of maternal death impact the quality of maternal healthcare rendered by midwives. In view of this, midwives need to be supported in different ways such as counselling, debriefing, training and being provided with all the necessary resources they need to enable them to cope with the adverse event of a maternal death.

KEYWORDS: Coping, Maternal death, Midwives, Psychological effects, physical effects

DEFINITION OF CONCEPTS

EFFECTS

The results of a particular influence. A change which is a result or consequence of an action or other cause. (Cambridge online dictionary, 2021). In this study, effects meant changes that arise to the physical and psychological state of midwives because of maternal death.

EXPLORING

Enquire into or discuss a subject in detail (Cambridge online dictionary, 2021). In this study, exploring referred to investigation, analysis and discussing the physical and psychological effects of maternal death on midwives working in a selected public hospital of Vhembe District, Limpopo Province.

MATERNAL DEATH

Female deaths from any cause related to or aggravated by pregnancy or its management (excluding accidental or incidental causes) during pregnancy and childbirth or within 42 days of termination of pregnancy irrespective of the duration and the site of the pregnancy (WHO, 2017). In this study, maternal death meant female deaths from any cause related to or aggravated by pregnancy that occurred while under the care of the selected midwives.

MIDWIVES

A midwife is a person who has successfully completed a midwifery education programme that is based on the essential competencies for midwifery practice and the framework of the global standards for midwifery education and is recognised in the country where it is located, who has acquired the requisite qualification to be registered and or legally licensed to practice midwifery and use title midwife, and who demonstrates competencies in the practice of midwifery (International Confederation Of Midwives, 2019).

In this study, midwives meant a health care professional who has successfully completed a midwifery education programme who is registered and recognised by the South African Nursing Council (SANC) and who is rendering maternal health care services in a selected public health facility of Vhembe district, Limpopo Province.

PHYSICAL

Relating to the body as opposed to the mind. Relating to things perceived through the senses as opposed to the mind, tangible or concrete (Cambridge dictionary, 2021). In this study, physical referred to the bodies of the concerned midwives after encountering a maternal death. It includes any tangible, concrete effect that occurs to their bodies.

PSYCHOLOGICAL

Refers to a feeling affecting or arising in the mind related to the mental and emotional state of a person (Cambridge dictionary, 2021). In this study, psychological meant the emotional and mental state of midwives after encountering a maternal death.

ACRONYMS

ANC	Ante natal care
AU	African Union
CARMMA	Campaign for Accelerated Reduction of Maternal Mortality in Africa
DCST	District Clinical Specialists Teams
EPMM	Ending Preventable Maternal Mortality
FSI	Fragile State Index
ICU	Intensive Care Unit
IMMR	Institutional Maternal Mortality Rate
MMR	Maternal Mortality Rate
MPNH	Maternal Perinatal and Neonatal Health
MNURS	Master of Nursing Science
NDoH	National Department of Health
NICD	National Institute of Communicable Disease
PHC	Primary Health Care
PTSD	Posttraumatic Stress Disorder
SAMPN	South African Maternal, Perinatal and Neonatal Health Policy
SANC	South African Nursing Council
SBAS	Skilled Birth Attendants
SMAR	Saving Mothers Annual Report
TGHO	The Global Health Observatory
WHO	World Health Organisation

Contents

DECLARATION ii
DEDICATION iii
ACKNOWLEDGEMENTS iv
ABSTRACT v
DEFINITION OF CONCEPTS vi
ACRONYMS viii
LIST OF FIGURES xiii
LIST OF TABLES xiv
CHAPTER ONE 1
ORIENTATION TO THE STUDY 1
1.1 INTRODUCTION AND BACKGROUND 1
1.2 PROBLEM STATEMENT 3
1.3 PURPOSE OF THE STUDY 4
1.3.1 Research objectives 4
1.4 RESEARCH QUESTIONS 4
1.5 RESEARCH METHODOLOGY 4
1.6 SIGNIFICANCE OF THE STUDY 5
1.7 CONCLUSION 6
CHAPTER TWO 8
LITERATURE REVIEW AND THEORATICAL FRAMEWORK 8
2.1 LITERATURE REVIEW 8
2.1.1 Physical effects of maternal deaths on midwives 9
2.1.1.1 Sleep disturbances 9
2.1.1.2 Digestive problems and weight changes 10
2.1.2 Psychological effects of maternal death on midwives 10
2.1.2.1 Stress 10
2.1.2.2 Burnout 11
2.1.2.3 Psychiatric symptoms 12
2.1.2.4 Grief 13
2.1.2.5 The impact of maternal death and support needed by midwives. 13
2.1.2.6 Anxiety 14
2.1.2.7 Dealing with a deceased family member. 14
2.2 THEORETICAL FRAMEWORK 15
2.2.1 Roy's Adaptive Concepts 15

2.3 CONCLUSION 19
CHAPTER THREE 20
RESEACH METHODOLOGY AND DESIGN 20
3.1 INTRODUCTION 20
3.2 RESEARCH METHODOLOGY 20
3.3 RESEARCH DESIGN 20
3.4 Study setting 21
3.5. POPULATION 23
3.6 SAMPLING TECHNIQUE AND SAMPLING SIZE 23
3.6.1 Inclusion criteria 23
3.6.2 Exclusion criteria 24
3.7.1 Development and testing of the interview guide. 25
3.7.2 Characteristics of the data collection 25
3.7.3 Data collection process 26
3.7.3.1 Face to face interviews 26
3.7.4 Data analysis 27
3.8 MEASURES TO ENSURE TRUSTWORTHINESS 28
3.8.1 Dependability 29
3.8.2 Confirmability 29
3.8.3 Transferability 30
3.8.4 Credibility 30
3.9 Ethical consideration related to data collection. 30
3.9.1 Informed Consent 31
3.9.2 Principle of Autonomy 31
3.9.3 Privacy 32
3.9.4 Anonymity and Confidentiality 32
3.9.5 Risks and harm 33
3.9.6 Principle of beneficence 33
3.9.7 Principle of justice 33
3.9.8 Measures to prevent COVID-19 infection. 34
3.9 CONCLUSION 35
CHAPTER FOUR 36
PRESENTATION AND DISCUSSION OF THE RESULTS 36
4.1 INTRODUCTION 36
4.2 DATA MANAGEMENT AND ANALYSIS 36

4.3 RESEARCH RESULTS 37
4.3.1 Participant demographic 37
4.3.2 PRESENTATION OF THEMES AND THEIR SUB-THEMES 38
4.3.2.1 Theme 1: Physical effects of maternal deaths among midwives. 40
4.3.2.1 Sub-theme 1: Eating disturbances and weight changes. 40
4.3.2.2 Sub-theme 2: Sleeping disturbances. 42
4.3.2.3 Sub-theme 3: Somatic symptoms 43
4.3.2.4 Sub-theme 4: Exhaustion 45
4.3.3 Theme 2: Psychological effects of maternal deaths among midwives. 48
4.3.3.1 Sub-theme 1: Sadness, Depression, and anger. 48
4.3.3.2 Sub-theme 2: Fear of death and pregnancy. 50
4.3.3.3 Sub-theme 3: Empathy with family members 52
4.3.3.4 Sub-theme 4: Affected self-concept (self-doubt, guilt, and failure) 53
4.3.3.5 Sub-theme 5: Repetitive/ intrusive thoughts/ flashbacks 55
4.3.3.7 Sub-theme 7: Social isolation 58
4.3.3.8 Sub-theme 8: Stressful work environment 59
4.3.3.9 Sub-theme 9: Avoidant behaviour 62
4.3.4 Theme 3: Recommendations made by midwives related to how to deal with maternal death and the support required. 64
4.3.4.1 Sub-theme 1: Acceptance and adaptation 64
4.3.4.2 Sub-theme 2: Occupational support (managerial support and training). 66
4.3.4.3 Sub-theme 3: Psychological support. 68
4.4 CONCLUSION 70
CHAPTER FIVE 71
SUMMARY, CONCLUSION, LIMITATIONS AND RECOMMENDATIONS 71
5.1 INTRODUCTION 71
5.2 AIM OF THE STUDY 71
5.3 RESEARCH DESIGN AND METHOD 71
5.4 SUMMARY OF THE FINDINGS 72
5.4.1 Theme 1 physical effects of maternal among midwives 72
5.4.2 Theme 2 psychological effects of maternal death 73
5.4.3 Theme 3 recommendations related to support needed by midwives. 74
5.5 RECOMMENDATIONS 75
5.5.1 Recommendations to employers (Department of Health) 75
5.5.2 Recommendations to nursing education and training. 75

5.5.3 Recommendations for further research 75
5.6 LIMITATIONS OF THE STUDY 76
5.7 CONCLUDING REMARKS 76
REFERENCES 77
ANNEXURE A (Ethics certificate TREC) 99
ANNEXURE B (letters requesting permission 100
ANNEXURE C & D (approval letters) 104
ANNEXURE E (Certificate from independent coder) 106
ANNEXURE F (participant information sheet) 107
ANNEXURE G (interview guide) 111
ANNEXURE H (Consent) 112
ANNEXURE I: (Letter from editor) 113
ANNEXURE J transcript 114

LIST OF FIGURES

Figure 1 Schematic presentation of Roy’s adaptive model 19
Figure 2 Vhembe district map 22

LIST OF TABLES

Table 4. 1 Participant demographics and descriptive data. 37
Table 4. 2. Themes and sub-themes reflecting the effects of maternal deaths among midwives. 39
Table 4. 3 Psychological effects related to maternal death. 48
Table 4. 4 Recommendations made by midwives related to maternal deaths. 64

CHAPTER ONE

ORIENTATION TO THE STUDY

1.1 INTRODUCTION AND BACKGROUND

Maternal mortality is a global problem mostly influenced by pregnancy related conditions or its management. It occurs during pregnancy and childbirth or within 42 days of termination of pregnancy irrespective of the duration and the site of the pregnancy (WHO, 2017). While it may seem a single event, it bears catastrophic consequences on the emotional make-up of caregiving midwives charged with the responsibility of the well-being of pregnant women, during ante natal, intrapartum, and postpartum period. As such, the World Health Organisation (WHO), 2017 reported that the rate of maternal mortality is unacceptably high. About 295 000 women die during pregnancy, childbirth, and following pregnancy (WHO, 2017). The vast majority of these deaths (94%) occurred in low resource settings, and most could have been prevented (WHO, 2019). The maternal deaths affect the psychological states of midwives who are care givers to these women.

Various strategies were put in place, such as the African Union, who launched the campaign for accelerated reduction of maternal mortality in Africa (CARMMA) in 2009 which aimed to reduced maternal mortality, to which South Africa responded in 2012, the campaigns three key areas are, public information and advocacy, encouraging achievements and strides made in some countries in reducing maternal mortality and seeking to replicate them and intensifying actions aimed at reducing maternal and infant mortality. The CARMMA campaign coincided with the re-engineering of primary health care (PHC), including the introduction of district clinical specialists' teams (DCSTs) and PHC ward-based outreach teams in SA in 2012. Although they yielded noticeable improvements in maternal, perinatal, and neonatal health (MPNH) services, the rate of maternal mortality rate (MMR) is still high, with most of them occurring in health care institutions in the care of midwives. Midwives' regular attempts to deal with issues of maternal deaths in their environment often translate into visible signs of depression, feelings of seclusion, and apprehension as well as being easily bothered, sometimes resulting in loss of sleep and appetite. Depression is an important public

health condition of general demonstrative dejection and withdrawal from people (Osler, 2022). In Sub-Saharan Africa and southern Asia, maternal deaths accounted for was approximately 86% (254 000) in 2017 (WHO, 2017). Sub-Saharan Africa alone accounted for roughly two-thirds (196 000) of maternal deaths, while Southern Asia accounted for nearly one-fifth (58 000) (WHO, 2017). The events surrounding maternal death may ignite unresolved grief issues within the midwives themselves (Begley, 2003). Yet they are expected to provide sensitive and supportive care to the families while coping with their own emotional response to a maternal death.

In South Africa, the institutional maternal mortality ratio (IMMR) decreased from 320/100000 live births in 2012 to 120/100000 live births in 2019/2020 (NDoH, 2019; South African Maternal Perinatal and Neonatal (SAMPN) Health Policy, 2021). However, the burden of non-pregnancy related infections, obstetric haemorrhage and pre-eclampsia or eclampsia remains unchanged. As such, these conditions are major contributory factors in tertiary hospitals of Limpopo Province with maternal deaths ranging between 216/ 100000 deaths in 2016 and 150/100000 deaths in 2017 (NDoH, 2016; NDoH, 2017). IMMR in these studies could be due to socio economic factors, delayed referrals from lower-level facilities, lack of access to quality care, lack of infrastructure and insufficient numbers of qualified midwives. Although there is inequality in the distribution of resources including specialists, dedicated obstetric ICU in tertiary hospitals in Limpopo Province are well equipped as compared to district hospitals (Ntuli et al, 2017).

Regardless of the availability of resources in some institutions, maternal death results in midwives being traumatized physically, emotionally, or psychologically. This characterization of difficulty in having restorative sleep has the result of posing challenges and coping at work. Lack of sleep influences personal quality of life as it impacts the cognitive abilities of midwives, thereby affecting their functionality both at work and at home. A study conducted by (Dartey,Phetlhu & Phuma-Ngaiyaye, 2020) indicated that continuous lack of sleep can lead to poor quality of life, risks of obesity and cardiovascular conditions.

In extreme cases, nurses and midwives break down with exhaustion from emotional, physical, and mental episodes consequential to losing a patient to perinatal events

(Dartey et al, 2020). It is against this background that the researcher thought to conduct this study in order to explore the physical and psychological effects of maternal death on midwives in a selected hospital of Vhembe district, Limpopo Province.

1.2 PROBLEM STATEMENT

Life is said to be more meaningful when an individual can cope with challenges associated with it. Challenges at the workplace, whether physical or psychological all contribute to occupational trauma (Dartey, Phuma-Ngaiyaye & Phetlhu, 2014). Maternal death is a global challenge that affects Limpopo Province with the tertiary and district hospital at a rate of 105/100000 live births between 1997 and 2009 and 88/100000 between 2019 and 2020 (Limpopo Province budget speech, 2021/22). Although most deaths appear in the care of health workers such as midwives, there are factors contributing to MMR, such as delayed referral to the next level of care, patient factors such as delay in reporting labour or any condition which has a detrimental effect during pregnancy and health care system factors (NDoH, 2017). Even though it is a single death, midwives as care givers, have trouble in coping with trauma resulting from their encounters with the deaths (Dartey, Phetlhu & Phuma-Ngaiyaye, 2019). Through personal conversations with colleagues, it has been established that midwives working in Vhembe healthcare facilities are continually exposed to maternal deaths, in Limpopo an average of 12 maternal deaths were experienced monthly in 2022 (National committee for confidential enquiry into maternal deaths, 2022). They have voiced their concerns about maintaining a strong and positive energy after encountering maternal death. It is business as usual as there are other women to render services to, despite the emotional disturbance a midwife has just encountered.

The regular attempts of midwives to deal with maternal death in their working environment often leads to visible signs of depression, seclusion and apprehension as well as being irritable, sometimes resulting in loss of sleep and appetite (Dartey et al, 2019).

The researcher has identified that there is limited information on the physio-psychological effects caused by the encounter of maternal death and no studies were done in Limpopo Province. This is the reason for the exploration of the physical and psychological effects of maternal deaths on midwives which was conducted in one of the selected hospitals in Vhembe District.

1.3 PURPOSE OF THE STUDY

The purpose of the study was to determine the physical and psychological effects of maternal death on midwives working in a selected hospital of Vhembe district, Limpopo Province.

1.3.1 Research objectives

- To explore and describe the physical effects of maternal death on midwives working in a selected hospital of Vhembe district, Limpopo Province.
- To explore and describe the psychological effects of maternal death on midwives working in a selected hospital of Vhembe district, Limpopo Province.

1.4 RESEARCH QUESTIONS

- What are the physical and psychological effects of maternal death affecting midwives working in a selected hospital of Vhembe district, Limpopo Province?

1.5 RESEARCH METHODOLOGY

The study adopted a qualitative approach to explore the physical and psychological effects of maternal deaths on midwives working in a selected public hospital at Vhembe district, Limpopo Province.

An explorative descriptive research design was used. The explorative design targeted the discovery of new ideas and clarification of existing concepts (Grove, Gray, 2020). The population were midwives. A non-probability snowball sampling was used to sample participants because not all members of the targeted population had witnessed or experienced the phenomenon under investigation. The sample size was determined by saturation of data. Data in this study was collected at the selected hospital during face-face interviews with individual midwives.

Thematic content analysis was used to process the transcribed data. Measures to ensure trustworthiness was adhered by using an independent coder to confirm study findings (see Chapter 3). Ethical considerations were followed where ethical clearance was issued by the university of Limpopo ethics committee and permission was obtained from the hospital and participants who were part of the study (Chapter 3).

1.6 SIGNIFICANCE OF THE STUDY

According to Brink, (2018), the research study should have the potential to contribute to health science knowledge in a meaningful way, and patients, healthcare professionals and the community should benefit from findings of the study.

Nursing education

The body of scientific knowledge might be increased from the study, also, healthcare practice and policies should improve, and become implemented and cost-effective. Capacity building for midwives during training on incident and report writing, strengthening of essential steps in management of obstetric emergency (ESMOE).

Nursing practice

The findings of the study might assist in developing measures to assist midwives after encountering maternal deaths. Policies might be developed that might assist in supporting midwives who might come across maternal death, hence reducing the physio-psychological effects for them.

Further research

Further research might emerge from the findings of this study on management of post-traumatic stress disorder in midwives, midwives as second victims after a perinatal event, support needed by midwives after a maternal and the development of an employee assistance programme for midwives.

1.7 CONCLUSION

This chapter discussed the overview of the study. The study was introduced and the background information about maternal deaths was explained from a global context to a local context. The research background and problem were described. The aim, research questions and objectives were outlined. The methodology with the research design, sampling, data collection, data analysis and the significance of the study were summarised.

ARRANGEMENT OF CHAPTERS

CHAPTER ONE (OVERVIEW OF THE STUDY)

Chapter One presented an overview of the study. First, the researcher introduced the study under the introduction and background.

CHAPTER TWO (LITERATURE REVIEW AND THEORATICAL FRAMEWORK)

Chapter Two presents a literature review of the physical and psychological effects of maternal death among midwives and the theoretical framework on which the study is based. Several data sources were used to review the literature related to the phenomenon being studied.

CHAPTER THREE (RESEARCH METHODS AND DESIGN)

This chapter discusses in detail the methodology used in collecting data for the study including the research design, sampling, data collection techniques and methods of data analysis used.

CHAPTER FOUR (PRESENTATION OF STUDY FINDINGS)

Chapter Four presents research findings and a discussion of the results that were supported by the literature and theoretical framework.

CHAPTER FIVE (CONCLUSION, SUMMARY AND RECCOMEDATIONS)

This chapter summarized and concluded the findings of the current study. Limitations and recommendations were also outlined.

CHAPTER TWO

LITERATURE REVIEW AND THEORATICAL FRAMEWORK

2.1 LITERATURE REVIEW

Brink (2018) define literature review as written sources relevant to the topic being studied. It is a critical summary of existing knowledge on the topic being studied. A literature review must identify the research problem and refine the research questions. It compares findings of existing studies with those of the topic being studied (Brink, Van De Walt & van Rensburg, 2018). On this study literature review was used as a source for focusing on a topic as it reduces the chances of following an irrelevant and old/outdated source. The literature review will focus on the physical and the psychological effects of maternal deaths on midwives. Different sources used in this review were journals and books. A narrative method of review was used.

Midwives are exposed to dying patients in the course of their work, and this experience makes individuals conscious of their own mortality, often giving rise to anxiety and unease (Laing, Fetherston & Morrison, 2020). The fear of death is a universal phobia experienced by humans, with societal preference strongly advocating the preservation of life in many fields, such as in medicine. Individuals have their own attitudes towards death influenced by personal, cultural, social, and philosophical belief systems that shape a person's conscious or unconscious behaviours. These attitudes are attached to human emotions, which are in turn attached to actions taken towards the object of the emotions, in this case, death (Slomian, Honvo, Emonts, Reginster & Bruyere, 2019)

It is believed that the main responses of nurses and midwives to their patient's death include physical, emotional, cognitive, social as well as professional reactions. On the other hand, cognitive reaction involves the questioning of oneself and reviewing treatment given to the deceased before death.

Socially, people become isolated and want to be on their own after a death and the professional reaction includes lack of control over a situation, feeling distracted, as well as feeling irritated towards other patients (Pezaro et al., 2016).

2.1.1 Physical effects of maternal deaths on midwives

Development and progression of cardiovascular disease in the general population, in adults with work related stress, have a 1.1-to-1.6-fold increased risk incidence of coronary heart disease and of strokes (Kivimaki, Steptoe, 2018). The literature on whether acute stress boosts or baffles the tendency for hedonic consumption is fraught with conflicting findings. On the one hand, several studies point to a positive link between experiencing stress and the consumption of palatable, high caloric foods. For example, a recent meta-analysis conducted by Ferrer et al, (2020) suggests that an incidental negative affect may increase various appetite risk behaviours, including over consumption of palatable foods that are high caloric, sugary or salty.

Haltinner (2021) describes the nature of midwifery practice as exposure to unpleasant, nauseating, frightful and traumatic scenery. Due to the nature of the midwifery profession, a therapeutic relationship naturally develops between the midwife and the patients. This relationship may also extend to family members of the patient who, in turn, may be a source of concern for the midwife (Eagen-Torkko, Altman, Gavin, Mohammed & Kantrowitz-Gordon, 2021).

2.1.1.1 Sleep disturbances

Sleep disturbances is a common complaint of grief. People who have grief symptoms are more likely to take longer to fall asleep and spend a significant portion of their time in bed awake rather than asleep, according to a study by (Dartey & Ngaiyaye, 2020) who demonstrated that insomnia was common among midwives after encountering maternal death, and that most midwives cannot sleep as they are preoccupied with the incidence.

A study conducted by Endjala, Amukugo & Nghitanwa (2021) revealed that midwives suffered from difficulties in sleeping as a result of death events. Furthermore, some midwives had nightmares as a result of maternal deaths.

2.1.1.2 Digestive problems and weight changes

These are often connected with the disruption to normal eating habits or routines. Bereavement can often cause temporary digestive problems such as constipation, diarrhoea, stomach pains, queasiness or feeling nauseated. Changes in weight are also common, when grieving or during stresses, many people tend to develop unhealthy eating habits (Raymond, 2022). Lack of exercise, lack of personal care, overeating, eating more often, eating more junk food are often exhibited when one is grieving or stressed out. Besides the emotional and psychological impact, exposure to death and death situations can also lead to physical ill-health and withdrawal from clinical practice, both of which, subsequently, can lead to high turnover, decreased patient service and satisfaction (Johnstone, 2019). Physical ill heath may be present in the form of somatization, such as medically unexplainable pain, fibromyalgia, irritable bowels and chronic fatigue.

2.1.2 Psychological effects of maternal death on midwives

2.1.2.1 Stress

Psychological stress and physical activity are believed to be reciprocally related (Stults-Kolehmainen & Sinha, 2014). Although the concept of stress has earned a bad reputation, it is important to recognize that the adaptive purpose of a physiological stress response is to promote survival during flight or fight. While long term stress is generally harmful, short-term stress can be protective as it prepares the organism to deal with challenges. Long term stress suppresses or dis-regulates innate and adaptive immune responses inducing low grade chronic inflammation, and suppressing numbers, trafficking, and function of immune-protective cells. Chronic stress may also increase susceptibility to some types of cancers by supressing type 1 cytokines and protective T cells and increasing regulatory T cell function (Anderson, Durstine, 2019).

Psychological stress is widely accepted as a trigger or modifier of the clinical course of diverse gastrointestinal disorders such as: peptic ulcers, irritable bowel syndrome or inflammatory bowel disease (Ljungberg, Bondza, Lethin, 2020).

Stress can also synergize with pathogenic factors such as helicobacter pylori, non-inflammatory drugs or colitis inducing chemicals to produce gastrointestinal disease (Peirce, Alvina, 2019). The brain gut axis provides the anatomical basis through emotions and environmental influences which modulate the gastrointestinal function. The regulation of gastrointestinal immune system and mucosal inflammation, in this sense, mucosal mast cells at cellular level and corticotrophin releasing factor at molecular level seem to play a crucial role in the gut mucosa anti- inflammatory pathways. These cells counteract the deleterious effect of the stressful stimuli on the gastrointestinal homeostasis (De punder, Pruimboom, 2015).

Chronic exposure to stress hormones, whether it occurs during the prenatal period, infancy, childhood, adolescence, adulthood, or aging, has an impact on brain structures involved in cognition and mental health. In adults, the chronic exposure to high levels of glucocorticoids has been associated with depressive disorders (O connor, Julian, Vedhara, 2021). Sleeplessness is one of the problems encountered by midwives after coming across a maternal death. This is caused by thinking about the incidence of death starting from when they started to nurse the patient.

Midwives' work-related stress affects their health and quality of work life (Khalil et al, 2016). Some studies have indicated that midwifery is highly emotional work with participants experiencing many work-related conflicts and dilemmas. A study conducted by Brigid (2022) indicated that stress is a significant feature related to midwifery work and the authors further identified high levels of poor psychosocial health in the midwifery population. The emotional or psychological effects may include denial, depression, anger, anxiety, and a sense of guilt.

2.1.2.2 Burnout

Burnout has three components: emotional exhaustion, depersonalisation and reduced personal accomplishment (Lubbadeh, 2020). Emotional exhaustion is the core component of burnout whereby individuals become emotionally drained by the interpersonal demands and chronic stress of their work. Depersonalisation refers to the development of negative and cynical feeling towards others, as well as a psychological withdrawal from personal and working relationships (Allam, Malik & George, 2021).

Finally, the reduced personal accomplishment represents a lack of effectiveness at work arising from feelings of emotional exhaustion and depersonalisation. A study of midwives that measured burnout found a level of work-related burnout (Kinman, Teoh & Harris, 2020). A study by Vaiciene et al., (2021) revealed that 42.6% of midwives had moderate and high level of work-related burnout, with maternal death being an undesirable outcome during the provision of maternal health services and midwives tend to have work related burn out and reduced motivation.

2.1.2.3 Psychiatric symptoms

Mental health and well-being among midwives after a maternal death are understudied. Beyond the normal strain imposed on midwives, exposure to maternal death may add significant stress. A study conducted by Kreisel, Frank, Licht, Reshef, Ben-Menachem-Zidon, Baratta, Maier & Yirmiya (2014) showed a higher level of psychiatric symptoms (Post traumatic stress disorder), depressive and psychosomatic symptoms. Similarly, another study conducted by Cohen, Leykin, Golan-Hadari & Lahad (2017) on the exposure to traumatic events at work, post-traumatic symptoms and professional quality of life among midwives indicated relatively high levels of compassion satisfaction which may mitigate at least to some degree the negative aspects of compassion fatigue.

Post traumatic stress disorder (PTSD) levels are significantly and positively correlated with secondary traumatic stress and burnout. Midwifery practice is emotional and, at times, traumatic. Cumulative exposure to this in an unsupportive environment can result in the development of psychological and behavioural symptoms of distress (Pezaro et al, 2015). A study conducted by (Dartey & Phuma-Ngaiyaye, 2020) established that midwives were depressed in the face of a maternal death, regardless of age, the type of health facility they are working in, their rank or work experience. Depression experienced by midwives is manifested by loss of interest in the environment or the people as well as lack of self-care, neglect of family responsibilities and inability to work. Various authors acknowledged that depression is the most adverse emotional problem faced by nurses and midwives at their workplaces (Mark & Smith, 2012; Mousavi, Ramezani, Salehi, Hossein Khanzadeh & Sheikholeslami, 2017).

2.1.2.4 Grief

A study done by Dartey, Phuma-Ngaiyaye & Phetlhu (2017) showed that midwives grieve differently whenever there is a maternal death in the unit. Some midwives showed subdued reaction to grief, others demonstrated open agony. Grief takes over the mental capacity of the individual midwife and, therefore, exhibit a lack of concentration leading to reduced quality of nursing care provided to clients.

2.1.2.5 The impact of maternal death and support needed by midwives.

A study conducted by Muliira & Muliira (2016) showed that there is a negative and positive effect of patient's death depending on the way in which a patient's death is perceived. The positive outcomes include increased professionalism, devotion to patient care, bonding with deceased family members and individualized patient care. Beehan (2022) conducted a study on continued professional development for midwives, and the results indicated that an organisation with trusting culture and supportive collegial relationship creates opportunities for midwives to develop professionally.

A study done by Adcock, Sidebotham & Gamble (2022) also indicated that leadership attributes and developmental opportunities for midwifery leaders is of importance and plays a major role in the case of adverse events happening in the unit. As such, staff involvement in decision making processes is a motivational factor for midwives to stay in the profession. Midwives need to be the centre of decision-making processes related to their profession. A study by Pezaro et al, (2016) concluded that midwives are torn between a psychologically safe and a professional journey. The study offered the principal conclusion that when maternity services invest in the mental health and wellbeing of midwives, they reap the rewards of improved patient care, improved staff experience and safer maternity services. The negative effect may be short term emotional reactions such as fear, severe grief, and self-doubt. The short-term adverse outcomes can initiate long term consequences such as compassionate fatigue, burnout, and withdrawal from practice among nurses with inappropriate coping (Hansen, Eklund, Hallen, Bjurhager, Norrstrom, Viman & Stocks, 2018).

Midwives need psychological support to be offered by their employer after the encounter of a maternal death, an employee assistance programme needs to be in place in order to assist midwives after maternal deaths.

2.1.2.6 Anxiety

Death is often regarded as a failure of medical and nursing care, and a source of guilt feelings by nurses and other health care professional (Nihei, Asakura, Sugiyama, Takada, 2022). Literature shows that observing death affects the level of anxiety experienced by the nurse (Nia, Lehto, Ebadi & Peyrovi, 2016). Midwives perceive patient death in different ways terrible, satisfying, or mixed emotions (Stokar & Pat-Horenczyk, 2022). Deaths that occur in the obstetric units are correctly reported to be traumatic to midwives because of their unexpected nature (Stokar et al, 2022). However, regardless of how the midwives feel and react to the death of a patient, when it occurs, they are expected to help and comfort the family members and continue caring for other patients at the same time. After death, most midwives never get time to stop and think about the meaning of it all (Zheng, Lee & Bloomer, 2018).

A study done by Muliira et al., (2016) in districts of Uganda showed that the phenomenon may result in death distress, and this is associated with psychological outcomes such as death anxiety, death obsession and death depression.

A study conducted by Dartey et al., (2017) showed that midwives feared the maternal mortality review outcomes because it is within the review process that the individual midwife is seen to be guilty or otherwise for the death of the patient. Meanwhile, the fear of blame and punishment is still seen among health professionals worldwide (Parker, 2013).

2.1.2.7 Dealing with a deceased family member.

There is a lack of training and experience in dealing with the family members of the deceased and this generates an inner conflict and stress (Renbarger & Trainor 2022). The generated internal conflicts and stress are mostly not immediately resolved because midwives are expected to remain stable and give support whether affected or not (Zheng, Lee & Bloomer, 2018).

Maternal deaths have negative effects on the physical and psychological wellbeing of midwives. Most research done on grieving the loss of a patient is in respect of palliative care and critical care, less is done in respect of maternity care. There is still a gap in knowledge regarding the effects of maternal death on midwives in the South African region.

2.2 THEORETICAL FRAMEWORK

Roy's adaptation model was suitable for this study because it explains that adaptation occurs when people respond positively to environmental changes, and it is the process and outcome of individuals and groups who use conscious awareness, self-reflection, and choice to create human and environmental integration.

The adaptive model makes certain assumptions such as: the person is a bio-psycho-social being, the person is in constant interaction with a changing environment. To cope with a changing world, a person uses coping mechanisms, both innate and acquired, which are biological, psychological, and social in origin.

Health and illness are inevitable dimensions of a person's life, and to respond positively to environmental changes a person must adapt (Roy, 2009). The model consists of five concepts and four adaptive modes. Midwives need to adapt to their changing environment.

2.2.1 Roy's Adaptive Concepts

Roy's adaptive concepts were applied in this study and in the discussion chapter. The concepts included adaptation, person, environment, health, and nursing.

Adaptation

Adaptation is the process and outcome whereby thinking and feeling persons as individuals or in groups use conscious awareness and choice to create human and environmental integration (Roy, 2009). As indicated in Figure 1 below, in this study, adaptation refers to midwives' ability to respond positively to stimuli which is maternal death.

Person

According to Roy's model, a person is a bio-psycho-social being in constant interaction with a changing environment. He or she uses innate and acquired mechanisms to adapt (Roy, 2009). The model includes people as individuals, as well as groups such as families, organisations, and communities, and this includes society (Roy, 2009). In this study, the concept of person refers to midwives as human beings in which they are biological, physical, psychological, and social beings who are affected by the adverse event of either maternal or neonatal death happening in the maternal environment. These include the public hospital where they are rendering maternal health care services. The model also indicated how they must cope within their working environment refer to Figure 1 below.

Environment

The environment is defined as conditions, circumstances, and influences that affect human's development and behaviour as an adaptive system (Roy, 2009). The environment is a stimulus or input that requires a person to adapt. These stimuli can be positive or negative (Roy, 2009). In this study, the environment refers to the stimulus (death) that affect the midwives in their workplace or when rendering care to their patients. Regardless of the stimulus that the midwives come across daily, they continue to work as though nothing has happened in order to cope with it. (Figure 1).

Health

Health is defined as the state where humans can continually adapt to stimuli, because illness is a part of life (Roy, 2009). Health results from a process where health can continue to adapt holistically. They will maintain health to reach completeness and unity within themselves. If they cannot adapt accordingly, the integrity of the person

can be affected negatively (Roy, 2009). In this study, health refers to midwives' ability to continually adapt to stimuli holistically while on duty, and this includes whether they come across adverse events like maternal death or death of the new-born who was under their care.

Nursing

In the adaptation model, nurses are facilitators of adaptation. They assess the patient's behaviour for adaptation, promote positive adaptation by enhancing environment interactions and helping patients react positively to stimuli. Nurses eliminate ineffective coping mechanisms, and this eventually leads to better outcomes (Roy, 2009). In this study, nursing refers to midwives' ability to promote positive adaptation by enhancing environment interactions and helping one another to react positively to stimuli.

Roy's Four Adaptive Modes

Four adaptative modes were outlined and applied to curent study as physiological, self- concept, role function concept and interdépendance mode.

Physiological mode

Physical and chemical processes are involved in the function and activities of living organisms. The basic need of these modes is composed of the needs associated with oxygenation, nutrition, elimination, activity and rest, and protection. The complex processes of these modes are associated with the senses, fluid and electrolytes, neurologic function, and endocrine function (Roy, 2009). In this study, the physiological mode as depicted by Figure 1 below, refers to the physical changes or alterations that occur to midwives upon encountering the stimuli which is a maternal death. They experience, for example, lack of sleep especially after witnessing or experiencing maternal death.

Self-Concept Mode

In this mode, the goal of coping is to have a sense of unity, a realization of the meaning the purposefulness in the universe and a sense of identity integrity. This includes body image and self-ideals (Roy, 2009). In this study, self-concept refers to how midwives identify themselves when interacting with their patients as care providers during the provision of maternal health services.

Role Function Mode

This mode focuses on the primary, secondary, and tertiary roles that a person occupies in society and knowing where they stand as a member of society (Roy, 2009). In this study, role function mode refers to the role played by midwives caring for women before pregnancy, during ante-natal, labour, and post-natal period (Figure 1).

Interdependence Mode

This mode focuses on attaining relational integrity through the giving and receiving of love, respect, and value. This is achieved with effective communication and relations (Roy, 2009). In this study, the interdependence mode refers to the relations that midwives form with their patients while rendering care to the patients.

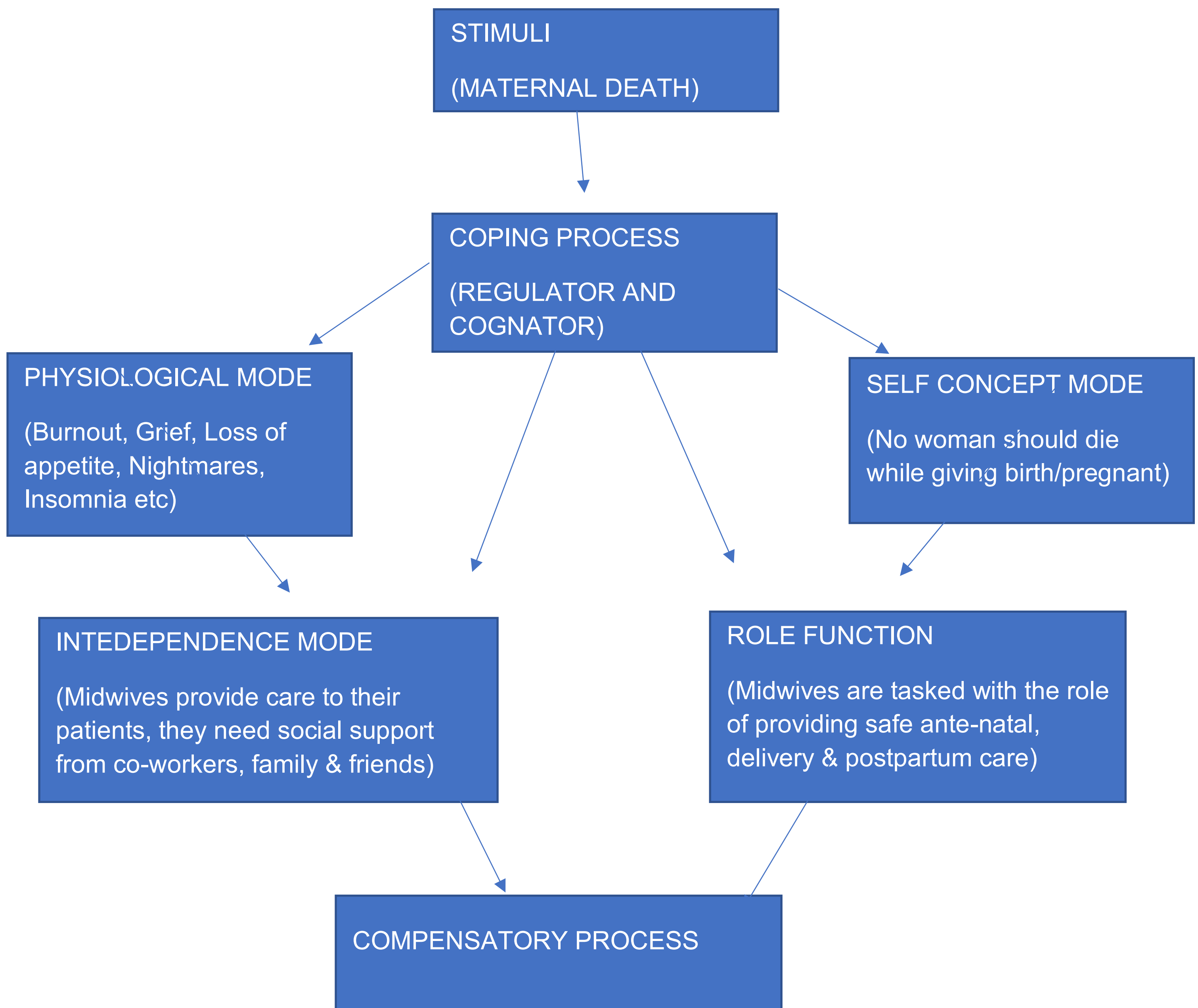

Figure 1 Schematic presentation of Roy's adaptive model

2.3 CONCLUSION

This chapter focused on a detailed literature of the study. The physical and psychological effects of maternal death were explained with literature. Under physical sleep disturbances, digestive problems and weight changes were explained, under psychological, stress, burnout, psychiatric symptoms, grief, anxiety and dealing the deceased family members were explained with literature. A theoretical framework was also discussed. The next chapter focuses on research methodology.

CHAPTER THREE

RESEACH METHODOLOGY AND DESIGN

3.1 INTRODUCTION

This chapter refers to a comprehensive account of the overall research approach, research method, data collection and analysis in a systematic fashion (Polit & Beck, 2021). In this section, research design and methodological approaches that were employed in gathering the data for the study and addressing the objectives of the study were described. The section provides the details of the methodological processes involved in the study such as research design, population of the study, sample size and sampling techniques, instrument for data collection, and data analysis.

3.2 RESEARCH APPROACH

Qualitative research is a systemic approach used to describe experiences and situations from the perspective of the person in the situation. The researcher analyses the words of the participants, finds meaning in the words and provides a description of the experience that promotes deeper understanding of the experience (Grove, Gray & Burns, 2018). Creswell (2018) described qualitative research as an approach for exploring and understanding the meaning individuals or groups ascribed to a social or human problem. The study adopted a qualitative approach to get the in-depth information about the physical and psychological effects of maternal deaths on midwives working in a selected public hospital at Vhembe district, Limpopo Province.

3.3 RESEARCH DESIGN

Research designs are types of inquiry within qualitative, quantitative, and mixed methods approach that provide specific direction for procedures in research (Creswell, 2018). As such, an exploratory, descriptive research design was used in this study.

- Exploratory design

The explorative design targets the discovery of new ideas and clarification of existing concepts (Grove, Burns, 2020). It also can be defined as using other sources (research Books). The use of exploratory research design helped the researcher to explore the physical and psychological effects of maternal deaths on midwives working in a selected public hospital at Vhembe district, Limpopo Province. The exploratory descriptive design is used to explain how a phenomenon is manifested. It allowed the researcher to investigate the nature of a little understood situation or phenomenon and provide an in-depth understanding of the phenomenon under study. It also allowed participants to contribute to the generation of new knowledge in the area under study.

- Descriptive research design

Descriptive design is an inquiry process of understanding based on distinct methodological traditions of inquiry that explore a social or human problem (Creswell, 2018). Polit & Beck (2021) consider descriptive design as a design that illuminates how a phenomenon is manifested and is useful in uncovering the full nature of a little understood phenomenon. The researcher used the descriptive design after engaging with participants and in describing the physical and psychological effects of maternal deaths among midwives who were rendering maternal health care services in a selected hospital of Vhembe district Limpopo Province. In this study the researcher applied descriptive design by describing the phenomenon of maternal death and the experiences of the midwives who experience the death, and it further described all the effects it has on the affected midwives.

3.4 Study setting

Study setting refers to the physical, social and cultural site in which the researcher conducts the study (Creswell, 2018). The study setting will be one of the regional hospitals in Vhembe district, Limpopo Province. Vhembe is one of the 5 districts of Limpopo Province of South Africa. It is the northern most district of the country and shares its northern border with the Beit Bridge district of Zimbabwe and the east of the Gaza Province of Mozambique. The seat of Vhembe is Thohoyandou. According to census 2011, most Vhembe residents (about 800000) speak Tshivenda as their

mother language. The district has one regional hospital, one specialised hospital and six district hospitals. The number of filled posts per category of community health workers is 2288, nursing assistants: 1218, enrolled nurses: 1009, professional nurses: 2828, medical practitioners: 204, pharmacists: 96, dental practitioners: 33, occupational therapists: 46, physiotherapists: 37, speech therapists: 22 (District health information system, 2017).

The regional hospital is a public hospital operated by the Limpopo department of health located in Thohoyandou (Shayandima) along the Pundamaria Road. The hospital has a capacity of 400 approved beds divided among their wards which are Accident and Emergency unit, Labour ward, Ante-Natal ward, post-Natal ward, Theatre, ICU, Paediatric ward, Neonatal Ward, Female Surgical ward, Male Surgical ward, Female Medical ward, Male Medical ward and Outpatient Department. The hospital has 1950 midwives. Participants on this study were drawn Ante-natal ward, post-natal ward and Labour ward.

Figure 2 Vhembe District Map

3.5. POPULATION

Population is a particular group of individuals or elements who are the focus of the research (Grove, Gray, 2020). According to Creswell (2018), population is a group of individuals who have the same characteristics. Burns and Grove (2020) describe population as all the elements that meet the criteria for inclusion in a study. In this study, the population was all midwives working in the maternity units of a selected hospital in Vhembe district. The target population was all midwives who had encountered maternal death in their lives and are working in the maternity units of the selected hospital in Vhembe district, Limpopo Province.

3.6 SAMPLING TECHNIQUE AND SAMPLING SIZE

Sampling involves selecting a group of people, events, objects or other elements with which to conduct a study (Grove, Gray & Burns, 2020). The sample size is a cross-section of the target population from which the data will be collected while selecting them is referred to as the sampling technique (Polit & Beck, 2020).

A non-probability snowball sampling was used because not all members of the targeted population would have witnessed or experienced the phenomenon under investigation. The sample size was determined by saturation of data. As such, fourteen midwives who had experienced the phenomenon of maternal demise during the provision of maternal health services was the sample.

3.6.1 Inclusion criteria

This concerns properties of the target population, defining the population to which the study's results should be generalised. These are features of the target population that the researcher will use to answer the research question (Patino, Fereira, 2018). Inclusion criteria includes demographic, clinical and geographic characteristics. In this study, the inclusion criteria included midwives who have experienced maternal death,

who were willing to participate in the study and who were on duty during data collection as agreed with the researcher in terms of date and time. It included all midwives working at Antenatal, Post-natal and Labour ward who have experienced a maternal death.

3.6.2 Exclusion criteria

These are features of the potential participant who meet the inclusion criteria but present the researcher with additional characteristics that could interfere with the success of the study or increase the risk of an unfavourable outcome (Patino, Ferreira, 2018).

In this study, the exclusion criteria excluded midwives who were not willing to participate in the study and those who were absent on duty during data collection period and those who have not experienced a maternal death.

3.7 DATA COLLECTION METHOD

According to Creswell, (2018), the data collection includes setting the boundaries for the study, collecting information through unstructured or semi structured observations and interviews, documents and visual materials as well as establishing the protocol for recording information. Data in this study was collected at the selected hospital face-face with individual midwives. An interview guide (Annexure G) with consisted of section A demographic data of participants followed by section B semi-structured interview questions. Probing questions was used when appropriate to enhance the richness of the data.

3.7.1 Development and testing of the interview guide.

Testing of the data collection instrument involves a pilot study. A pilot study is a small feasibility study designed to test various aspects of the methods planned for a larger, more rigorous, or confirmatory investigation (Lowe, 2019). A pilot study asks whether something can be done, should researchers proceed with it, and if so, how (Juyong, 2017). The primary purpose of a pilot study is not to answer specific research questions but to prevent researchers from launching a large-scale study without adequate knowledge of the methods proposed; in essence it prevent the occurrence of fatal flaw in a study that is costly in time and money (Polit & Beck, 2017). A pilot study provides valuable information, not only for the researcher's main study, but also for other related studies. Therefore, a pilot study was conducted before the actual data collection for the main study commenced. The researcher sampled two midwives who have had an experience of maternal demise in another hospital to check the feasibility of the interview questions. The results of the pilot study were not included in the main study. The research was not modified after the pilot study.

3.7.2 Characteristics of the data collection

The researcher began by explaining the research objectives and purpose to the midwives in the units. Consent was obtained from the participants, and the interviews were conducted with individual midwives. The interview sessions took place in a separate private room to make sure that participants were comfortable and were free to express themselves. In the private room, the researcher greeted the participants and explained the aim and objectives of the study. The interview began after consent was obtained. A semi structured interview was conducted. The researcher explained the use of voice recorder and field notes for record-keeping (Brink et al., 2018). The interviews were conducted using Tshivenda language because it was the home language of the participants and first additional language to some. All participants were asked identical questions, "how were you affected physically and psychologically by the events of maternal death during provision of maternal health services?" The researcher also used probes to allow the respondents to elaborate on the topic, especially with the aspects that needed more clarity. Open ended questions were used

to allow flow of the interview. The researcher used active listening to better understand what the participants were saying, nonverbal communication like nodding of the head was used. The interview sessions took approximately 15-30 minutes with each participant.

3.7.3 Data collection process

Face to face interviews with individual midwives were conducted in a private cubicle at the hospital. The researcher and the participants agreed on a suitable date, time and venue for the individual face to face interviews. Upon arrival at the unit the researcher introduced herself and greeted the staff members and further explained the purpose of their visit. Participants were handed information sheet, and everything was read to them and explained. Informed consent was obtained before the interviews could commence. The interviews were conducted in a quiet private cubicle to eliminate distractions, support confidentiality, and allow quality audio recording. The researcher and the participant were seated across the table for the individual face to face interview to demonstrate equality and comfort.

3.7.3.1 Face to face interviews

This is a type of qualitative research or data collection method in which data is collected through personal interactions between the researcher and the participant. Individual interviews are social interactions based on conversations between the participants and the researcher (Rubin & Rubin, 2011). In this study, individual interviews were conducted to obtain the data from midwives regarding the physical and psychological effects of maternal death.

The individual face to face interviews started in January 2023. The participants were contacted telephonically a day before the interview and again in the morning to confirm availability. On the day of the interview, the researcher welcomed the participants, introduced herself and explained the study to the participants.

Thereafter, the researcher went through the consent form with the participants and explained everything including that the interviews would be recorded and informed consent would be obtained from participants. Once the participant was comfortable and all uncertainties were ruled out, the researcher asked the central question followed by probing questions. At the end of the interview, the researcher asked if there was additional information the participants desired to add or any questions to clear up. Participants were then thanked and allowed to leave.

A total of fourteen (14) face to face interviews were conducted on midwives working in labour ward, post-natal and ante natal ward. Prior to the interviews, verbal permission was obtained from the participants. The participants were interviewed in a quiet, non-threatening and safe environment. The interviews took between 15 to 30 minutes and were all conducted in the hospital premises inside the wards.

3.7.4 Data analysis

Qualitative data analysis is based on assumptions and the use of interpretative frameworks to ensure a final written report or presentation that includes the voice of participants, the flexibility of the researcher, a complex description and interpretation of the stated problem, and its contribution to the literature or a call for change (Creswell, 2018). The interviews were immediately transcribed verbatim in order to refrain from missing relevant data. Thematic content analysis was used to process the transcribed data. The process included the following steps:

Step 1: Familiarisation during this stage the researcher got to know the data, and a thorough overview of all the data collected was done before analysing individual items. This included transcribing audio, reading through the text and taking initial notes and generally looking through the data to get familiar with it.

Step 2: Coding: during this stage, all the transcripts were gone through and everything that appeared as relevant or potentially interesting was highlighted. The phrases and sentences were highlighted to check for a match with these codes. After the researcher went through the text, all the data was collated together into groups identified by code.

Step 3: Generating themes, at this stage, patterns amongst the codes were identified, and themes were formed.

Step 4: Reviewing themes: at this stage, the researcher made sure that the themes are a useful and accurate representation of the data. Here the researcher returns to the data set and compares the themes against it to see if there is anything missing, and if the themes are really present in the data and to see what could be changed to make the themes better.

Step 5: Defining and naming themes: after a final list of the themes was compiled, they were then named and defined.

Step 6: Writing up: this step involves writing up of the data analysis.

The researcher developed a coding scheme in which the theme and sub-themes were labelled, categorised, and summarised, followed by charting, which involved rearranging the data within subthemes.

The emerged subthemes were organised and interpreted to draw relationships between codes to aid easy presentation. The data collected was further submitted to the independent coder to confirm the study findings. Lastly, five themes and sixteen sub-themes emerged as indicated in Chapter 4.

3.8 MEASURES TO ENSURE TRUSTWORTHINESS

Trustworthiness of the study was achieved through audit trails (Burns & Grove, 2017). The researcher recorded events associated to the study over time and documented all the processes of the study, which can easily be followed by anyone interested and still obtain similar results. Self-reflexivity was ensured by the researcher.

The researcher reflected and examined the assumptions made in the study. The assumptions were made regarding data analysis, interpretation of data and immersing oneself in the data analysis process so the researcher could be knowledgeable about the midwives' situation.

3.8.1 Dependability

Dependability refers to the stability of findings over time. It includes participant's evaluation of the findings, interpretation, and recommendations (Korstjens & Moser, 2018). Procedures for dependability include maintenance of an audit trail of process logs and peer-debriefings. To ensure dependability, the coding process was evaluated by an independent coder. The research steps were transparently described from the start of the research project to developing and reporting of the findings, and the records of the research path were kept throughout the study.

Process logs include all activities that occur during the study and decisions about aspects of the study, such as whom to interview and what to observe.

3.8.2 Confirmability

Confirmability refers to the degree to which the results could be confirmed or corroborated by others (Korstjens et al, 2018). Confirmability is the neutrality or degree findings are consistent and could be repeated. Neutrality was ensured through the strategy of confirmability by keeping appropriate distance between the researcher and informants to avoid influencing the findings. A complete set of notes on decisions made during the research process, meetings, reflective thoughts, sampling, research materials adopted, emergence of the findings and information about the data management was provided by the researcher to allow the auditor to study the transparency of the research path. The notes were made available for discussions in peer-debriefing sessions to prevent biases. The researcher documented the procedures for checking and rechecking the data throughout the study.

3.8.3 Transferability

Transferability refers to the degree to which the results of qualitative research can be generalised or transferred to other context or settings (Korstjens et al, 2018). The researcher will provide the data base to make transferability possible on the part of potential appliers by using the strategy of thick description, describing not just the behaviour and experiences, but their context as well, so that the behaviour and experiences become meaningful to an outsider. This will enable the reader to assess whether the findings are transferable to their own setting.

3.8.4 Credibility

The credibility criteria involve establishing that the results of qualitative research are credible or believable from the perspective of the participant in the research (Korstjens et al, 2018). To ensure credibility of the findings, the researcher did participant checking by sharing the interpretations and conclusion with the participants to allow them to clarify, correct and provide additional information where necessary. Prolonged engagement to become more familiar with setting and context was done to build trust and to get to know the data to get rich data. Persistent observation was done to enhance the richness of the data and reflective journaling was made. Evidence was presented to iterative questioning of the data and returning to examine data several times was done.

3.9 Ethical consideration related to data collection.

Ethical consideration in research is a set of principles that guides research designs and practices (Bhandari, 2021). Ethics in research ensures that the rights of participants are observed, protected, and respected (Polit & Beck, 2018). Ethical clearance was obtained from the University of Limpopo research ethics committee. Ethical clearance / permission was obtained from department of health Limpopo Province, Vhembe District Health and from the Chief Executive officer of the selected hospital.

In this research ethical considerations included informed consent, principle of autonomy, privacy, anonymity and confidentiality, risk and harm, principles of beneficence, principle of justice, measures to prevent covid-19.

3.9.1 Informed Consent

Informed consent is an agreement by a prospective subject to participate voluntarily in a study after the participant has assimilated information about the study (Burns & Groves 2017). Jawa, Boyd, Maslove, Scott & Silver*,* (2023) are of the opinion that informed consent means the participants understand the aims, objectives, data collection method, duration and participation needed from them.

In this study, informed consent (Annexure H) was provided by getting consent from the participants after giving them full information about the study. Participants gave consent of their own free will without coercion, harassment, manipulation, or any form of remuneration.

3.9.2 Principle of Autonomy

Autonomy refers to the liberty to follow one's own will, with personal freedom (Burns et al, 2017). In this study, the researcher ensured that each participant had autonomy and was free to make autonomous decisions. Every participant was fully informed of what the research entails. They gave their consent to participate and were able to withdraw at any point and were free from being influenced or threated by the researcher.

3.9.3 Privacy

Burns & Groves, (2017) define privacy as the freedom of participants to determine the time, circumstances and extent to which private information will be shared. In this study, the participant's attitudes, opinions, beliefs, and identities were not shared with people who were not involved with the research project. All interviews were conducted privately in a separate free cubicle where no one could hear what was being said or observe what was happening.

3.9.4 Anonymity and Confidentiality

Burns (2017) defined confidentiality as the management of private data in research in such a way that only the researcher knows the subjects' identities and could link them with their responses. According to Meyer *et al.,* (2011), confidentiality means that the information obtained through the research should not be made available to other people.

Participants were assured that whatever they had said would never be used against them or to embarrass them. The researcher explained why a tape recorder is used and why field notes were taken.

In this study, the researcher did not share information gathered with anyone outside the research team, such as close friends, family members or any other unauthorized persons. The collected data was stored in a locked safe to ensure and prevent any unauthorized person from assessing it. During data collection and when reporting the collected data, the researcher did not include the names or identities of the participants. Instead, a number was assigned to each participant during data collection to hide their identity.

3.9.5 Risks and harm

Risk is defined as the probability and magnitude of harm or discomfort anticipated in the research (University of Nevado, 2021). Risks may include physical, emotional, and economic risks. This study might evoke emotional risk to the midwives because of the nature of the topic. The researcher made arrangements with the psychologist of the selected hospital to refer any participant that exhibited signs of emotional distress for proper counselling.

3.9.6 Principle of beneficence

Beneficence is an action that is done for the benefit of others. This principle states that research should do no harm, the purpose of research should never be to hurt anyone or find out information at the expense of others (Mulaudzi, Mulaudzi, Anokwuru, Maselesele, 2021). In this study, the researcher minimized the risk of harm by making sure that all participants who showed signs of emotional distress were sent to see a psychologist, three participants were referred to see a psychologist.

By participating in this study employers, policy makers and curriculum makers will know how maternal deaths affect midwives and make necessary improvements for the benefit of the midwives.

3.9.7 Principle of justice

The principle of justice deals with the concept of fairness. People who are included in research should not be included merely because they are a population that is easy to access, available, or perhaps vulnerable and less able to decline participating (Kumar, Aranha, Rajgarhia, Royal & Mehta, 2021). In this study, the researcher applied the principle of justice by being fair and making sure that every participant was participating out of free will.

3.9.8 Measures to prevent COVID-19 infection.

Corona virus is an infectious disease caused by the SARS-CoV-2 virus which presents itself by mild to moderate respiratory illness and people recover from it without requiring treatment. However, some will become seriously ill and require medical attention (WHO, 2022). In this study, the researcher adhered to the current regulations imposed by the Department of Health and the National Institute for Communicable Diseases (NICD). A safe distance of a meter was kept between researcher and participants, sanitizer was used before and between participants, interviews were conducted in a well-ventilated room, masks were not required but participants who wished to wear them were allowed to, re-usable items such as pens were sanitized after each use and/or before being used by a different person (NICD, 2022).

3.4 BIAS

Bias is an influence that produces an error or distortion, which can affect the quality of evidence in research (Brink & Van Rensburg 2018). In research, bias occurs when a systemic error is introduced into sampling or testing by selecting or encouraging one outcome or answer over others. This research avoided bias by not allowing personal experiences and emotions to intrude and not taking sides during the study. In addition, the researcher used the participants' first language and was neutral throughout the interview. The researcher-maintained neutrality throughout the study to avoid influencing the participants' responses. The researcher did not give out information about the goal or role of the study. The researcher considered all the data obtained and analyzed it clearly and unbiasedly. Then, the researcher continually re-evaluated the impressions and responses and ensured that pre-existing assumptions were kept at bay. General questions were asked first before moving to specific or sensitive questions.

3.9 CONCLUSION

This chapter addressed the research method used, which is a qualitative research method and the study adopted qualitative explorative, descriptive research design methods for data collection and analysis. A snowball sampling method was used in this study. Data was collected through in-depth interview and analysis was done using thematic content analysis, measures to ensure trustworthiness and ethical consideration were elaborated. The next chapter will be about presentation and discussion of the results.

CHAPTER FOUR

PRESENTATION AND DISCUSSION OF THE RESULTS

4.1 INTRODUCTION

The previous chapter presented the methodology and research design which guided the study which covered an explanation of the study site, population and sampling, research method and design, data collection method used, and data analysis. This chapter presents and discusses the research findings from the individual interviews conducted with midwives who have experienced a maternal death while rendering maternal health services at a selected hospital of Vhembe district Limpopo Province, South Africa.

4.2 DATA MANAGEMENT AND ANALYSIS

Fourteen midwives who have experienced the phenomenon of maternal demise during the provision of maternal health services were sampled. Exponential non-discriminative snowball sampling technique was used. The first subject recruited provided multiple referrals who then also provided other referrals until enough subjects were reached. Data in this study was collected at the selected hospital face-face with individual midwives. An interview guide (Annexure G) with semi-structured interview questions and probing was used when appropriate to enhance the richness of the data. The central question on this study was "*How were you affected physical and psychological by maternal demise during the provision of maternal health care services"*? The interviews were conducted in a private cubicle with one individual participant at a time. Field notes were used to capture body language and facial expressions of the interviewees. Each interview lasted between 15-30 minutes. The interviews were digitally recorded using a voice recorder with the consent of participants and transcribed. The researcher used a letter and a number to code the interviews and to identify the individual in formats for audio records. Each of the respondents were coded as P1, P2, P3, P4 and so on. Data was collected with participants until saturation was reached.

Data was collected within a period of six weeks. The interviews were immediately transcribed verbatim in order to refrain from missing relevant data. Thematic content analysis was used to process the transcribed data. The researcher developed a coding scheme in which the theme and sub-themes were labelled, categorised and summarised, followed by charting, which involved rearranging the data within subthemes. The emerged subthemes were organised and interpreted to draw relationships between codes to aid easy presentation. The data collected was further submitted to the independent coder to confirm the study findings.

4.3 RESEARCH RESULTS

Below is a table of the demographic characteristics of the participants followed by themes and sub-themes that emerged from the study.

4.3.1 Participant demographic

A total number of 14 participants were interviewed between ages 18 to 60 years, who witnessed a maternal death during the provision of maternal health services. All demographic and descriptive data are presented in Table 4.1.

Table 4. 1 Participant demographics and descriptive data.

CHARACTERICTICS	NUMBERS
PARTICIPANTS	
Midwives who experienced a maternal death	14
GENDER	
Female	14
Male	00
RACE	
African	14
White	00
Asian	00
Other	00

AGE	
18-30	03
31-40	03
41-50	03
51-60	05

UNITS WHERE PARTICIPANTS WERE DRAWN FROM	
Labour ward	07
Post-natal	04
Antenatal	03

Table 4.1 depicts those 14 participants who consented to be part of the study. All participants were female, all 14 participants were African. Participants were drawn from an ante-natal ward, labour ward and post-natal ward.

4.3.2 PRESENTATION OF THEMES AND THEIR SUB-THEMES

Three themes and their sub-themes emerged. Each theme and sub-theme are discussed and supported by direct quotes from the transcripts. The quotes from the participants are indicated in italics in the discussion of themes and sub-themes. The participants were all female. Literature is presented to support the findings.

Table 4. 2. Themes and sub-themes reflecting the effects of maternal deaths among midwives.

THEMES	SUB-THEMES
4.3.2.1 Physical effects of maternal deaths among midwives	4.3.2.1.1 Eating disturbances and weight changes 4.3.2.2 Sleeping disturbances. 4.3.2.3 Somatic symptoms 4.3.2.4 Exhaustion
4.3.2.2 Psychological effects of maternal deaths among midwives	4.3.2.2.1 Sadness, depression and anger 4.3.2.2.2 Fear of death and pregnancy 4.3.2.2.3 Empathy with family members 4.3.2.2.4 Affected self-concept (self-doubt, guilt and failure) 4.3.2.2.5 Repetitive/intrusive thoughts /flashbacks 4.3.2.2.6 Hypervigilance 4.3.2.2.7 Social isolation 4.3.2.2.8 Stressful work environment 4.3.2.2.9 Avoidant behaviour
4.3.2.3. Recommendations made by midwives related to support after experiencing maternal death in a unit	4.3.2.3.1 Acceptance and adaptation 4.3.2.3.2 Occupational support (managerial support and training) 4.3.2.3.3 Psychological support

4.3.2.1 Theme 1: Physical effects of maternal deaths among midwives.

This was the first theme which emerged from the findings of the current study. Participants indicated how they could not sleep nor eat after witnessing maternal deaths. Participants reported that they experienced somatic disorder symptoms, and they were exhausted. The four Sub-themes which emerged from this theme as indicated in Table 4.2 were presented and discussed below.

4.3.2.1 Sub-theme 1: Eating disturbances and weight changes.

The participants in the study indicated that the event of a maternal death caused eating disturbances and weight changes. One participant indicated how she lost her weight and people were talking about it. Another one indicated how she skipped her lunch hours as her focus was to make sure that her patients were well cared for. This was supported by the following quotes:

"*I lost a lot of weight because in 12 hours shift, I stopped even taking my lunch hour, I would be on my feet the whole day just trying to make sure that everything and all the patients are in good condition*" (Participant 02)

"*I lost a significant amount of weight to point that everyone was commenting about it not knowing what was happening to me*" (Participant 14)

Other participants reported how their appetite was affected after experiencing maternal death. One even reported that she had to take unhealthy food because of a lack of appetite. Another participant indicated how she could not enjoy her food anymore hence she forced herself to eat so that she could get strength to continue with her daily routine.

"*My appetite was affected I suddenly started eating a lot of unhealthy foods and during that time I noticed I started suffering a lot from indigestion, heartburn, just digestive problems in general*" (Participant 03)

"*Eish my appetite was gone, I didn't enjoy my food anymore, I actually just forced myself to eat so that I can have the energy to continue working*" (Participant 07)

Another one concurred by indicating that sometimes she would not eat at all and, as such, she resorted to taking fruits only for the whole day.

"*I was skipping some meals, sometimes I would eat only once in a day and some days I would just eat only fruits and not a real meal*" (Participant 01)

From this sub-theme, it was evident that maternal death affected participants negatively as their eating behaviour was affected. Others lost their appetite, with others skipping their meals, hence they were eating unhealthy food to boost their appetite with others eating fruits. The results of this study were supported by Konttinen (2020) who conducted a study on emotional eating and obesity in adults and his results indicated that emotional eating can be caused by various mechanisms, such as using eating to cope with negative emotions or confusing internal states of hunger and satiety with physiological changes related to emotions. Another study by Michels (2019) on biological underpinnings from psychosocial stress towards appetite and obesity concluded that our modern lifestyle presents us with many psychosocial stressors in a highly palatable food environment and stimulates uncontrolled eating which can lead to increased energy intake and finally overweight. An eating disturbance might lead to conditions such as Anorexia Nervosa and can affect the midwives' psychological state. This leads to a failure to think rationally when rendering maternal health care services in their role, as indicated in the Roy's Adaptation Theory. This leads to errors that might cost another life (Roy, 2009). Khaled, Tsofliou, Hundley, Helmreich & Almilaji, (2015) conducted a study on perceived stress, unhealthy eating behaviours, and severe obesity in low-income women which indicated that perceived stress was positively associated with uncontrolled eating and emotional eating.

4.3.2.2 Sub-theme 2: Sleeping disturbances.

The participants in this study demonstrated that insomnia was common among them when they experienced maternal death. One participant indicated that they started having insomnia and couldn't fall asleep even after trying. They also demonstrated that it was because they kept on seeing the repeated episode of the unfortunate event that happened at work. The lack of sleep is illustrated in the following quotes by participants:

"I started having insomnia, I couldn't sleep, and I'd be trying to sleep only for that event to play over and over in head like I as relieving it over and over again" (Participant 02)

"I just had insomnia and even when I did fall asleep, I wouldn't sleep for long before I wake up from nightmare and night terrors (frowns)" (Participant 01)

Other participants reported that their sleeping quality was diminished after witnessing a maternal death while rendering maternal health care services, they couldn't sleep normal hours. The poor sleeping quality is illustrated in the following quotes:

"I also had poor sleep, I would sleep an hour then wake up and start thinking about what happened then after some time sleep again then wake up again" (Participant 13).

"Yes, immediately after the incident I couldn't sleep properly, I had insomnia, I would sleep only three hours then wake up and go work" (Participant 7).

Another participant reported that they started to take alcoholic beverages to induce sleep.

"Yes, I was struggling to sleep, I would be tired from work but falling asleep was so difficult that I found wine to be helpful a lot when it comes to that" (Participant 8).

From this sub-theme, it was evident that maternal death affected participants negatively as they developed sleeping disturbances. Others had insomnia with others having poor sleeping quality and others resorting in drinking to aid their sleep.

Similarly, to the findings of the current study, a study conducted by Lancel, Stroebe and Eisma (2020), on sleep disturbances in bereavement revealed that insomnia is more prevalent and scores higher in bereaved than non-bereaved persons. The same study also indicated the diversity of sleeping pattern disturbances which varies from lower sleep quality, shorter sleep duration and anxious night-time awakenings. A study by Aoyoma, Sakaguchi, Fuiisawa, Morito & Ogawa (2020) on insomnia and the relation between possible complicated grief and depression, the major findings of the study were that 14% of the participants reported alcohol consumption as a result of bereavement. Another study conducted by Milic, Perez, Zuurbier, Boelen & Rietiens (2019) concluded that a person with normal and complicated grief both had a shorter sleep duration and a lower sleep quality, mainly explained by depressive symptoms.

The effect of short or long sleep duration on quality of life and depression was also confirmed by a study conducted by Matsui, Kuriyama, Yoshiike, Nagao & Ayabe (2020). Poor sleep quality and sleeping for a shorter duration will mean that midwives are not getting enough sleep which can have a negative impact on their interdependence mode (their relationship with pregnant women) as stated by Roy (2009) leading to poor quality nursing care being rendered and, ultimately, a rise in maternal deaths.

4.3.2.3 Sub-theme 3: Somatic symptoms

Somatic symptoms disorder is diagnosed when a person has a significant focus on physical symptoms, such as pain, weakness or shortness of breath, to a level that results in major distress or problems functioning as indicated in the diagnostic and statistical manual of mental disorders, (American Psychiatric Association, 2013) this was supported by (Summers, Gorrindo, Hwang, Aggarwal & Guille, 2020). The participants in this study demonstrated somatic symptoms such as headache and neck pain which were common among them when they encountered a maternal death. Both painful and non-painful somatic symptoms essentially characterize clinical states of depressive mood (Kapfhammer, 2022).

The somatic symptoms are illustrated in the following quotes by the participants:

"An experience of an adverse event resulting in a loss of a pregnant woman stress me, I would constantly have non ended headaches and pain on my neck". (Participant 3)

Another participant concurred by indicating that:

"Hmmm…maternal loss is a painful event to come across, I was having a lot of headaches and generalised body pains and fatigue". (Participant 4)

"When I came across that incident, I started having indigestion issues and was later diagnosed with peptic ulcers, it is not good after you progress a woman with no issues and suddenly the condition changes, hey... (Nodding her head)". (Participant 4)

The same somatic experienced were shared by other two participants (8 and 1) where they indicated that they had gastrointestinal related issues.

"After the incident, I started experiencing digestive issues which I blamed the type of food I was eating but I also had back pains". (Participant 8)

"Well during that time of the incident, it was like a dream then latter, I started experiencing gastric pains and heartburns a lot, I had indigestion issues, and I was put on anti-acids by my doctor". (Participant 1)

From this sub theme it was evident that maternal death affected participants negatively as they developed somatic symptoms. Having somatic symptoms may increase staff absenteeism, as they may be having physical symptoms, and it can also affect the quality of care provided by the affected personnel. A study conducted by Michaelides, Zis (2019) on depression, anxiety and acute pain links and management challenges found that the link between mood disorders and somatic symptoms as manifested by acute pain which has proven to be increasingly significant since the link is bi-directional, and both act as a risk factor for each other.

Depression and anxiety are associated with increased perception of pain severity, whereas prolonged duration of acute pain leads to increased mood dysregulation. Another study conducted by Simon, Vonkorff, Piccinelli, Fullerton & Ormel (1999) on the relation between somatic symptoms and depression concluded that somatic symptoms of depression are common in many countries, but their frequency varies depending on how somatization is defined. Somatic symptoms, notably those related to energy, showed good predictive potential in identifying subthreshold depression and major depressive disorders in primary setting (Li, Zhang, Han, Guo & Ceban, 2023).

A multinational, multicentre study on the psychological outcomes and associated physical symptoms amongst healthcare workers during the Covid 19 outbreak by Chew, Lee, Tan, Jing, Goh & Ngiam, (2020) found that commonly reported symptoms were headache and lethargy. The physical symptoms had higher rates of depression, anxiety, stress and post-traumatic stress disorder (PTSD) and the association of physical symptoms and psychological outcomes may be bidirectional. In this study, somatic symptoms experienced by participants relates to the physiological mode as indicated by Roy's Adaptation Model which was defined as the physical and chemical processes involved in the functioning of participants. Hence, participants in this study experience headache and other digestive related problems.

4.3.2.4 Sub-theme 4: Exhaustion

The participants in this study demonstrated that they were exhausted after the encounter of a maternal death in their units. Exhaustion is a state of extreme physical or mental tiredness, or the state of using up something or the state of being used up (Botkin, 2023). Participants reported how tired they had felt as they did not perform any of their daily duties when they arrived home from work. Instead, they went to sleep without even eating. This information was supported by the following quotes.

*"I didn't have energy at all when I got home like I used to before, I'd just get home and go straight to bed". (*Participant 2)

“First thing that happened to me was fatigue, I was always tired and demoralised, I had no energy for work at all.” (Participant 6)

Another participant concurred and reported that she was not only exhausted, but she was drained even emotionally.

“I was fatigued and I always felt tired, and I was literally pushing myself to go to work because of how I felt as such I felt exhausted both physically and emotionally.” (Participant 3)

“Physically I was tired, I was exhausted, I was energy less, I didn’t even want to get up in the morning and go to work.” (Participant 10)

From this sub theme, it was evident that midwives showed signs of exhaustion after encountering a maternal death. The exhaustion experienced by midwives might affect their role functioning mode and quality of care they provide because someone who is exhausted cannot function or perform to their optimum level. The findings of this study revealed that midwives were both physically and emotionally exhausted which might lead to burnout. As such, a study conducted by Panagioti, Geraghty, Johnson, Zhou, Panagopoulou, Chew-Graham, Peters, Hodkinson, Riley & Esmail, (2018) found that burnout is associated with 2-fold increased odds for unsafe care, unprofessional behaviours, and low patient satisfaction. Burnout is typically measured in health care by assessing the frequency of symptoms in 2 domains, emotional exhaustion, and depersonalisation (Hewitt, Ellis, Hu, Cheung, Moskowitz, Agarwal, & Bilimoria., 2020). Another author defined burnout as a multifaceted condition of overwhelming exhaustion, interpersonal detachment, or cynicism towards one’s job (Maslach, Jackson & Leiter, 2021). Burnout has gained attention in the medical community due to its reported association with physician attrition, mental and physical health, and self-reported medical errors.

On the other hand, emotional exhaustion was found to be negatively related to job performance in terms of organisational commitment and job satisfaction and the mediating effect of emotional exhaustion was confirmed in the relationship between job performance and appraisals of emotion, optimism, and social skills (Moon, Won-Moo Hur, 2011). Another study conducted by Tertemiz, Tuyluoglu, (2020) is entitled: Are signs of burnout and stress in palliative care workers different from other clinic workers? The study concluded that burnout and exhaustion are a significant problem among healthcare workers and, signs of stress, cognitive-sensorial, physiological and pain complaints are particularly common. Perinatal stress events can be a predictor of exhaustion, especially when combined with low efficacy and limited seniority (Jasinski, 2021). Exhaustion is linked with the physiological mode as indicated by Roy's Adaptive Model, hence, its aftermath cannot be ruled out, especially in the maternal health care services which involve the lives of two people.

4.3.3 Theme 2: Psychological effects of maternal deaths among midwives.

This was the second theme which emerged from the findings of the current study. Participants indicated how they were sad, depressed, and empathetic after witnessing maternal deaths. Participants reported that they experienced intrusive thoughts, resorted in isolating self from others, displayed avoidant behaviours and they were hypervigilant. The nine (9) sub-themes which emerged from this theme as indicated in Table 4.3 were presented and discussed below.

Table 4. 3 Psychological effects related to maternal death.

THEME	SUB-THEMES
4.3.2.2 Psychological effects of maternal deaths among midwives	4.3.2.2.1 Sadness, depression, and anger
	4.3.2.2.2 Fear of death and pregnancy
	4.3.2.2.3 Empathy with family members
	4.3.2.2.4 Affected self-concept (self-doubt, guilt, and failure)
	4.3.2.2.5 Repetitive/intrusive thoughts /flashbacks
	4.3.2.2.6 Hypervigilance
	4.3.2.2.7 Social isolation
	4.3.2.2.8 Stressful work environment
	4.3.2.2.9 Avoidant behaviour

4.3.3.1 Sub-theme 1: Sadness, Depression, and anger.

The participants in this study demonstrated that depression, anger, and sadness among midwives is a significant issue that can have a negative impact on their wellbeing as well as their ability to provide quality care to their patients.

One participant even indicated how harsh she was when engaging with her children at home. This information was supported by the following quotes:

“I can tell you this I was depressed (sad face), I was anxious, I would get panic attacks, and my life was just not good at all “(Participant 5)”.

“I would be very irritable and isolate myself and be harsh even to my kids at home because of that disturbance” (Participant 11)

Another participant concurred and reported that they were numb and felt a great sense of loss:

“(Sighs) I was numb at first, it was as if it hadn’t really clicked in my head what had really just happened” (Participant 14).

“So, for me it felt like I had just lost someone close to me not just a patient” (Participant 6).

Another participant reiterated and reported that how she cried to sleep when thinking about the event which happened at work.

“When everybody left the house to school and work, and I would remain alone and literally just cry until I fell asleep” (Participant 5).

From this sub theme it was evident that depression and anxiety was a significant problem among healthcare professionals, and it affected their role function as stipulated in Roy’s Adaptation Model (Roy, 2009). In support of the results of the current study, a survey conducted by Greedy, Shochet, Horsfall, and Hartz (2015) with over 2,400 midwives across Australia found that over a third of them reported symptoms of depression anxiety or stress related to their work. Furthermore, Hunter et al. (2019) reported that approximately 30% of midwives experienced symptoms of depression with higher rates reported among those working in high stress environment. In this study, maternal death affected midwives negatively as they feel depressed, irritable, and isolate themselves. Sadness, depression and anger are

prevalent emotional challenges experienced by midwives, with significant implications for their wellbeing and the quality of care they provide. This is linked to the physiological mode of the Roy's Adaptation Model which formed the basis of the current study.

4.3.3.2 Sub-theme 2: Fear of death and pregnancy.

In this study, participants revealed that the encounter of maternal death caused them to develop fear of death and pregnancy. Nurses are frequently exposed to dying patients and death in the course of their work. This experience makes individuals conscious of their own mortality, often giving rise to anxiety and unease (Peters et al 2013). The fear of death and pregnancy was illustrated in the following quotes by participants.

"I honestly started being afraid of death, I know we are all going to die someday but after that I was afraid of dying as if someone told me I'm going to die tomorrow (sad facial expressions)" (Participant 3).

"Witnessing a maternal death changed my perspective on being pregnant, I saw it as being very risky and it made me not want to be pregnant because I feared I might end up dead" (Participant 3).

Another participant concurred by indicating that her own pregnancy triggered the previous experience when she came across of the death of a pregnant woman. The thought of it made her to be afraid and she was always thinking of dying herself during pregnancy.

"It scared be to a point that I was afraid of falling pregnant and by the time I fell pregnant I was always having this though at the back of my head that I might just die unexpectedly from obstetric complications, I was paranoid and unsettled, I felt being pregnant put one at risk of dying" (Participant 8).

Another participant reported that the fear she had was due to the traumatic experience of maternal death which happened while she was still young in the profession and when she did not even have a child:

"I experienced a maternal death just when I entered into the profession and it was very traumatic for me because I'm still young and I don't have a child so the thought of falling pregnant myself, I might die while pregnant or while giving birth" (Participant 12).
"I had a lot of fear and I started having a phobia to death, I am really afraid of death since then, I guess seeing that happen changed me" (Participant 8).

From this sub theme, it was evident that maternal death causes nurses to develop fears towards death and pregnancy and it negatively affects them as some were still young and without children. Fear of being pregnant also has a negative effect on nursing, as midwives with death anxiety will not be confident when dealing with life threatening conditions. According to Roy (2009), a person is a bio-psycho-social being in constant interaction with a changing environment. He/she uses innate and acquired mechanisms to adapt. Midwives who fail to adapt to their challenging environment won't be able to render nursing care in totality. Abraham, Berchie, Druye, Prempeh, Okantey & Agyei-Ayensu (2020) supported the findings of the current study as such. They concluded that midwives attending woman who die during the peripartum period suffer emotionally and psychologically. Nurses who have a strong anxiety about death may be less comfortable providing nursing care for patients at the end of their life. Fear of death is a universal human experience that has been studied across various disciplines. A study by Tobbiasson, Lyberg (2019) on fear of childbirth from the perspective of midwives working in hospitals in Norway, found that encountering fear of childbirth evoked the desire to protect and help. Death anxiety, a negative affective state that is incited by mortality salience, may be experienced by nurses and other health care workers who are exposed to sickness, trauma, and violence (Nia, Lehto, Ebadi, Peyrovi, 2016). Fear of death and pregnancy is linked to physiologic mode on the Roys Adaptation Model.

4.3.3.3 Sub-theme 3: Empathy with family members

The participants in this study demonstrated empathy with family members after maternal death of their loved one. A study by Ravaldi, Mosconi, Mannetti, Checconi, Baiuti, Ricca, Mosca, Dani & Vannacci (2023) on posttraumatic stress symptoms and burnout in health professionals working in neonatal intensive care units, showed that the hardest tasks by health professionals were communicating a baby's death and informing on autopsy results. It further showed that 44.7% of health care professionals (HCPs) did not receive formal training in communicating bad news and 90% of professionals thought that training on bereavement care is necessary. Empathy is illustrated in the following quotes by participants:

"Yes, and my other fear is having to inform family that their loved one has passed away when they were happy waiting to receive good news of the birth of a child" (Participant 3).

"I was left in a lot of pain thinking about the deceased family and thinking about her other children and I just put myself in their shoes and realised that if it were me, I wasn't going to be able to handle it (Facing down)" (Participant 13).

Another participant concurred and reported that seeing family members of the deceased disturbed her. The participant further indicated how she avoided eye contact with the bereaved family, and she described herself as a failure.

"What hurt me the most was when the family came, seeing them shattered me, I had to hide to avoid eye contact because I felt I had failed, I felt like I was a bad midwife, how can I let that happen (teary eyes)" (Participant 2).

From this sub theme it was evident that maternal death affected midwives negatively, as they grieved the death of the patient while still having to continue working and caring for other patients. Midwives in this study felt that telling family members that their loved one was deceased was the hardest thing to do. To respond positively to environmental changes a person must adapt (Roy, 2009). Failure to adapt might affect a person negatively.

Midwives have a role to play in telling family members about death but due to their emotions, they avoid doing so which might also affect the manner in which they end up delivering the news. Empathy is essential in nursing when interacting with family members. By active listening, validating emotions, providing information, being present and supportive, anticipating needs and offering emotional support, nurses can create a caring and compassionate environment which supports both patients and their families. Nurses provide individualized nursing care by meeting the needs of patients and their families at the time of death and playing a role in helping them to find meaning in death with a positive attitude and allowing patients to end their lives with dignity (Andersson, Salickiene & Rosengren, 2016; Gorchs-Font, Ramon-Aribau, Yildirim, Kroll, Larkin & Subirana-Casacuberta, 2020). A cross- sectional survey study on the influence of clinical nurses' empathy on their death competence by Wang, Chen, Liu, Liao, Long & Li (2021) concluded that death competence in clinical nurses was moderate to low level. Empathy with family members is linked to interdependence on the Roy's Adaptation Model.

4.3.3.4 Sub-theme 4: Affected self-concept (self-doubt, guilt, and failure)

The participants in this study demonstrated self-doubt, guilt and affected self-concept. This led to loss of self confidence in their skills. The affected self-concept is illustrated in the following quotes by participants:

"I felt guilty and sad all the time, I lost all my confidence in my midwifery skills, I felt like a failure" (Participant 1)

"I just did not have anywhere else to go at the time, but I felt like I wasn't meant to be a midwife, I started doubting myself a lot and didn't believe or have any confidence I'm my skills and knowledge, felt guilty" (Participant 3).

Another participant concurred by indicating that she was no longer enjoying her work as a midwife as she did not even anticipate during her training that she would meet with the death of a pregnant woman.

"I didn't enjoy my job anymore because of what had happened, I felt when I choose to be a midwife, I didn't expect to have pregnant woman dying under my care" (Participant 10).

Another participant concurred and reported that they felt they could have done something to save the patient:

"So, when the unfortunate happens it leaves you shattered as a midwife, I would question myself and my skills and I ask myself if I failed that patient, you always feel like you could have done something even if there wasn't anything you could do" (Participant 7).

From this sub theme, it was evident that experiencing a maternal death can have a significant impact on self-concept of midwives. According to Roy's (2009) Adaptation Model, a person ought to have improvement in self-image and if self-concept is not improved, it can affect the midwife's function. Midwives play a crucial role in providing care and support to expectant mothers and their families, and when a maternal death occurs, it can be emotionally and professionally challenging for them. A study conducted by Scroder, Jorgensen, Lamont & Hvidt (2016) found that although blame from family's patients, peers or official authorities was feared, the inner struggles with guilt and existential considerations were dominant. Feelings of guilt were reported by 36-49% and 50% agreed that the traumatic childbirth made them think more about the meaning of life (Scroder et al., 2016). Midwives who witness traumatic death were mostly emotionally affected. They lost their self-confidence and intended to leave their profession (Aydin, Aktes, 2021). A meta-ethnographic synthesis of midwives and nurses' experiences of adverse labour and birth effects by Elmir, Pangas, Dahlen & Schmied (2017) reported midwives who experienced feeling the chaos, being powerless and failure after experiencing maternal death. The study concluded that midwives feel relatively unprepared when faced with a real-life labour and birth emergency event while others were traumatised by the experience (Elmir et al., 2017). Maternal death affects midwives negatively as they felt guilty and felt as if they were failures, thus further affecting their confidence in midwifery.

A demotivated or demoralised midwife cannot perform to their optimum best, and as such, they are prone to make mistakes leading to another adverse event in the maternal unit.

4.3.3.5 Sub-theme 5: Repetitive/ intrusive thoughts/ flashbacks

The participants in this study demonstrated that intrusive thoughts, flashbacks were common among them after the encounter of a maternal death. The repetitive/intrusive thoughts and flashbacks were illustrated in the following quotes by participants:

"And when you get to bed the only thing in your mind is the incident, you start re-imagining or replaying everything from the moment she entered and everything that happened" (Participant 13).

"Psychologically I was stressed a lot, I kept thinking about the deceased patient, her picture in my head was not going away" (Participant 8).

"I struggled a lot with trying to forget what had happened you know, I couldn't take that picture out of my head, I kept seeing everything play over and over again in my head" (Participant 6).

Other participants indicated that the flashbacks were so intense that it even made it difficult for them to sleep properly.

"Instead of sleeping I would be replaying what happened trying to find if there is any omission I made or trying to change the scenario if I had done this or that before doing that maybe the patient would still be alive" (Participant 2).

"I kept replaying the scenario in my head, even when I try closing my eyes it would just come" (Participant 7).

From this sub theme, it was evident that midwives experienced some of the symptoms of post-traumatic stress (flashbacks, nightmares, inability to forget, avoidance).

Negative emotions such as shock, crying, guilt, and helplessness experienced by midwives during and after birth trauma may have been predisposing factors for post-traumatic stress disorder.

Negative feelings and post-traumatic stress symptoms experienced by the midwife during and after trauma adversely affect the current and future mental health of the midwife, the quality of midwifery care, and their private and professional lives this is linked with the physiological mode as indicated by Roy's Adaptive Model of 2009. As such, a study conducted by Seys, Decker, Waekens, Claes & Panella (2022) aimed to describe the differences and similarities in the reaction of the healthcare worker involved in a patient safety incident reported the following: anxiety, difficulties concentrating, doubting knowledge and skills, feeling on their own, feeling unhappy and dejected, feeling uncertain in team, flashbacks, hypervigilance, having sleep deprivation, stress and wanting to quit the profession. These were found to be prominent in second victims. In support, a study by Chankaya, Aksoy, Yilmaz (2021) found that midwives experienced highly emotional exhaustion in the form of sadness, flashbacks, guilt, fear, and empathy, and they performed an increasingly defensive practice. These results are linked to the physiological mode on the Roy's Adaptation Model.

4.3.3.6 Sub-theme 6: Hypervigilance

The participants in this study demonstrated that they experienced hypervigilance when they experienced a maternal death. One participant reported that she always asked her colleagues to confirm her findings as she doubted herself. The hypervigilance is illustrated in the following quotes by participants:

"I always felt like maybe my findings were not correct so I would ask someone to confirm everything I do, which made me feel like I was a burden to my colleagues (looking down)" (Participant 1).

One participant reported that she kept copies of the duty roster, while another participant reported that they were not at ease when dealing with patients and had to be extra cautious. This is demonstrated in the quotes below:

“You know that the time I encountered a maternal death I was left on duty to run this unit alone, even this day I still have all the records including the duty roster just so that when they come for me, I can protect myself” (Participant 2).
“I was afraid when dealing with patients in general, I had to be extra cautious and make sure that everything was done and correctly so because I was afraid that another maternal death might happen, I actually was afraid of a maternal death I still am, I don’t want to ever experience that again (Sad face)” (Participant 7).

Some midwives started double checking everything so that it sometimes meant that they couldn’t take a lunch break.

“I started double checking everything I do and wanted to make sure I document everything without omitting anything because when the file goes for reviews anything you did not document you did not do” (Participant 4).

“My confidence was affected a lot which is why during that time I couldn’t even take my lunch hour; I always had to go back and recheck everything just to make sure all was well” (Participant 2).

From this sub theme, it was evident that maternal death affected midwives negatively as they had to spend a lot of time going through one thing just to make sure it was perfect; this means that the midwives won’t be able to manage several patients at the same time, as they need rather much more time with one patient, meaning other patients might be left unattended. In support of these results, a study conducted by Hadjigeorgiou, Koliandri, Josephidou (2023) found that some midwives become defensive and careful to avoid similar traumatic experiences in the future, while some of them developed symptoms of posttraumatic disorder (PTSD). The findings of a study conducted by Minooee, Cummins, Foureur, Travalgia, (2021) suggested that fear and anxiety which are shaped after traumatic events can influence the way midwives perceive the risk of emergencies in subsequent births. Midwives may ruminate on the worst possible scenarios and develop catastrophic thinking. As a result of this, they may tend to over-react in the next births by undertaking procedures that are not necessary.

Disturbed orientation of normal birth shifted midwives towards hypervigilance in practice. Fear of repetition of the incident and negative thoughts after the experience shifted some midwives towards catastrophic thinking and hypervigilant behaviours (Minooee, Sonia, 2022). This is linked to the physiological mode on the Roy's Adaptation Model.

4.3.3.7 Sub-theme 7: Social isolation

Participants in this study demonstrated that they started to have social isolation. Social isolation is a state of complete or near complete lack of contact between an individual and society. Individuals with depressive symptoms are more likely to be isolated in their social networks, which can further increase their symptoms (Elmer, Sedtfeld, 2020). The social isolation is illustrated in the following quotes by participants:

"I didn't have the motivation to continue working, I would isolate myself from my colleagues" (Participant 1).

"I isolated myself, I was no longer myself, I am a bubbly person by nature but that time I just kept to myself and didn't make small talks with anyone, I was just working and nothing else" (Participant 14).

"Just wanted to be alone most of the time, I didn't want to be around people, even at work I would go to the kitchen when there was no one there, and I stopped having casual conversations with my colleagues because I just didn't have the energy for that" (Participant 9).

Other participants indicated that they became moody and sat in their cars during lunch hour just to isolate themselves, as in the following quotes:

"Yes, I become moody at home and isolate myself because if feel I'm not worthy at my job so even at home I feel like I'm useless" (Participant 11).

*"Sometimes I would isolate myself from my colleagues and just go sit in my car during my lunch hour, I felt I wanted to be alone" (*Participant 4).

From this sub theme it was evident that maternal death affected midwives negatively as they started having social isolation, meaning that their social relationships at work and at home were affected. This means that the midwives won't be updated with certain information at work as they are not having engagements with their colleagues anymore.

Meetings might be conducted in their absence as they are isolating themselves, meaning a further loss of information to them. It also means that they don't enjoy work anymore as nursing is a dynamic profession which requires a lot of social engagements with other multidisciplinary team members and patients etc. The lack of social interactions and social relationships can have detrimental effects on an individual's physical and psychological health, (Valtorta, Kanaan, Gilbody, Ronzi, Hanratty, 2016). Pegg, Arfer, Kujawa, (2021) established that individuals with depressive symptoms have less rewarding and more dysfunctional social relationships. In that regard, longitudinal social network studies have shown that depressive symptoms affect the creation, maintenance, and termination of social ties (Elmer, Boda, Stadfeld, 2017). A study conducted by Viduani, Benetti, Martini, Buchweitz, Ottman, Wahid, Fisher, Mondelli, Kohrt & Kieling, (2021) on social isolation found that the experience of depression led to a feeling of detachment from others, resulting from the sensation that usual interactions did not have the same meaning as before. This disruption in interactions is perceived as self-isolation and is described in relation to coping mechanisms. This influences their social integrity as indicated in the Roy's (2009) Adaptation Model.

4.3.3.8 Sub-theme 8: Stressful work environment

The participants in this study demonstrated that the working environment became stressful for them. It became dull and sad, and the stressful work environment was illustrated in the following quotes:

"It was dull, no more jokes and laughs just a quiet serious environment" (Participant 1)

"After it happened the whole unit atmosphere just changed, it became dull, everyone just looked sad" (Participant 12).

One participant reported that it was hard to relax and be at peace because of the fear of being implicated.

"You can never be at peace and relax because when the case goes to be presented and you get asked questions of what really happened, and the file gets scrutinised to find any leads or mistakes that were made you are in fear if you will be implicated or not" (Participant 7).

One participant reported that although one might still be processing the maternal death, there was also a possibility of precautionary suspension, while another participant reported that during the 24 hours of perinatal review, one ought to write a statement and the file should be taken to be reviewed for clues.

"You can just imagine when you are still trying to deal with the trauma of a maternal death and then you get suspended because they want to do investigations and they cannot do them while you are there" (Participant 5).

"There is something called 24 hours' perinatal review where within 24 hours, you write down a statement and notify the death and the file gets taken and checked for clues of what might have happened to the woman" (Participant 3).

From this sub theme, it was evident that maternal death affected midwives negatively as it made the working environment to be stressful and uncomfortable for midwives. The working environment became more undesirable and tormenting to midwives who had to answer questions and write statements. The implications of a stressful working environment are staff turnover and burnout. Midwives could end up leaving the midwifery profession or leaving their current employer.
A midwife working in a stressful environment will not perform to their absolute best, quality of care render will be compromised due to the stress.

Several studies demonstrated that while performing diverse routines in health facilities, nurses often face over commitment and low social support leading to high levels of stress (Dondonkhuu, Tserenkhuu, Nyam, Jurmeddorj, 2021). Job stress had a direct positive effect on anxiety, and it also exerted indirect positive effects on depression and anxiety through mediating factors.

Emotional exhaustion and social support were the main mediating variables, accounting for 72.0% of the variation in anxiety and nearly 43.4% in depression (Chen, Jiping, Bingrong, Wang, Luo & Xu., 2019). Occupational stress has substantial direct and indirect effects on the intention to leave the current organisation and the intention to leave the profession in the future. It exerts its indirect effects through job satisfaction, depressed moods, and stress adaptation (Said, El-Shafei, 2021).

A study conducted by Baye, Demeke, Birhan, Semahegn & Birhanu (2020) on work related stress and associated factors in governmental hospitals found that two-thirds of nurses who were working at government hospitals had work related stress and the work-related stress was associated with child-rearing, working units, work on rotation and chronic medical illness. Work stress is comprised of the mental and physical conditions which hurt the productivity, effectiveness, psychophysical health, work ability, satisfaction, and quality of work of individual workers in the workplace (Khamisa, Oldenburg, Petzer & Ilic, 2015) Thus, work stress is an interactional construct encompassing a misfit between environmental demands and personal abilities. Nursing professionals who are severely stressed could render poor quality of service, which can result in low patient satisfaction and low turnover (Ojekou, Titilayo, 2015). A study conducted By Geraghty, Speelman, Bayes (2019) on midwives' experiences of workplace stress revealed that as the number of and extent of stressors increase, the negative implications and effects for midwives rise as the opportunities to do midwifery in the way they value decrease and that commitment to and engagement with workplace diminishes.
This is linked to interdependence mode on the Roy's (2009) Adaptive Model as a stressful work environment might affect midwives' ability to perform their professional responsibility effectively.

4.3.3.9 Sub-theme 9: Avoidant behaviour

Participants in this study demonstrated that they developed avoidant behaviour towards direct patients care or emergencies, these were illustrated in the quotes below:

“And immediately after the incident you pull back a bit from direct patient care because of the trauma, you are literally in fear of what might happen to a patient” (Participant 10).

Another participant reported that they started to notice that other colleagues ran away from emergencies:

“I somehow started noticing that some colleagues actually run away from emergencies (raising eyebrows), they don’t want to be the one receiving that patient because they are afraid of what might happen, so if you can’t dodge you will be left always having to deal with emergencies of finding yourself encountering maternal death” (Participant 7).

One participant reported that they felt discouraged to go in front of a patient and that they were still traumatised while another participant reported that they even asked the matron to remove them from the unit:

“I felt discouraged to even go in front of patient and to even touch a patient and to be honest with you I’m still traumatised even today” (Participant 4).

“I remember I even went to the matron and ask to be removed from this unit and be taken to non-midwifery units” (Participant 2).

From this sub theme, it was evident that maternal death affected midwives negatively causing them to develop avoidant behaviour. Avoidant behaviour is bad as it will prevent and prolong the adaptation process as indicated by Roy’s (2009) model.

Avoidant behaviour puts patients at risk of being neglected as the personnel who is supposed to care for them are avoiding them in fear of their condition. Midwives who have avoidant behaviour may exaggerate patient condition as severe even if it's not because of the fear they have. Maternal death evokes intense psychological responses that threaten their personal and professional selves, and their ability to deliver high patient care (Van Gerven, 2016). Avoidant coping plays an important role in the maintenance of post-traumatic stress disorder (PTSD). Midwives are routinely exposed to events in the workplace they personally perceive as traumatic (Slade, Sheen, Collinge, Butters, Spiby, 2020).

Avoidance describes any action designed to prevent an uncomfortable situation or emotion from occurring. Although it is a common reaction to trauma, avoidance becomes problematic when it is the primary coping strategy and plays a major role in the development and maintenance of posttraumatic stress disorder (PTSD). Avoidance in posttraumatic stress disorder (PTSD) may generalize to non-harmful environmental cues that are perceived to be unsafe (Coll, Eustache, Doidy, Fraisse, Peschonski, Dayan, Gagnepain & Laisney, 2022).

According to models of PTSD, avoidance behaviour increases the severity of PTSD symptoms. Avoidance becomes problematic when it affects the processing of elements that do not represent any danger. While avoiding stimuli that predict danger is required for survival, avoidance can become maladaptive when an individual avoids situations that are relatively safe, resulting in negative consequences (Arnaudova, Kindt, Fanselow, Beckers, 2017). A study conducted by Ball, Gunaydin about measuring maladaptive avoidance from animal models to clinical anxiety proposed that maladaptive avoidance may be caused by alterations in three neurobehavioral processes namely: threat appraisal, habitual avoidance, trait avoidance tendency.

4.3.4 Theme 3: Recommendations made by midwives related to how to deal with maternal death and the support required.

This was the third theme which emerged from the findings of the current study. Participants made some recommendation which might assists in coping in case they came across maternal deaths. Participants also indicated the need for support as this part is lacking in their workplace. From this theme, three sub-themes emerged as indicated in Table 4.4 and were presented and discussed below.

Table 4. 4 Recommendations made by midwives related to maternal deaths.

THEME	SUB-THEMES
4.3.4 Recommendations made by midwives related to how one must deal with maternal death and support they need	4.3.4.1 Acceptance and adaptation 4.3.4.2 Occupational support (managerial support and training) 4.3.4.3 Psychological support

4.3.4.1 Sub-theme 1: Acceptance and adaptation

Coping with the challenges of work is an important part of achieving occupational wellbeing, irrespective of how difficult the job may be. Midwives are trained to be responsible for safe pregnancy and delivery. However, when faced with maternal deaths, work becomes difficult as they must cope with the trauma resulting from their encounters with these deaths (Dartey, Phetlhu, Phuma-Ngaiyaye, 2019). Participants in this study demonstrated that regardless of their encounter with maternal death, life had to go on, work had to be done as other patients still needed their care. This was illustrated in the quotes below:

"I just act normal and do everything I can to save the current patient" (Participant 4).

"I had to be strong and gather myself because I knew no one cares about what I'm going through at work and at home they just wouldn't understand so I didn't share what had happened with them" (Participant 10).

“You know when you are nurse you always have other patients waiting for you to help them, so you don’t really have a choice or even a chance to nurse your feelings, you need to continue working like nothing happened” (Participant 6).

Other participants concurred and one indicated how she tried to adjust to her current situation even though it was difficult. The participant asked to be relocated to another ward but to no avail, she remained in the same unit.

“After some time, I had to adjust myself and be strong even though it was hard, I even asked the manager to remove me from maternity, but she refused” (Participant 1).

In this sub theme, it was evident that midwives had to accept and adapt after the adverse event of a maternal death. Adapting to unfavourable conditions or situations shows how resilient a midwife is. Going on to serve and save lives by midwives shows that just because it is difficult it doesn’t mean one must quit. Regardless of passing through a traumatic experience, the adverse events help midwives to learn more and improve from their past mistakes and talking about their traumatic experiences in a safe, supportive, non-judgemental environment can heal without scarring them. Also, the traumatic event can be safely absorbed into the midwife’s body of knowledge, while feelings of self-blame, responsibility, and incompetence can be alleviated. Midwives can explore how to do better rather than becoming defensive, which can help them offer and maintain positive compassionate interactions with women (Stabnick, Yeboah, Arthur-Komeh, Ankobea, Moyer & Lawrence, 2022)

The ability to grow from these events or be brought down by them can depend on resilience. The responsibility for midwives to practice self-care and develop resilience is widely called for and an important skill in midwifery (Dartey et al, 2019). Contrary to the results of this study, where participants tried to adjust to their situations regardless of what they went through, another study discovered that midwives in a similar situation used prayers (Yenal, Tektas, Donmez, Okumus, .2021) as a coping strategy.

The same study indicated that midwives tried to provide meaning of their status by connecting the internal questioning of one's own competency with an external manifestation in terms of spirituality that allows midwives to overcome their negative responses (Yenal, et al,.2021). In a study conducted by Ismaila, Bayes, Geraghty (2021) on strategies for coping with barriers to providing quality maternal and neonatal care, it was found that the midwives' motivation to continue to work in such a conducive environment was due to their strong desire to save the lives of women and neonates and their strong affection for the midwifery profession was identified to help them cope with the barriers that they faced in their workplace. Acceptance and adaptation might assist midwives to cope and accept the reality of their situation as they continue to render maternal health care services, although their interdependence mode is not attended through other support structures like colleagues and managers (Roy, 2009).

4.3.4.2 Sub-theme 2: Occupational support (managerial support and training)

The participants in this study demonstrated that occupational support from their managers would really help them in dealing with maternal death. The need for managerial support and training was recommended where participants indicated that enough staff must be hired, and equipment must be acquired as well as continuous training. This was illustrated in the following quotes by participants:

"*We need support from the management, they need to make sure we have enough staff, enough equipment's and all the necessary pharmaceuticals that we need, and lastly more regular trainings can benefit us"* (Participant 3).

"We also need resources, equipment's and more staff because sometimes we don't even have the relevant resources we need and there is no manpower to deal with emergencies adequately" (Participant 1).

Other participants concurred and indicated the need for team building activities, drills as form of capacitation and the need to be provided with feedback on the real causes of maternal death as this is not practised.

"More and more trainings and drills will assist us in managing our patients, and also we need to be given feedback after investigations are done" (Participant 10).

"We also need to have team building activities, we also need support and motivation from our managers" (Participant 14).

Another participant uttered the following when indicating the support, they need after an adverse event and indicated the need for managers to refrain from blaming the staff instead of offering their support.

"We need supportive managers that don't blame staff and point fingers when adverse events occur, they should be supportive and help staff to cope" (Participant 8).

Intrapartum death impacts negatively on midwives' well-being, psychologically and professionally. Beneficial strategies may include timely debriefing, dedicated support services, avoidance of further allocation of clinical care during the shift and the option of time off (O'Connel, Mcnamara, Meaney, Greene, 2016). Several strategies can be employed to reduce burnout in nurses. Mealer, Conrad, Evans, Jooste, Solyntjes, Rothbaum & Moss (2014) reported a resilience training program consisting of teaching professional techniques for dealing with cognitive behaviour and increasing their resilience to the challenges demanded by the nursing profession. They proposed that resilience can be taught, developed, and strengthened through coping skills training. Midwives in this study indicated that they need more training, team building activities and to be given feedback after the investigations are done.

From this sub-theme, it was evident that midwives need to work in an environment that has all the necessary resources readily available whenever they are needed. The need for skills development was largely raised by midwives. It was also evident that nursing managers need to support their staff and not be quick to point fingers should something going wrong. Having all the necessary resources will reduce the risk of having avoidable adverse events. Well trained midwives who are regularly in service with new and improved guidelines will mean a more knowledgeable work force which can manage complications more effectively with confidence.

Support by managers will motivate the staff and aid in building team spirit and teamwork. As such, the self-concept mode of midwives will be enhanced (Roy, 2009)

As such, the significant mediating effect of emotional exhaustion and social support in the link between job stress and depression and anxiety should be emphasized by nursing administrators and effective targeted measures need to be adopted (Chen, Jiping, Bingrog, Wang & Luo, 2019). Nursing managers should be more cognizant of the impact of job stress on the development of depression and anxiety. When midwives experience trauma through witnessing poor interpersonal care; being prevented from providing best care due to systemic pressures, or being disrespected, undermined, or bullied; the responsibility for improvement lies with the organisation. This requires the Department of Health to acknowledge and address damaging cultures. Throughout the hierarchy of staff, there must be an attitude of zero tolerance towards all actions and inactions that serve to undermine and harm midwives, damaging care quality and interactions with women, and compromising midwives' abilities to cope during traumatic events. When midwives experience trauma from witnessing adverse obstetric events or poor interpersonal care towards women, they require a non-judgemental culture in which their normal human responses and subsequent needs are acknowledged and appropriately responded to. This requires management to prioritise listening, providing time, offering nurturing care and psychological treatment as appropriate. Often, simply spending time with a sympathetic listener can help restore midwives to a place of equilibrium rather than trauma.

4.3.4.3 Sub-theme 3: Psychological support.

The participants in this study demonstrated that they need psychological support in a form of counselling and employee wellness programme will be of help when midwives encounter maternal death. The need for psychological support was illustrated in the following quotes by participants.

"I think we need counselling, and having an employee assistance programme can help" (Participant 3).

"We need Psychological help, we need someone to talk to, someone who is not biased and blaming us for what happened" (Participant 9).

Other participants concurred and further indicated that continuous counselling must be offered until they felt okay. Debriefing must be offered after the incident. They should not be kept in the dark.

"We need counselling and not a once off thing because after such an incident there are statements to be written and that process is very stressful its needs with someone doing counselling simultaneously" (Participant 13).

"We need counselling after such incidents" (Participant 5).

"I think immediately after the incident we must be taken for debriefing as midwives in which we get to see that we are not at fault for the patient's death, psychologically that can help us" (Participant 11).

In this sub theme, it was evident that midwives needed psychological support after the encounter of a maternal death. Midwives who receive psychological support can heal from the trauma holistically and be able to perform their duties without any psychological issues. Midwives who receive psychological support can be able to give psychological support among each other and to their patients and relatives during difficult times. Similarly, to the results of the current study, the study conducted by Aydin & Aktas (2021) revealed that some midwives needed support from their colleagues in the post-traumatic period, which was valuable for them in coping with trauma. Literature also cites that the midwife needs more social support, especially in challenging deliveries requiring medical intervention (Chankaya, Aksoy, Yılmaz, 2020). In traumatic births, the midwife, the birthing woman, the other healthcare workers, and the hospital management should have an empathic relationship. The midwife, who cannot get enough psycho-social support from her colleagues, institution, and manager, feels lonely and helpless (Chankaya et al, 2020). This situation leads to the midwife's inability to use his/her professional capacity sufficiently, professional burnout, a decrease in job satisfaction (Patterson, 2019), and the desire to quit the profession (Ayadin, Aktas, 2021).

It should be remembered that adequate psycho-social support to the midwives will contribute to their self-confidence in their knowledge and skills to promote normal birth (Qian, Chen, Jevitt, Sun, Wang & Yu, 2023).

Emotional exhaustion and social support may have significant mediating effects in the link between job stress and depression and anxiety. Strategies including deceasing emotional exhaustion, enhancing social support in work environment, and reducing job stressors would be useful to prevent depression and anxiety among young nurses, hence midwives will be able to perform their role function mode in confidence (Roy, 2009).

4.4 CONCLUSION

The focus of this chapter was to describe and explore the effects of maternal death among midwives. Three major themes were identified: physical effects of maternal death among midwives, psychological effects of maternal death among midwives, environmental effects of maternal death among midwives. Recommendations to support for midwives after maternal deaths were made, as well as sub-themes identified under each of them. Literature control to support the quotations from the themes and sub-themes were made. The effects of maternal death among midwives were explained. In Chapter 5 there follows a summary, conclusion of significant findings, implications of the findings, study strengths and limitations, and recommendations for future research is addressed.

CHAPTER FIVE

SUMMARY, CONCLUSION, LIMITATIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

The previous chapter presented the study findings and its discussion supporting it with literature. This chapter presents a summary, limitations, conclusions, and recommendations of the study which focused on the physical and psychological effects of maternal death on midwives working in a selected hospital of Vhembe district, Limpopo Province.

5.2 AIM OF THE STUDY

The purpose of the study was to explore the physical and psychological effects of maternal death on midwives working in a selected hospital of Vhembe district, Limpopo Province.

5.3 RESEARCH DESIGN AND METHOD

The study adopted a qualitative approach to explore the physical and psychological effects of maternal deaths on midwives working in a selected public hospital at Vhembe district, Limpopo Province. An explorative descriptive research design was used. The use of exploratory research design helped the researcher to explore the physical and psychological effects of maternal deaths among midwives working in a selected public hospital at Vhembe district, Limpopo Province. It allowed the researcher to investigate the nature of a little understood situation or phenomenon and provided an in-depth understanding of the phenomenon under study.

The researcher used explorative descriptive design to describe the physical and psychological effects of maternal deaths as stated by midwives who are rendering maternal health care services in a selected hospital of Vhembe district Limpopo Province. A non-probability snowball sampling was used because not all members of the targeted population witnessed or experienced the phenomenon under investigation. The sample size was determined by saturation of data. The objectives of the study were to explore and describe the physical and psychological effects of maternal death on midwives working in a selected hospital of Vhembe district, Limpopo Province.

5.4 SUMMARY OF THE FINDINGS

The study found that the adverse event of a maternal death affected midwives both physically and psychologically. Themes and sub themes emerged from the analysed data.

5.4.1 Theme 1 physical effects of maternal among midwives

This was the first theme which emerged from the findings of the current study. Four sub themes emerged from this theme namely: Eating disturbances and weight changes. From this sub-theme, it was evident that maternal death affected participants negatively as their eating behaviour was affected. Others lost their appetite, with others skipping their meals, hence they were eating unhealthy food to boost their appetite with others eating fruits. The second sub theme was sleeping disturbances where participants in this study demonstrated that insomnia was common among them when they experienced maternal death. From this sub-theme, it was evident that maternal death affected participants negatively as they developed sleeping disturbances. Others had insomnia with others having poor sleeping quality and others resorting to drinking to aid their sleep.

The third sub theme was somatic symptoms. From this sub theme, it was evident that maternal death affected participants negatively as they developed somatic symptoms. Having somatic symptoms may increase staff absenteeism as they may be having physical symptoms. This can also affect the quality of care provided by the affected personnel. The fourth sub theme was exhaustion where participants demonstrated that they were exhausted after the encounter of a maternal death in their units. The findings of this study revealed that midwives were both physically and emotionally exhausted which might lead to burnout.

5.4.2 Theme 2 psychological effects of maternal death

This was the second theme which emerged from the findings of the current study. From this theme, nine sub themes emerged. The first sub-theme was sadness, depression and anger where participants demonstrated that depression, anger and sadness among midwives is a significant issue that can have a negative impact on their wellbeing as well as their ability to provide quality care to their patients. The second sub-theme was fear of death and pregnancy wherein participants revealed that the encounter of maternal death caused them to develop fear of death and pregnancy. From this sub theme, it was evident that maternal death causes nurses to develop fear towards death and pregnancy and it negatively affects them as some are still young and without children. The fear of being pregnant also has a negative effect on nursing as midwives with death anxiety will not want or be confident when dealing with life threatening conditions. The third sub theme was empathy with family members where participants demonstrated empathy with family members after maternal death of their loved one. The fourth sub theme was affected self-concept where participants demonstrated self-doubt and guilt. Midwives play a crucial role in providing care and support to expectant mothers and their families, and when a maternal death occurs, it can be emotionally and professionally challenging for them. Participants demonstrated that intrusive thoughts and flashbacks were common among them after the encounter of a maternal death and it was evident that midwives experienced some of the symptoms of post-traumatic stress (flashbacks, nightmares, inability to forget, avoidance).

Negative emotions such as shock, crying, guilt, and helplessness experienced by midwives during and after birth trauma may have been predisposing factors for post-traumatic stress disorder. The sixth sub theme was hypervigilance where participants demonstrated that they experienced hypervigilance when they experienced a maternal death. From this sub theme, it was evident that maternal death affected midwives negatively as they had to spend a lot of time going through one thing just to make sure it was perfect. The seventh sub-theme was social isolation. Maternal death affected midwives negatively as they started having social isolation, meaning that their social relationships at work and at home were affected. The eighth sub-theme was stressful working environment. Participants in this study demonstrated that the working environment became stressful for them, and it became dull and sad. The ninth sub-theme was avoidant behaviour, where participants in this study demonstrated that they developed avoidant behaviour towards direct patient care or emergencies.

5.4.3 Theme 3 recommendations related to support needed by midwives.

This was the third theme which emerged from the findings of the current study. Participants made some recommendations which might assists in coping when one come across maternal deaths. From this theme, three sub-themes emerged. The first sub theme was acceptance and adaptation wherein participants demonstrated that regardless of their encounter with maternal death, life had to go on. Work had to be done as other patients still needed their care. The second sub theme was occupational support wherein participants demonstrated that occupational support from their managers would really help them in dealing with maternal death. The need for managerial support and training was recommended where participants indicated that enough staff must be hired, and equipment must be acquired as well as continuous training. It was also evident that nursing managers need to support their staff and not be quick to point fingers should something go wrong. Having all the necessary resources will reduce the risk of having avoidable adverse events. The third sub theme was psychological support wherein participants demonstrated that they need psychological support in the form of counselling and employee wellness programme that will be of help when midwives encounter maternal death.

5.5 RECOMMENDATIONS

The recommendations of this study were guided by the themes which emerged from the semi-structured interviews with the midwives namely, physical effects of maternal death, psychological effects of maternal, environmental effects, coping strategies of midwives and support for midwives.

5.5.1 Recommendations to employers (Department of Health)

- After the event of a maternal death, the manager should have a debriefing session and strengthen/enforce employees so that there is a good employee assistance program.
- The department should see to it that midwives are offered counselling after the encounter of a maternal death.
- The department should provide all the necessary resources including more personnel in the obstetric units to prevent maternal deaths caused by lack of resources.

5.5.2 Recommendations to nursing education and training.

- Capacitating building for midwives regarding incident and report writing.
- Training of midwives on Essential Steps in Management of Obstetric Emergency (ESMOE) should be strengthened.

5.5.3 Recommendations for further research

- Management of post-traumatic stress disorder in midwives
- Midwives as second victims after a perinatal event
- Support needed by midwives after a maternal death.
- Development of an employee assistance programme for midwives

5.6 LIMITATIONS OF THE STUDY

The study was limited to midwives working in the Antenatal, Postnatal and Labour ward of the selected hospital; hence the results of this study cannot be generalised to other hospitals in South Africa. Time was also a limitation as midwives were often very busy hindering them from conducting the interviews. The schedule of the midwives was busy, and this made it hard to get them to the interviews as some were working nightshift. Getting a private space was also a challenge in the labour ward but the researcher managed to get participants to agree to using a private room in the ante natal unit.

5.7 CONCLUDING REMARKS

Maternal death has physical and psychological effects on midwives working at the selected hospital of Vhembe district, Limpopo Province. The physical effects and the psychological effects affect how midwives perform their day-to-day work, social and family lives. Their performance is affected negatively, and their morale diminished. From the study findings, midwives also showed that they needed support (occupational and psychological support) from their employers. Maternal death is a phenomenon that leaves midwives as second victims. This study aimed to explore the physical and psychological effects of maternal death on midwives working in a selected hospital of Vhembe district, Limpopo Province. The findings of this study show that maternal death affects midwives negatively both physically and psychologically. The other finding of this study was the recommendations made by the midwives in terms of what they need to do in order to cope better after the event of a maternal death. The employer must offer the support needed by midwives to help them cope better and avoid having any further adverse events. This study makes a valuable contribution to health care facilities, midwives and their managers or employers.

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ANNEXURE A (Ethics certificate TREC)

University of Limpopo
Department of Research Administration and Development
Private Bag X1106, Sovenga, 0727, South Africa
Tel: (015) 268 3935, Fax: (015) 268 2306, Email: anastasia.ngobe@ul.ac.za

TURFLOOP RESEARCH ETHICS COMMITTEE

ETHICS CLEARANCE CERTIFICATE

MEETING: **29 November 2022**

PROJECT NUMBER: **TREC/587/2022: PG**

PROJECT:

Title:	Exploring the physical and psychological effects of maternal deaths among midwives in a selected hospital of Vhembe District Limpopo Province.
Researcher:	N Mofe
Supervisor:	Prof TI Ramavhoya
Co-Supervisor/s:	Ms MN Kgatla
School:	Health Care Sciences
Degree:	Master of Nursing in Nursing Science

PROF D MAPOSA
CHAIRPERSON: TURFLOOP RESEARCH ETHICS COMMITTEE

The Turfloop Research Ethics Committee (TREC) is registered with the National Health Research Ethics Council, Registration Number: **REC-0310111-031**

Note:
- **i)** **This Ethics Clearance Certificate will be valid for one (1) year, as from the abovementioned date. Application for annual renewal (or annual review) need to be received by TREC one month before lapse of this period.**
- **ii)** **Should any departure be contemplated from the research procedure as approved, the researcher(s) must re-submit the protocol to the committee, together with the Application for Amendment form.**
- **iii)** **PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES.**

Finding solutions for Africa

ANNEXURE B (letters requesting permission)

University of Limpopo

Faculty of health sciences

Department of nursing sciences

0152682384

Limpopo Department of Health

Fidel castro ruz house

18 college street

Polokwane, South Africa

0152936000

Dear sir/madam

RE: Permission to conduct research at Tshilidzini Hospital.

My name is Nancy Mofe

I am studying for master's in nursing in the faculty of health sciences at the University of Limpopo. I am seeking permission to do research at Tshilidzini hospital. I am conducting research on the title "Exploring the physical and psychological effects of maternal death on midwives working at a selected hospital of Vhembe district, Limpopo Province". The research will entail collecting data from midwives working at the maternity units (ANC, Labour ward and post-natal). I will invite individuals from your facility to participate in this study. Midwives working in the MOU who have experienced a maternal death. If they agree, they will be asked to be interviewed for 30-40 minutes, interviews will be conducted in the hospital premises. The interview will be audio recorded.

I therefore request permission in writing to conduct my research at your facility. The permission letter should be on your departments headed paper, signed and dated, and specifically referring to myself by name and the title of my study.

Please let me know if you require any further information. I look forward to your response as soon as is convenient.

Yours sincerely,

Nancy Mofe

Nancy mofe

Cell No: 0659858586/0725184285

Email: nancymofe44@gmail.com

Prof T Irene Ramavhoya

Associate professor in Nursing Department

Cell No: 082 221 4861

Tel : 015 268 3966

Fax : 015 268 3048

Email: Irene.ramavhoya@ul.ac.za

University of Limpopo

Faculty of health sciences

Department of nursing sciences

0152682384

Tshilidzini Hospital

Punda maria main road

Shayandima

Thohoyandou, South Africa

0159644200

Dear sir/madam

RE: Permission to conduct research at Tshilidzini Hospital.

My name is Nancy Mofe

I am studying for master's in nursing in the faculty of health sciences at the University of Limpopo. I am seeking permission to do research at Tshilidzini hospital. I am conducting research on the title "Exploring the physical and psychological effects of maternal death on midwives working at a selected hospital of Vhembe district, Limpopo Province". The research will entail collecting data from midwives working at the maternity units (ANC, Labour ward and post-natal). I will invite individuals from your facility to participate in this study. Midwives working in the MOU who have experienced a maternal death. If they agree, they will be asked to be interviewed for 30-40 minutes, interviews will be conducted in the hospital premises. The interview will be audio recorded.

I therefore request permission in writing to conduct my research at your facility. The permission letter should be on your departments headed paper, signed and dated, and specifically referring to myself by name and the title of my study.

Please let me know if you require any further information. I look forward to your response as soon as is convenient.

Yours sincerely,

Nancy Mofe

Nancy mofe

Cell No: 0659858586/0725184285

Email : nancymofe44@gmail.com

Prof T Irene Ramavhoya

Associate professor in Nursing Department

Cell No: 082 221 4861

Tel : 015 268 3966

Fax : 015 268 3048

Email : Irene.ramavhoya@ul.ac.za

ANNEXURE C & D (approval letters)

LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF
HEALTH

Ref : LP_2022-12-008
Enquires : Ms PF Mahlokwane
Tel : 015-293 6028
Email : Phoebe.Mahlokwane@dhsd.limpopo.gov.za

NANCY MOFE

PERMISSION TO CONDUCT RESEARCH IN DEPARTMENTAL FACILITIES

Your Study Topic as indicated below;

EXPLORING THE PHYSICAL AND PSYCHOLOGICAL EFFECTS OF MATERNAL DEATHS AMONG MIDWIVES IN A SELECTED HOSPITAL OF VHEMBE DISTRICT LIMPOPO PROVINCE

1. Permission to conduct research study as per your research proposal is hereby Granted.
2. Kindly note the following:
   a. Present this letter of permission to the Office District Executive Manager a week before the study is conducted.
   b. This permission is **ONLY for Tsilidzini Hospital**
   c. In the course of your study, there should be no action that disrupts the routine services, or incur any cost on the Department.
   d. After completion of study, it is mandatory that the findings should be submitted to the Department to serve as a resource.
   e. The researcher should be prepared to assist in the interpretation and implementation of the study recommendation where possible.
   f. The approval is only valid for a 1-year period.
   g. If the proposal has been amended, a new approval should be sought from the Department of Health
   h. Kindly note that, the Department can withdraw the approval at any time.

Your cooperation will be highly appreciated

_______________________ 12/12/2022

Head of Department **Date**

Private Bag X9302, Polokwane
Fidel Castro Ruz House, 18 College Street, Polokwane 0700. Tel: 015-293 6000/12. Fax: 015 293 6211.
Website: http/www.limpopo.gov.za

The heartland of Southern Africa – Development is about people!

LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HEALTH
VHEMBE DISTRICT

Ref: S5/4/2/3

Enq: Gertrude Baloyi

Date: 20 January 2023

TO: University of Limpopo

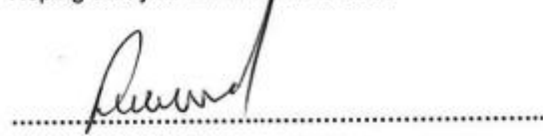
Attention: Nancy Mofe

SUBJECT: REQUEST TO CONDUCT A STUDY (RESEARCH) AT TSHILIDZINI HOSPITAL

Your study topic: Exploring the physical and psychological effect of maternal deaths among Midwives in a selected Hospital of Limpopo Province, South Africa

1. The above matter has reference
2. The Department of Health has acknowledged your communiqué received on the 19th January 2023 for the above mentioned. Kindly be informed that permission has been granted to conduct a research at **Tshilidzini Hospital from 23 January 2023 –23 January 2024 .**
3. You are also advised to comply or adhere with the Departmental Policies, rules and regulations during your operations.

Hoping that you will find this in order



20/01/2023

CHIEF DIRECTOR: HEALTH SERVICES **Date**

Private Bag X5009 THOHOYANDOU 0950
OLD parliamentary Building Tel (015) 962 1000 (Health) (015) 962 4958 (Social Dev) Fax (015) 962 2274/4623

The heartland of Southern Africa – development is about people!

ANNEXURE E (Certificate from independent coder)

Dr Annatjie van der Wath (M Cur, PhD) annavdw@mweb.co.za

CODING CERTIFICATE

Qualitative Data Analysis

This serves to confirm that Annatjie van der Wath has co-coded the following qualitative data: 14 interviews for the study:

EXPLORING THE PHYSICAL AND PSYCHOLOGICAL EFFECTS OF MATERNAL DEATHS AMONG MIDWIVES IN A SELECTED HOSPITAL OF VHEMBE DISTRICT LIMPOPO PROVINCE

I declare that the candidate, Nancy Mofe, and I have reached consensus on the major themes and categories as reflected in the findings during a consensus discussion.

Annatjie van der Wath (M Cur, Ph D) annavdw@mweb.co.za

ANNEXURE F (participant information sheet)

Participant information sheet

Invitation

Title: EXPLORING THE PHYSIO-PSYCHOLOGICAL EFFECTS OF MATERNAL DEATHS ON MIDWIVES IN A SELECTED HOSPITAL OF VHEMBE DISTRICT, LIMPOPO PROVINCE.

Dear prospective participant

My name is Nancy Mofe and I am doing research with Prof T Irene Ramavhoya a professor in the department of nursing sciences towards masters at the University of Limpopo. We are inviting you to participate in a study titled" Exploring the physio-psychological effects of maternal death on midwives working in a selected hospital of Vhembe district, Limpopo province" as partial fulfillment of the requirements of MNURS.

The purpose of the study is to explore the physio-psychological effects of maternal death on midwives working in a selected hospital of Vhembe district, Limpopo province. In this study the target population will be all midwives working in the maternity units of a selected hospital in Vhembe district.

In this study the target population will be all midwives working in the maternity units (ANC, Labour ward and postnatal ward) who have encountered a maternal death while rendering or during the provision of maternal health care services.

A non-probability snowball sampling will be used because not all members of the targeted population would have witnessed or experienced the phenomenon under investigation, other participants will help the researcher by referring to other participants who experienced the same problem. The sample size will be determined by saturation of data.

Data in this study will be collected at the selected hospital face-face with individual midwives. An interview guide with semi-structured interview questions and probing will be used when appropriate to enhance the richness of the data. The central question on this study will be, how were you affected by the adverse event of maternal demise during the provision of maternal health care services? The interview will be conducted in a private cubicle with one individual participant at a time. Field notes will be used to capture body language and facial expressions of the interviewees. Each interview will last between 30-40 minutes. The interviews will be digitally recorded using a voice recorder, checked for quality and transcribed. Data will be collected within a period of six weeks.

Confidentiality

The information that you give will be kept confidential. No names will be used when transcribing the interviews. I undertake that all information provided by you will be used only for the purpose of the study. Everything that you will say will be treated as private and confidential and no-one will know you answered the question apart from the researcher. The answers given by participants will be combined and analyzed according to common themes and categories and the combined information will be in the form of a report.

Consent

Ethical clearance will be obtained from the University of Limpopo Ethics Committee. Permission to carry out the study will be sought from the department of health Limpopo province and from the CEO of the hospital. We will request you to sign informed consent form that indicates your consent to participate in the study and to record the interview. If you are willing to consent, the researcher will appreciate your participation and the information you will give.

Benefits and risks of participation

Please note that participation in this study is voluntary and there will be no direct benefits to anyone who participates. There will be no penalties if you want to withdraw from the study or if you do not want to answer some of the questions if they are violating your rights. However, I would really appreciate it if you share your thoughts and feelings in relation to the questions asked.

Recording the interview

I would like to ask permission to audio record the interview because it is not possible to write down all your answers quickly enough to capture all the important information. I might misrepresent your responses to some of the questions that you will be asked if a recording is not done. It is important for you to know that the digital voice data and notes will remain confidential, and your identity will not be disclosed. I am only interested in your honest responses to the questions.

Recordings and digital data of the interview will be listened to only by the researcher and the co-coder and will bear no names of the interviewees. The information will be analyzed and organized into a report according to themes. The recordings and digital data files will be kept safe. In accordance with the national requirements the voice recordings and digital data will be destroyed two years after the publication of the research findings.

If you agree to take part, I will ask you questions in relation to how were you affected by the adverse event of maternal demise during the provision of maternal health care services? If you feel uncomfortable with answering some of the questions, feel free to express your discomfort, you will not be penalized.

If you would like to be informed of the final research findings, please contact Nancy Mofe on 0659858586/ email at nancymofe44@gmail.com. Should you require any further information or want to contact the researcher about any aspect of this study, please contact the researcher on the above-mentioned contact details.

Should you have concerns about the way in which the research has been conducted, you may contact Prof T Irene Ramavhoya on the following contact details:

Tel : 015 268 3966,

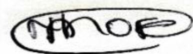
Fax : 015 268 3048

Email : Irene.ramavhoya@ul.ac.za

I will be happy to answer any question or to offer clarity about any issues you may have during this study. If you have any questions about your rights or any aspect of the study or further questions about the research or interview, please don't hesitate to contact me.

Thank you for taking time to read this information sheet and for participating in this study.

Thank you

Signature: 

Nancy Mofe

ANNEXURE G (interview guide)

SECTION A: DEMOGRAPHIC DATA OF PARTICIPANTS

Gender: Female/male

Race: African/white/Asian/other

Age: 18-30

31-40

41- 50

51-60

Units where the participant is working from: ANC/Labour/ Post-natal unit

SECTION B: INTERVIEW QUESTIONS

- How were you affected physically by maternal demise during the provision of maternal health care services?

- How were you affected psychologically by maternal demise during the provision of maternal health care services?

-What do you think should be done to support midwives going forward?

ANNEXURE H (Consent)
Consent Form

I……………………………………………Consent to participate in the research project on the "effects of maternal deaths on midwives at Tshilidzini hospital". The full explanation about the research was given to me, including the benefits of the study, and recording the interview. I understand that my confidentiality and privacy will be taken care of by the researcher. I also understand that the information collected through me will only be shared among people concerned with the study. I understand that I can terminate my participation in the study at any time without any intimidation/penalties. I understand that there is no personal gain or reward that will be given to me by the researcher for participating in the study. I confirm that I was not forced or coerced into participating in the study but doing it on my own free will.

Participant Signature…………………… Date………………….

Researcher Signature…………………... Date…………………..

ANNEXURE I: (Letter from editor)

Robbie Hift
Freelance Editing, Proofreading and Assessing of Manuscripts
Member of Cape Peninsular University of Technology Language Editing Team
Member of Mandela University Language Editing Team
Cell: 0833 202 944
E mail: info@hift.co.za

LANGUAGE PRACTITIONER DECLARATION

I, **Robert Hift, b**eing the holder of the following qualifications

B.A. HONS. (English) H.D.E.

Certify that I am the language editor for **Nancy Mofe**

with a dissertation entitled:

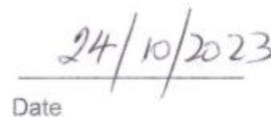
EXPLORING THE PHYSICAL AND PSYCHOLOGICAL EFFECTS OF MATERNAL DEATHS AMONG MIDWIVES IN A SELECTED HOSPITAL OF VHEMBE DISTRICT LIMPOPO PROVINCE

I hereby certify that I have edited the language usage and the referencing.

I have made a number of comments regarding changes that need to be made with regards to the content of the thesis and referencing. I have not had the opportunity to follow up and check to see if my recommendations were carried out.

I believe that what I have read is ready for publication, if my advice is followed, as suggested in my comments.

LANGUAGE PRACTITIONER



Date

ANNEXURE J (transcript)

TRANSCRIPT no: 2

UNIVERSITY OF LIMPOPO

NAME: Nancy Mofe

STUDENT NUMBER: 202273086

MARCH 2023

TOPIC: EXPLORING THE PHYSICAL AND PSYCHOLOGICAL EFFECTS OF MATERNAL DEATH ON MIDWIVES WORKING IN A SELECTED HOSPITAL OF VHEMBE DISTRICT, LIMPOPO PROVINCE.

KEYS:

R: RESERCHER P: PARTICIPANT

R: Good afternoon

P: Afternoon

R: How are you?

P: I’m fine thanks and how are you

R: I’m also fine, you are speaking to Nancy Mofe nursing master’s student from the University of Limpopo.

P: Ok

R: I’m a conducting a study titled, Exploring the physical and psychological effects of maternal deaths on midwives working at a selected hospital in Vhembe district, Limpopo Province.

P: Alright

R: here is the participant information sheet, it contains all information pertaining to this study that you need to know (handing the pamphlet to the participant)

P: (receiving the pamphlet and reading through it)

R: Okay. Agreeing to be part of this research does not mean your name will be used, it will be kept confidential and everything that we are going to talk about will remain between us.

P: Okay (nodding head)

R: before we can commence with the interview, I need to get consent from you.

P: Of-course I'm giving you my consent (Smiling)

R: Ok thank you, here is the consent form that you need to sigh for me to show that indeed you are consenting.

P: Okay (takes the paper and signs it then hands it back to the researcher)

R: Thank you, can we start

P: Yes, we can

R: OK please tell me how you were physically affected by maternal death that occurred while you were on duty.

P: Yoh it affected me so bad in a way I never thought it would (raising eyebrows)

R: Can you please explain how those effects

P: I lost a lot of weight because in 12 hours shift, I stopped even taking my lunch hour, I would be on my feet the whole day just trying to make sure that everything and all the patients are in good condition

R: Okay (Nodding head)

P: You know what the time I encountered a maternal death I was left on duty to run this unit alone, even this day I still have all the records including the duty roster just so that when they come for me, I can protect myself.

R: Mmmh what are the other physical affects you experienced.

P: I started having insomnia, I couldn't sleep, and I'd be trying to sleep only for that event to play over and over in head like I as relieving it over and over again.

R: Mmmh

P: I didn't have energy at all when I got home like I used to before, I'd just get home and go straight to bed only to toss and turn the whole night.

R: Mmmh so your energy levels went down?

P: Yes, a lot I was always tired due to the fact that I was overworking myself at work to try and prevent anything wrong from happening.

R: okay and I hear you saying you were struggling to sleep?

P: yes, instead of sleeping I would be replaying what happened trying to find if there is any omission I made or trying to change the scenario if I had done this or that before doing that maybe the patient would still be alive, and I had a lot of nightmares during that time, so it was difficult for me to sleep normally.

R: Okay, how did it affect you psychologically?

P: It destroyed my confidence a lot which is why during that time I couldn't even take my lunch hour; I always had to go back and recheck everything just to make sure all was well.

R: Mmmh

P: Yes, and I was under a lot of stress, you can just imagine having to write statements, and people coming and auditing the file and all that staff that happens after a maternal death.

R: How did that make you feel?

P: I felt terrible, it was as if they were trying to find fault on me, like to pin it on me whereas ignoring that I was left alone with more than twenty people to care for (teary eyes)

R: Mmmh

P: That incident nearly drove me crazy, I even isolated myself from all my other colleagues, I remember I even went to the matron and ask to be removed from this unit and be taken to non-midwifery units and she refused and reassured me that what happened was not my fault and that I was a good midwife.

R: Did that make the situation better?

P: Yes, I felt a bit better, but it took me a very long time to be my normal self again and even today I don’t want a maternal death to occur ever to anyone because it is a terrible experience.

R: Mmmh

P: yes, and what hurt me the most was when the family came, seeing them shattered me because when the woman came the partner had accompanied her and he was very friendly and happy that he is finally going to be a father, so seeing him there broke me even more, I had to hide to avoid just eye contact because I felt I had failed him and his wife, I felt like I was a bad midwife, how can I let that happen (teary eyes)

R: I am so sorry (giving participant water and tissue)

P: It is ok just bad memories.

R: One last question, what do you think should be done to support midwives going forward?

P: We need psychological help; we could really benefit from being offered psychologist visits.

R: Mmmh, what else?

P: Having enough staff could really benefit us and doing drills more often and ESMOE trainings could really benefit us as midwifes.

R: Mmh

P: Yes

R: Thank you we have come to the end of our interview I will now stop the recording and play it back for you so that you can add any information or clarify anything if you wish to do so. Thank you.