

**THE ADAPTATIONS OF MIDWIVES AFTER MATERNAL DEATHS AT
A TERTIARY HOSPITAL COMPLEX IN LIMPOPO PROVINCE**

by

CHARITY NGOATLE

A dissertation submitted in fulfillment of the requirements for the degree of

Master of Nursing Science

in the

FACULTY OF HEALTH SCIENCES

(School of Health Care Sciences)

at the

UNIVERSITY OF LIMPOPO

SUPERVISOR: Prof M.E Lekhuleni

CO-SUPERVISOR: Mrs M.K Thopola

2015

DECLARATION

I, **Charity Ngoatle**, declare that the dissertation “**The Adaptations of Midwives After Maternal Deaths at a Tertiary Hospital Complex in Limpopo Province**” hereby submitted for the degree Master of Nursing Science to the University of Limpopo has not previously been submitted by me for a degree at this or any other university, that it is my own work in design and in execution, and that all material contained herein has been duly acknowledged.

Charity Ngoatle :

Date Signed :

DEDICATION

The study is dedicated to my mother Masesie Masendizi Malomane, my three sisters Sharon Rose Maphopha, Dorcus Kholofelo Malomane and Reneiloe Malomane, and my brother-in-law Mogompane Peter Maphopha, for their endless support so that I could press on. I also dedicate this study to all the midwives in Limpopo province. Most of all I would like to dedicate this study to my supportive husband Sammy Madila Ngoatle, and our lovely daughter Desire Omohau Ngoatle.

ACKNOWLEDGEMENTS

I thank God, my Pillar, for giving me wisdom, strength and courage to conduct this research.

My special thanks to the following:

- My supervisor, Professor M.E. Lekhuleni, for supervising me and playing a mother figure in times of need, most of all for trusting in me and persuading me to continue with the study when times were hard.
- My co-supervisor, Mrs M.K. Thopola, for her endless and selfless support.
- The University of Limpopo, Department of Nursing Science, for supporting me throughout the study.
- The University of Limpopo, for financial assistance granted to me to pursue this degree.
- The University of Limpopo Medunsa Research Ethics Committee, for approval of my research study.
- The Limpopo Department of Health, for permitting me to conduct the study at their hospitals.
- The Polokwane/Mankweng Hospital Complex, for granting me permission to utilise their midwives to draw the research data.
- The Polokwane/Mankweng Hospital Complex obstetric unit managers, for assisting me in getting consent from the midwives to participate in the study.
- The Polokwane/Mankweng Hospital Complex obstetric area manager and the midwives, who encouraged me to persevere when I thought I could quit.

- Ms M.L. Kgasago and Ms N. Sambo, midwives at Polokwane Hospital Campus, for assisting me in getting the population and the number of maternity units in the hospital campus.
- Ms L.S. Takalo, a lecturer at the Limpopo College of Nursing—Sekhukhune Campus, for her generous support and encouragement.
- Atlantic Philanthropies, for financial assistance.
- Professor J.C. Kgole, for being an independent coder for my dissertation.
- Professor D.C. Hiss, University of the Western Cape, for editorial assistance.

ABSTRACT

The aim of this study was to determine the adaptations of midwives to their work after maternal deaths at a tertiary hospital complex in Limpopo Province. Qualitative phenomenological, exploratory, descriptive and contextual research design was used. Snowball sampling was used to select 22 midwives who experienced maternal deaths. Semi-structured interviews with a guide and audiotape were used to collect data. Tesch's eight steps of qualitative data analysis were adopted. The study revealed that the midwives had traumatic experiences after maternal deaths and were failing to adapt to their work. Strategies to enhance the adaptation of midwives to their work after maternal death were developed.

The study recommends that support, debriefing session, group therapy and counselling should be provided to the affected midwives. There should be provision of adequate number of midwives and material resources in the maternity units to maintain acceptable midwifery care. Sufficient number of midwives should be trained for advanced midwifery to increase capacity in the maternity units.

Keywords: Adaptations, midwives, maternal deaths, tertiary hospital

ABBREVIATIONS

ANC	Antenatal Clinic
BP	Blood Pressure
CEO	Chief Executive Officer
CPR	Cardiopulmonary Resuscitation
DoH	Department of Health
EMS	Emergency Medical Service(s)
ESCAP	Economic and Social Commission for Asia and Pacific
ICM	International Confederation of Midwives
ICU	Intensive Care Unit
MDG	Millennium Development Goal(s)
MEDUNSA	Medical University of South Africa
MMR	Maternal Mortality Rate
NCCEMD	National Committee on Confidential Enquiries into Maternal Deaths
OPD	Out-Patient Department
PPH	Postpartum Haemorrhage
RSA	Republic of South Africa
UK	United Kingdom
UNICEF	The United Nations Children's Fund
UNPFA	United Nations Population Fund Activities
WCF	Women and Children First
WHO	World Health Organization

DEFINITION OF CONCEPTS

- Adaptation** Adaptation means the individual's ability to cope with the demands of his/her immediate situation (Shafer & Kipp, 2010). In this study, adaptation means the midwives' strategies used to adjust to or survive during stressful situations, namely, after maternal deaths.
- Midwives** Midwives as defined by the Nursing Act No. 33 of 2005 section 30 subsection (1) are people who are qualified and competent to independently practice midwifery in the manner and to the level prescribed and who are capable of assuming responsibility and accountability for such practice (South African Nursing Council, 2005). In the study, midwives refer to people who are registered as midwives in terms of the Nursing Act, 33 of 2005, and employed in the maternity units of a tertiary hospital complex in Limpopo province for more than two months, and have experienced a maternal death.
- Maternal death** Maternal death is defined as the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy or its management, but not from accidental or incidental causes (WHO, 2015). In this study, maternal death means the death of a woman during pregnancy, labour or puerperium in the maternity units.
- Tertiary hospital** A tertiary hospital refers to a central or level 3 hospital, which provides tertiary hospital services and central referral services and may provide national referral services; training of health care providers; conducts

research; receives patients referred to it from more than one province; and must be attached to a medical school as the main teaching platform (DoH, 2007 & 2012b). In this study, a tertiary hospital refers to a hospital that provides services higher than those provided in district and regional hospitals of Limpopo province and serve as a referral hospital for the level 1 and 2 hospitals.

**Tertiary
Hospital
Complex** A tertiary hospital complex refers to a combination of highly specialized hospitals that are generally located only in major cities (Skolnik: 2008). In this study, a tertiary hospital campus refers to the two tertiary hospitals in Limpopo province.

CONTENTS

DECLARATION	i
DEDICATION	ii
ACKNOWLEDGEMENT	iii
ABSTRACT	v
ABBREVIATIONS	vi
DEFINITION OF CONCEPTS	vii
CONTENTS	ix
LIST OF FIGURES	xv
LIST OF TABLES	xv
LIST OF APPENDICES	xv
CHAPTER 1	1
<i>OVERVIEW OF THE STUDY</i>	1
1. Introduction and Background	1
1.2 Research Problem	4
1.3 Theoretical Framework	5
1.3.1 Roy's Adaptation Theory	5
1.3.1.1 Background	5
1.3.1.2 Stimuli	6
1.3.1.3 Response	7
1.3.1.4 Coping Mechanisms	7
1.3.1.5 The Four Adaptation Modes	7
• The Physical Mode	7
• Self-Concept Group Identity Mode	8
• Role Function Mode	8

• Interdependence Mode	8
1.3.1.6 Outcome	9
1.4 Aim of the Study	10
1.5 Research Questions	10
1.6 Objectives of the study	16
1.7 Overview of the Research Methodology	11
1.8 Significance of the Study	11
1.9 Conclusion	11
CHAPTER 2	13
<i>LITERATURE REVIEW</i>	13
2.1 Introduction	13
2.2 Midwives' Experiences and Adaptations after Maternal Death	13
2.2.1 Intruding Images	14
2.2.2 Identifying with the Mother	14
2.2.3 Encountering Death	14
2.2.4 Being Unprepared	14
2.3 Findings Recorded By Other Researchers	15
2.3.1 Lack of Support	15
2.3.2 Health Service System	17
2.3.3 Work Dissatisfaction and Overload	17
2.3.4 Lack of Resources	18
2.3.5 Poor Reputation	19
2.3.6 Midwives' Negligence	19
2.3.7 Patients' Negligence and Lack of Antenatal Clinic Booking	20
2.3.8 Maternal Conditions	21

2.3.9 Reducing the Occurrence of Maternal Death	21
2.3.10 Lack of Appreciation	23
2.3.11 Social Grant	23
2.3.12 Poverty	23
2.4 Conclusion	23
CHAPTER 3	25
<i>RESEARCH METHODOLOGY</i>	25
3.1 Introduction	25
3.2 Research Methodology	25
3.2.1 Study Site	25
3.2.2 Research Design	26
3.2.2.1 Phenomenology Research Design	27
• Bracketing	27
• Intuiting	27
• The Analysis Phase	28
• The Descriptive Phase	28
3.2.2.2 Exploratory Research Design	28
3.2.2.3 Descriptive Research Design	28
3.2.2.4 Contextual Research Design	29
3.2.3 Population and Sampling	29
3.2.3.1 Population	29
3.2.3.2 Sampling	29
3.2.4 Data Collection	30
3.2.4.1 Preparation Phase	31
3.2.4.2 Informed Session	32
3.2.4.3 Interview Phase	32

- Conducting the Semi-Structured Interview32
- Probing34
- Clarification34
- Summarization35
- Reflection35
- Observation35
- 3.2.4.4 Post-Interview Phase35
- 3.2.5 Pilot Study36
- 3.2.6 Bias36
- 3.2.7 Data Management37
- 3.2.8 Data Analysis37
- 3.2.9 Measures to Ensure Trustworthiness38
- 3.2.9.1 Credibility38
- 3.2.9.2 Dependability39
- 3.2.9.3 Confirmability39
- 3.2.9.4 Transferability39
- 3.3 Ethical Considerations40
- 3.3.1 Ethical clearance and Permission40
- 3.3.2 Informed Consent40
- 3.3.3 Confidentiality40
- 3.3.4 Anonymity40
- 3.4 Conclusion40
- CHAPTER 440
- DISCUSSION OF RESULTS, LITERATURE CONTROL AND ADAPTATION STRATION STRATEGIES.....42*
- 4.1 Introduction42

4.2 Characteristics of the Participants	42
4.3 Discussion of the Results	43
4.3.1 Theme 1: Poor Adaptation Mechanisms	44
4.3.1.1 Sub-Theme 1.1: Inability to adapt	44
4.3.1.2 Sub-Theme 1.2: Blame upon midwives	46
4.3.1.3 Sub-Theme 1.3: Intruding Images	48
4.3.1.4 Sub-Theme 1.4: Difficult to inform relatives	49
4.3.2 Theme 2: Limited support from management	49
4.3.2.1 Sub-Theme 2.1: Lack of Support from Supervisors	50
4.3.2.2 Sub-Theme 2.2: Lack of Professional Counselling	51
4.3.2.3 Sub-Theme 2.3: Manipulation during Statement Writing	54
4.3.3 Theme 3: Midwives Experienced Distress	55
4.3.3.1 Sub-Theme 3.1: Emotional Distress	55
4.3.3.2 Sub-Theme 3.2 Psychological Distress	56
4.3.3.3 Sub-Theme 3.3 Physical Distress	57
4.3.4 Theme 4: Sub-Standard Midwifery Interventions	59
4.3.4.1 Sub-Theme 4.1: Delay in Referring Women Timeously	59
4.3.4.2 Sub-Theme 4.2: Negligence of Midwives	60
4.3.4.3 Sub-Theme 4.3: Shortage of Material Resources	62
4.3.4.4 Sub-Theme 4.4: Shortage of Midwives and Advanced Midwives	64
4.4 Strategies to Enhance the Adaptations of Midwives after Maternal Deaths	

.....	67
4.4.1 Counseling	69
4.4.2 Support from colleagues	70
4.4.3 Advanced Midwifery Training	70
4.4.4 Provision by Managers	70
4.4.5 Upgrading of the Midwives	71
4.4.6 Use of crying	71
4.4.7 Time off	71
4.4.8 Outcome: Envisaged adapted midwife	72
4.5 Conclusion	72
CHAPTER 5	73
<i>SUMMARY, LIMITATIONS AND RECOMMENDATIONS</i>	73
5.1 Introduction	73
5.2 Summary of the Study Findings	73
5.2.1 Aim of the Study	73
5.2.2 Objectives of the Study	73
5.3 Limitations of the Study	74
5.4 Recommendations	74
5.4.1 Department of Health	74
5.4.2 Support from Management	75
5.4.3 Education and Training Section	75
5.4.4 The midwives	75

5.5 Conclusion	75
REFERENCES	77

LIST OF FIGURES

Figure 1.1: A schematic presentation of Roy’s adaptation theory	6
Figure 4.1: Strategies to enhance adaptation of midwives after maternal deaths	68

LIST OF TABLES

Table 3.1: Tesch’s eight steps of qualitative data analysis	37
Table 4.1: Characteristics of the participants	42
Table 4.2: Themes and sub-themes on adaptations after maternal death	43

LIST OF APPENDICES

APPENDIX 1: APPROVAL LETTER FROM MEDUNSA RESEARCH AND ETHICS COMMITTEE	87
APPENDIX 2: LETTER REQUESTING PERMISSION TO CONDUCT THE STUDY	88
APPENDIX 3: APPROVAL LETTER FROM LIMPOPO DEPARTMENT OF HEALTH	89
APPENDIX 4: APPROVAL LETTER FROM MANKWENG HOSPITAL CAMPUS	90

APPENDIX 5: ETHICAL CLEARANCE FROM POLOKWANE/MANKWENG HOSPITAL COMPLEX	91
APPENDIX 6: CONSENT FORM	92
APPENDIX 7: INTERVIEW GUIDE	93
APPENDIX 8: EXAMPLE OF A CONDUCTED INTERVIEW	95
APPENDIX 9: LETTER FROM INDEPENDENT CODER	108
APPENDIX 10: CONFIRMATION BY LANGUAGE EDITOR	109

CHAPTER 1

OVERVIEW OF THE STUDY

1.1 Introduction and Background

The maternal death rate is high worldwide and when there is a maternal death, the affected midwives face the emotional trauma of dealing with these maternal deaths and find ways to deal with the trauma. The World Health Organization (WHO, 2012) reported that about 800 women die from pregnancy- or childbirth-related complications around the world every day. It further stated that in 2010, 287,000 women died either during pregnancy, labour or puerperium. The report indicates that almost all of these deaths occurred in low-resource settings, and a high number of these deaths could have been prevented. These low-resource settings leave the midwives in jeopardy as they still have to provide maternity care to mothers despite the lack of resources. A level 3 hospital has to provide a highly specialised consultative care by specialists/experts working in a centre that has personnel and facilities and equipment for special investigation and treatment (Torrey, 2011).

It is, however, difficult for these midwives to adapt to maternal deaths. Mander (2001a) elaborated that midwives felt unprepared for the maternal deaths which happened in their care. Some of these midwives further asserted that they could not believe that the maternal death had happened to them and felt that they were ill-equipped for the maternal deaths. Tuteur (2013) supported the WHO (2012) by reporting that approximately 800 women die every day from preventable causes related to pregnancy and childbirth and that maternal death in developed countries occur mostly among women who are high risks, furthermore the latest triennial review of Maternal Death in the United Kingdom (UK) discloses that midwives are responsible for the main portion of maternal deaths. However, the WHO (2012) reported that between 1990 and 2010, the global maternal mortality ratio declined by only 3.1% per year, and this is far from the annual decline of 5.5% required to achieve Millennium Development Goal (MDG) number 5 namely, reducing maternal

mortality. A number of countries in sub-Saharan Africa have halved their levels of maternal mortality since 1990 to date (WHO, 2012). The WHO, the United Nations Children's Fund (UNICEF), United Nations Population Fund Activities (UNFPA) and the World Bank (2010) presented the following figures showing a decline in maternal mortality from 1990 to 2010: Maternal Mortality Rate (MMR) of 850 in 1990 and 500 in 2010, and maternal death rate of 192,000 in 1990 and 162,000 in 2010. The WHO (2012) indicated that in other regions, counting Asia and North Africa, a smooth grander advancement has been made to address the increased maternal mortality rate. However, the most disturbing news is that 99% of all maternal deaths occur in developing countries and the maternal mortality is higher in women living in rural areas and among poorer communities. Amongst those women, the young adolescents are the ones who are confronted with a higher risk of complications and death as a result of pregnancy than older women, and more than half of these maternal deaths have been noted in sub-Saharan Africa and almost one third occur in South Asia.

Moosa (2011) estimated that the lives of up to 3.6 million mothers and newborn babies could be saved every year by midwives working in a supportive health system in the 58 developing countries. The report resulted from the research conducted in 58 countries, mainly in Africa and Asia, which account for 91% of the world's maternal deaths, i.e., women dying during pregnancy and labour (Moosa, 2011). Furthermore, Moosa (2011) reported that the needless loss of life is a reminder of global injustice, taking into account that a woman's chance of dying as a result of pregnancy is 1 in 31 in sub-Saharan Africa and 1 in 4300 in the developed world.

Moosa (2011) highlighted that 90% of all maternal deaths could have been prevented if pregnant women were cared for by trained midwives, with specialised back-up in cases of emergencies. The above statement is supported by Davies (2011) that Malawi has one of the worst maternal mortality rates in the world. Davies (2011) further reported that by comparison, in the United Kingdom (UK), on average 8.2 mothers die per 100,000 live births.

However, though the Republic of South Africa had upgraded its standard of

maternity health care services, there is still an increase in maternal mortality rate. (DoH, 2007) reported that the accurate fraction for maternal death in the Republic of South Africa is alleged to be close to 150 maternal deaths per 100,000 live births. The above statement does not mean maternal mortality is resolved in the Republic of South Africa, as the DoH (2012a) reported that an increased number of maternal deaths was reported in 2008-2010 than in any of the previous years before 2008 and maternal mortality is still growing in the Republic of South Africa, meaning that there is still a lot that needs to be done to address maternal mortality in the Republic of South Africa. The National Committee on Confidential Enquiries into Maternal Deaths (NCCEMD) suggested that the main cause of maternal deaths are linked to failure to use health care facilities, scantiness of services and substandard care, and these may denote that, although the Republic of South Africa is developing, maternal death is still a challenge to it (DoH, 2012a).

Although the Limpopo Province has a MMR of 164.74 which makes it the seventh province with the highest MMR in the country, it still accounts for 987 maternal deaths which were reported between 2008-2010, and makes it the fourth in the country with an increased number of maternal deaths (DoH, 2012a). This MMR is higher as compared to 2005-2007, which were 162.82. The DoH (2012a) further reported that, "Non-pregnancy-related infections, obstetric haemorrhage and hypertension are still the major leading causes of maternal deaths in this province." Worldwide maternal deaths statistics is as follows: in 2008, an estimated 358 women died from pregnancy-or childbirth-related complications and more than 60% of maternal deaths occurred in the postpartum period (WHO, 2013a).

However, LaFranchi (2012) has found that a report issued by the WHO, UNICEF, UNFPA and the World Bank (2010) stated that 287,000 women died in pregnancy in 2010 worldwide, which is a decline of 47% from levels in 1990. WHO, UNICEF, UNFPA and the World Bank (2010) outlined several factors that could have accounted for global, regional and country decline in maternal mortality between 1990 and 2010, which are improvement in health systems, increased female education and increased physical accessibility to health facilities. Nour (2008) outlined the causes for these deaths as follows: during pregnancy (pre-eclampsia and eclampsia, antepartum haemorrhage, infections, during labour such as

obstructed labour and unsafe abortion; and during the puerperium such as sepsis, postpartum haemorrhage, anaesthetic complications and embolism.

Despite the increase in MMR, the midwifery training course in SA incorporates psychology in it in which midwives are trained to support mothers and families to deal with death and dying during their training as midwives. After qualifying as these midwives would be able to counsel mothers when they have lost their babies before, during and after birth, and also support families who had lost their members due to pregnancy, birth and puerperium. The training incorporates referral to specialists to deal with trauma such as a psychologist if the counselling did not yield positive results or when it is difficult to counsel the bereaved. They are also trained to provide follow-up management to evaluate if the bereaved is responding well to the therapy or need further referral to other multidisciplinary teams. These midwives should be able to transfer the skills acquired during this training to cope during stressful situations like in case of maternal death. This is, however, not helping a lot as the training does not incorporate the support of midwives when there is a death and little attention is paid to the effects of death on the midwives. A gap exists between the training of midwives with regard to adaptation after maternal death.

1.2 Research Problem

The MMR at the tertiary hospital complex is 2049.3 and the leading causes of these deaths are infectious diseases, haemorrhage and hypertension in pregnancy (Ntuli, 2012). Despite the efforts that the midwives make to provide optimal midwifery care, they are still blamed for the deaths of mothers in the maternity units of the tertiary hospital complex. The researcher has observed that in the maternity units of tertiary hospital complex, the affected midwives' mood changes dramatically after maternal death. The midwives appeared withdrawn and seemed to force themselves to carry on with their normal daily duties. These changes in the mood of the midwives progress to a period of about 30 days. The atmosphere in the maternity unit does not feel good during that period of maternal death; it makes it difficult for the maternity unit staff to work in collaboration with each other and everyone in the

maternity unit become tense and unapproachable since the midwives are failing to adapt to their work. Ntuli & Ogundanjo (2014) indicated that there is shortage of midwives in the tertiary hospital complex because of midwives turnover and that the midwives are overworked whereas most of them do not have advanced midwifery training to assist them in managing the probable complications associated with maternal morbidity and maternal death. The sixth domain of the National Core Standards for health establishments in South Africa states that there should be an active and efficient patient care to support and safeguard provision of safe and effective patient care. These include human resource development and management, and midwives' welfare and wellness (DoH, 2011). The midwives' welfare and wellness also include their physical and psychological well-being.

However, the midwives still continue with their work despite these mood changes hence the researcher in support of this statement has been inspired by Byaruhanga (2012) who stated that further research is needed to find out on why midwives are purported to be rude and negligent. The study will determine how affected midwives adapt to their work after maternal deaths and the level of support they get and also develop strategies to assist the affected midwives to adapt to their work after maternal deaths.

1.3 Theoretical Framework

Roy's adaptation theory will be used as a framework for the study on the development of adaptation strategies for midwives after maternal death.

1.3.1 Roy's Adaptation Theory

1.3.1.1 Background

Roy's theory defines adaptation as the process by which an individual or group makes conscious choices to cope with his or her, or their situation (Sherman, 2013). The theory states that adaptive responses increase people's ability to cope, and to achieve goals, including survival, growth, mastery of their lives and personal and

environmental transformation. It further states that successful adaptation integrates a bad situation into an individual's life, or at least helps compensate for the problem.

Figure 1.1 shows a schematic representation of Roy's adaptation theory.

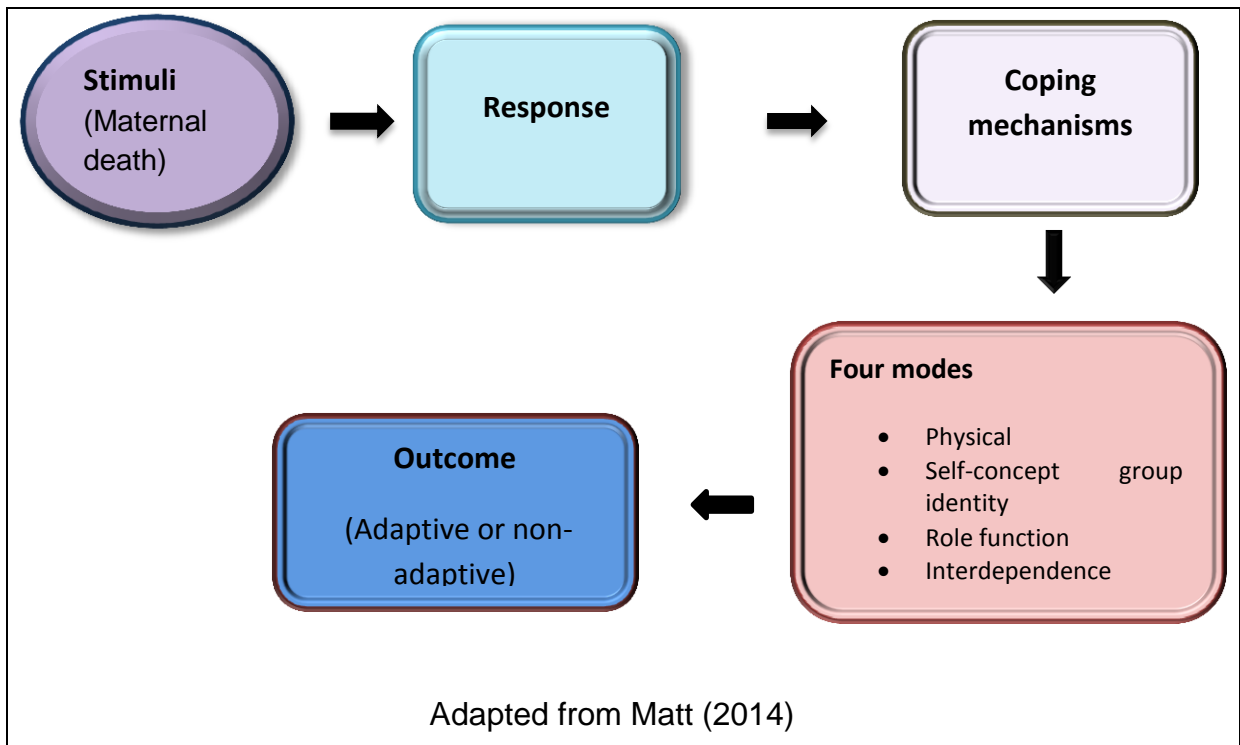


Figure 1.1: A schematic presentation of Roy's adaptation theory

The circle which is different from the four rectangles represents external forces being the stimuli which invade the midwives causing the midwives to respond. The one-way arrows represent a process of flowing events that take place when external forces (stimuli) have invaded a midwife. The four rectangles represent the events that take place following midwives' invasion by stimuli.

1.3.1.2 Stimuli

Upon encountering maternal deaths, being the stimuli, the midwives are expected to react towards that experience. The reaction will be followed by coping mechanisms which will be displayed by the midwives. The stimuli however will cause different

reactions depending on its cause.

1.3.1.3 Response

After being invaded by a stimulus (maternal death) a response is expected from the midwives. The midwife's supervisor must assess the midwives' adaptive behaviour, namely, the midwives' reaction or actions after maternal death. Since every individual is unique, they also respond differently to situations, therefore the midwife's supervisors should take this into consideration when there is a maternal death in the maternity units. Examination of the midwives' behavior after maternal death need to be instituted, their coping mechanisms and the level of support they require also need to be assessed

1.3.1.4 Coping Mechanisms

The coping mechanisms that an individual portray after a stressful event will determine the outcome. The UCLA (2016), explains that the use of coping mechanisms in order to adapt in response to a psychological stress is required. These coping mechanisms are different from each individual and are individual's own way of dealing with stressful situations.

The coping mechanisms are influenced by Roy's four adaptation modes.

1.3.1.5 The Four Adaptation Modes

These four modes are factors that assist individuals in dealing with the stressful situation and will influence the outcome of the adaptation process. It is vital to take into account every mode when dealing with midwives who have encountered maternal deaths which are the stimuli. The four modes are discussed lengthy below:

❖ The Physical Mode

The physical mode covers physiological needs, such as eating, sleeping and protecting the body. An individual's physiologic needs need to be taken care of, for him or her to function optimally. Individuals will not be able to adapt if their

physiological needs are not met and therefore could be affected for a longer period and thus predisposed to subsequent errors. One should understand that every individual concentrate on satisfying their own physiological needs before others' needs (Hellriegel & Slocum, 2010).

❖ **Self-Concept Group Identity Mode**

The self-concept group identity mode refers to an individual's beliefs and feelings about him or herself. It is a category of behaviour related to the personal aspects of individuals and one needs to know who he or she is in order to have a sense of unity (Parker & Smith, 2010). Every individual needs to believe in self, be confident about self and have self-worth. In a work setting, individuals should believe in themselves and have confidence about the service they are providing without any fear. If this is not attained, the individual will see the working environment as an unsafe place to be and thus will always be stressed. This will prolong the adaption process of the midwives.

❖ **Role Function Mode**

The role function mode incorporates the perception of where the individual fits in the social network, how the person relates to other people and his or her behaviour toward others. The role function mode focuses on the roles a person plays in society, particularly in groups such as family or work situations and also focuses on the expectations, perception, and behaviour associated with those roles (Freeman & Freeman, 2005). It vindicates expectations towards each other. Every individual should realise that he or she cannot exist alone in the universe; he or she needs other people to survive and should find a better way of relating with other people. In a work environment, individuals need each other for them to fully render their services. It is difficult for individuals to work in cooperation with each other if they are not relating well, do not trust each other or have bad behaviour towards each other.

❖ **Interdependence Mode**

The interdependence mode refers to the personal relationships which the person has with friends, family and life partners (Sherman, 2013). The relationship between

an individual and friends, family or life partners is of vital importance to the individual and it can either have a negative or positive influence on the individual. Allgood (2014) stated that the most important components of the interdependence mode are the person's significant others such as spouse, friend, child or God, and his or her social support system. The interdependence mode is expressed in the ability to love, respect, and value and to receive love and respect and to be valued (Meleis, 2012).

Individuals sometimes go through tough times in their lives. This may be due to poor relationship with either their family, friends or life partners, or having social problems which may alter their normal functioning at their work if not attended to. Individuals should support each other if they know that another staff member is going through a tough time due to problems related to family, friend or life partner. Roy explains how supervisors at work could assist their subordinates with regard to adaptation and has stated that supervisors could help their subordinates increase their ability to adapt, and their goal should be to promote adaptation in all four modes of life (Sherman, 2013). The theory further explains that for the supervisors to achieve the advancement of adaptation in all the four modes of life, they must assess the individual's behaviour and other factors influencing the individual's power to adapt and intervenes to help adapt better.

1.3.1.6 Outcome

The results from the coping mechanisms can either be positive (adaptive) or negative (non-adaptive). This determines the severity of the damage on the individuals and also a need for proper follow-up and referral for professional counselling. In a work environment, the supervisor should assess the individual's adaptation problems; sets goals for improving it; takes steps toward the goals; and finally evaluates the effectiveness of the interventions (Sherman, 2013; Sitzman & Eichelberger, 2011). It is important to observe the way an individual deals with a stressful situation. If the individual is not coping, then goals for improving adaptation will be set and implement measures that will assist in reaching those goals. Since goals are time-orientated, when the set time for the goals to be reached elapse, evaluation should be carried out to check if the therapy was successful. In a work setting, the supervisor in this case will act as the person providing therapy to the

affected individuals unless referral to a psychologist is needed.

1.4 Aim of the Study

The aim of the study was to determine the adaptations of midwives after maternal deaths at a tertiary hospital complex in Limpopo Province.

1.5 Research Questions

The following research questions guided the researcher during the study:

- What are the experiences of midwives after maternal deaths at a tertiary hospital complex in Limpopo Province?
- What are the adaptations strategies that midwives use to cope after maternal deaths at a tertiary hospital complex in Limpopo Province?

1.6 Objectives of the Study

The objectives of the study were to:

- Explore the experiences of midwives after maternal deaths at a tertiary hospital complex in Limpopo Province.
- Describe the adaptations of midwives after maternal deaths at a tertiary hospital complex in Limpopo Province.
- Develop strategies that will assist midwives to adapt after maternal death.

1.7 Overview of the Research Methodology

A qualitative, phenomenological, exploratory, descriptive and contextual research design was adopted with the aim of determining the adaptations of midwives after maternal death. The population of the study comprised all the midwives working in the maternity units of both the two hospital campuses, and the sample size comprised 22 midwives who had experienced maternal death directly and the first three (3) formed the pilot study. The data were collected through one-to-one semi-structured interviews, using an interview guide, a voice recorder and field notes as tools. The detailed methodology is discussed in Chapter 3.

1.8 Significance of the Study

The study might contribute towards assisting midwives to adapt well after maternal deaths at the tertiary hospital complex. The study could also assist the maternity units' managers to support midwives to cope after maternal death in the maternity units of the tertiary hospital complex.

1.9 Conclusion

This chapter discussed overview of the study. The study was introduced and background information about maternal deaths is explained from global context to the tertiary hospital complex in Limpopo Province. The research problem and the theory background were described. The aim, research questions, and the objectives of the study were outlined. The research methodology with the research design, population, sampling, data collection, and analysis were summarised. Chapter 2 will provide the literature review, chapter 3 will present the research methodology, chapter 4 presents the discussion of results, literature control and adaptation

strategies, whereas the chapter 5 will provide the summary, limitations and recommendations.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter will be focusing on the studies that were already done about the experiences of midwives, how they adapted and the support they received after they had a maternal death. The aim is to check what other researchers have found regarding the problem being studied. The literature review was conducted through journal articles, books and online media reports.

2.2 Midwives' Experiences and Adaptations after Maternal Death

Not much research has been done about how midwives adapt after maternal deaths, however, several research reports show that maternal death affects midwives psychologically and as a result they develop poor adaptation mechanisms. Michael (2014) asserted that poor adaptation mechanisms involve poor behavioural and cognitive responses to stressful, unusual and unexpected situations and the people who face loss or an abrupt change will have distraught feelings. However, the responses should return normal as soon as the individual adapts to the new circumstances, but it may last for a longer period (Michael, 2014).

Mander (2001a) conducted a study in the UK about the midwives' experience on the death of a mother and its effects on the midwives, using a qualitative phenomenological research design. The participants were experienced and non-experienced midwives of maternal death where data were drawn from 36 midwives using mainly semi-structured interviews by telephone, letters and e-mail. Looking at the study, Mander did not, however, ask the participants how they coped with the situations or what mechanisms they used to adapt after encountering the maternal death. The findings of the study were as follows:

2.2.1 Intruding Images

Mander (2001b) found that midwives had a problem of having flashbacks about the events surrounding the maternal death they had. These memories made it difficult for the midwives to sleep at night and to proceed with their normal daily working duties as they disrupted their minds. These intruding images had a habit of manifesting themselves at problematic times, whereby one midwife thought she was going to die when she was giving birth because she experienced complications which triggered the maternal death she experienced (Mander, 2001b).

2.2.2 Identifying with the Mother

The midwives identified themselves with the mother who died in dissimilar ways. Some midwives got affected by the death merely because the mother was of the same age as their daughters and all she just saw the mother as her child (Mander, 2001a). The results further showed that one midwifery teacher also realised the impact the death of mothers had on her students because some of the mothers who died were of the same age as the students.

2.2.3 Encountering Death

Mander (2001a) also showed that the death of a mother was more unbearable for the newly qualified midwives who did not work as nurses before, since most of the midwives never came across death before. Those midwives who had been nurses before being midwives, although it was not easy for them, it was better because they did encounter death in their work before (Mander, 2001a).

2.2.4 Being Unprepared

The midwives felt unprepared for the mothers' deaths. Some said they just could not believe the maternal death just happened to them. One midwife indicated that during her training as a midwife she was not cautioned about circumstances that could result in maternal death and that made her not to be prepared. The midwives actually did not admit that a woman could die in their care before the maternal death could actually happen to them (Mander, 2001a). Kenworthy and Kirkham (2011) in support of Mander (2001a), have also found that the degree of the shock midwives

experienced when involved with maternal death showed the degree to which the midwives felt unprepared for the maternal death, and also dealing with their own succeeding feelings brought about by maternal death. Raynor, Marshall and Sullivan (2005) also supported Kenworthy and Kirkham (2011) by asserting that midwives can be earnestly devastated after experiencing maternal death. They further suggested that there is no problematic situation in the maternity unit than a maternal death. De Leo, Cimitan, Dyregrov, Grad and Andriessen (2014) added that after a traumatic event an individual may experience problems in communicating, reduced performance at work, angry and crying, and he or she may withdraw from others and or make excessive sick leave at work.

2.3 Findings Recorded by Other Researchers

2.3.1 Lack of Support

A report compiled by Byaruhanga (2012) where information was drawn from nursing staff in Malawi, stated that “Ideally in Malawi, after an occurrence of a maternal death, a midwife on duty should be given at least 48 hours of rest to recover from the trauma and shock due this death.” However, Byaruhanga (2012) has discovered that this was not practiced due to severe shortage of staff in many health facilities, and in many health centres, as the midwife was forced to continue with the days' work as if nothing happened.”

Raynor et al. (2005) elaborated that after a maternal death the maternity units' managers could offer support immediately through listening to the affected midwives and emphasizing. They further recommended that the maternity unit's manager may refer the midwives to a specialist for counseling but should do regular follow-ups with affected midwife to check the midwives is recuperating from the event and that they will be able to work again in the unit without increased anxiety.

Raynor's recommendation was reinforced by Kenworthy and Kirkham, (2011) who stated that support made a crucial difference in this terrible situation (after maternal death), although it was not always available and they concluded by that midwives

were mainly reliant on their colleagues as their for support after maternal deaths since there was minute opportunity of their grief being authenticated by the deceased families' story of the death. However, Mander (2001b) argued that, in some instances few midwives did not get this collegial support. In her study, Mander (2001b) found that a midwife had provisionally declared to offer substandard care to mothers after feeling unsupported and their training were suspended for few days while the standard of her practice was being questioned earnestly.

Kenworthy and Kirkham (2011) further stated that to reduce feelings of isolation on affected midwives, the midwives could identify someone who could listen and understand their situation since every maternal death is different. This concurred with the report by Hughes, Kinder and Cooper (2012) which elaborated that appropriate support for health professionals (midwives) is considered as a crucial defensive factor to prevent severe outcomes following traumatic exposures, and the involved midwives required support to prevent a disruption of midwifery care.

Hughes et al. (2012) explained that counselling allots an individual with an opportunity to express self with a professional counsellor and this can help an individual to make sense of his or her feelings and would be encouraged. However, in this counselling, the individual is not told what to do but offered new ideas for coping. Mander (2001a) in her study elaborated that many midwives considered to receiving counselling as it was not available and hence the midwife's recovery from the maternal death was made more difficult. The study findings by McCready and Russell (2009) about the 2000-2002 Confidential Enquiry into Maternal and Child Health's report has also highlighted that in some situations, midwives who had been involved in maternal deaths did not get and thus the report recommended that Trusts must make provision for the prompt offer of support and/or counselling for all midwives who have cared for a woman who has died.

Perry, Hockenberry, Lowdermilk and Wilson (2014) also highlighted that the emotions that are brought by maternal death to the work – life of the midwives need to be addressed, as the midwives often experience guilt, anger, tears, sadness, and depression which are all common responses of a maternal death. The midwives may need to participate in a debriefing session where they can evaluate the

situation surrounding the events, their participation in caring for the mother, and their response to the maternal death (Perry et al., 2014).

Crying is another remedy that could be employed to help midwives adapt after maternal death. Vingerhoets and Cornelius (2012) assert that crying is some sort of last alternative which occurs when all coping efforts have failed and were in vain. They further speculated that crying reduces tension and brings relief, which could be considered as a kind of emotion focus for coping. It induces sympathy, comfort and emotional support. It also inhibits aggression, although if it does not stop, it can elicit aggression.

2.3.2 Health Service System

In each province in South Africa, the way the health service facilities work is that patients should be treated from primary health facility going up in the system until the tertiary institutions if there is in need for more advanced or speciality treatment (DoH, 2007 & 2012a). Mohapi and Basu (2012) reported that under the National Health Insurance, a hospital is expected to provide service to patients based on its category. However, in reality the tertiary hospitals offer every level of care, resulting in poor quality of care and over-expenditure, and same is the case with the tertiary hospital complex—it delivers tertiary care as well as dealing with some secondary and primary care cases (Mohapi & Basu, 2012).

2.3.3 Work Dissatisfaction and Overload

Women and Children First (UK) (WCF) through its own work in Malawi, has observed that maternal and newborn health staff are overworked and underpaid (Davies, 2011). Furthermore, Davies (2011) reported that there are inadequate midwives and therefore the available staff work long hours and they do not have enough time to rest. Adding to that, the midwives deal with successive death of mothers and babies which is an unpleasant experience. In a study conducted by Chimwaza, Chipeta, Ngwira, Kamwendo, Taulo, Bradley and McAuliffe (2014), it was also found that midwives were expected to attend to more than a single ward at the same time, i.e., one midwife was left to attend to antenatal clinic (ANC), Out-Patient Department (OPD) and the labour wards. They further reported another

incidence where a midwife experienced burnout due to a too much workload, which resulted from receiving extra patients with gynaecological complications from a nearby hospital that was under reconstruction. In the same study, another midwife was left alone to attend to the labour and postnatal wards at the same time. When realising that the labour ward was full she asked for extra help from the matron, and was told that there was no one to help her because of shortage of staff, whereas another midwife also was left with a responsibility of looking after eight patients in the labour ward, three of whom were complicated cases.

In the same study, Davies (2011) reported that the hospital staff gave an account that midwives suffered stress and fatigue from persistent workload, which has increased over the last two to three years as government policy began to decide that all women should give birth in health facilities, although the supply of hospital beds, drugs and staff has not kept pace. The conclusions were that quality of care was compromised and, at times, delayed in providing skilled care ended in needless fatalities and that burnout appeared to be common among maternity units' midwives providing antenatal, delivery and postnatal health services in a district referral hospital in Malawi. The report further stated that out of the 101 participants, nearly three-quarters (72%) reported emotional exhaustion, more than one-third (43%) reported de-personalisation and three-quarters (74%) experienced reduced personal accomplishment. In the above study, Davies did not mention who the participants were, which criteria he used to choose the participants, how data were collected and how the participants coped with the situations.

2.3.4 Lack of Resources

Lack of drugs, equipment and other supplies affect the performance of clinical duties in maternity units (Chimwaza et al., 2014). In their study they have found that some of the equipment were in short supply in the maternity units and they ran short of curtains for privacy, blood pressure (BP) machines, glucometers and delivery packs. Insufficient ambulances remains a problem in the country as indicated by Dhaar and Robbani (2008) that when ambulances or other vehicles were multipurpose, however, they may not be available when needed for obstetric patients. Therefore, strategies to ensure the full-time availability of ambulances must be developed. This

lack of resources also covers unavailability of advanced midwives. WHO (2014) have stipulated that when midwives are educated to international standards and within a fully functional health system, they can provide about 90% of the essential care to women and can potentially reduce maternal death by two thirds.

2.3.5 Poor Reputation

A research study conducted by Kenworthy and Kirkham (2011) on the impact of maternal death on midwives showed similar findings and more traumatic experiences following maternal death and those midwives involved formed an isolated 'in group' who felt they would not share their tragic experiences of maternal death. These led to the allegations that midwives are rude and negligent whereas the current working environment places a heavy burden on the midwives, the health of a midwife is never considered by policy makers and the general public (Byaruhanga, 2012). The above report was also corroborated by the study conducted by the New York Academy of Medicine, which found that lesser women died in the care of midwives even though the study design favored physicians.

That is, if a woman died in childbirth and had been in the care of a midwife at any time, the death was recorded to the midwife, but the physician. However, if the woman lived but had been in the care of both a physician and a midwife, the case was recorded to the physician only (Block, 2007). Block went on to say that midwives were still blamed for maternal deaths by the New York Obstetrical Society. The New York Obstetrical Society released its own interpretation of the maternal mortality report in which it cleared obstetricians from being responsible for maternal death. On the other hand, midwives reportedly suffered "vicious attacks." They were called "dirty, filthy and unscrupulous" beings. Report by Byaruhanga (2012) indicate that in Uganda many people have tended to associate maternal deaths with poor attitude of midwives, negligence, absenteeism and stealing of medicines from the health facilities. Byaruhanga (2012) should have interviewed a few numbers of midwives so as to get more responses from other midwives.

2.3.6 Midwives' Negligence

Midwives sometimes make mistakes that result in maternal death. A case was

reported by Laurence (2012) that a woman who was taken to hospital for induction died after few days of admission due to negligence as she was left unattended by a midwife. The woman had intolerable pains soon after the induction and her husband beseeched the midwives for intervention, but she was left unattended for more than two hours. By the time the doctor arrived, the woman was in cardiac arrest and had a ruptured uterus. The woman was rushed to theatre where a Caesarean section was performed. A fresh stillbirth was extracted and the woman died five days later. Two midwives were suspended following the case.

Evans (2015) also reported that a mother died due to an inexperienced midwife's errors whereby the midwife mismanaged the mother and failed to detect that the woman was a high risk mother. However, the midwifery council has ruled out the fact that the midwife was responsible for the maternal death since it was amniotic fluid embolism that killed the mother.

Another woman also died due to incorrect advice received from a midwife. (Levy, 2012) reported that a mother who had a previous Caesarean section died few hours after giving birth following postpartum haemorrhage (PPH) and cardiac arrest. A midwife told the mother that it was safe to give birth at home and she was to help her with the delivery. After giving birth, the midwife removed the placenta procedurally which left the mother in a pool of blood. The mother sustained a tear and some part of the placenta remained in the uterus, but the midwife told the woman's husband that the remaining placenta will come out naturally and the tear do not need suturing. The mother bled excessively and had cardiac arrest. The midwife came later after repeated contacts. The midwife performed cardiopulmonary resuscitation (CPR) which she was not well experienced in. The mother was then rushed to hospital and was examined by a gynaecologist who found that 30% of the placenta remained in the uterus. The woman went into shock and died later that day.

2.3.7 Patients' Negligence and Lack of Antenatal Clinic Booking

Marshall and Raynor (2014) asserted that late booking and poor ANC attendance remains a feature of many maternal deaths. They further stated that maternity

services can also be difficult to access for indigenous women, and most of these indigenous women do not recognise the importance of attending ANC early to enable valuable health and social care screening to be undertaken.

2.3.8 Maternal Conditions

The largest share of maternal deaths is attributable to direct causes which occur following complications of pregnancy and childbirth, or being caused by interventions, omissions, incorrect treatment, or events that result from these birth complications. The five major direct causes of maternal death include haemorrhage, infection, eclampsia, unsafe abortions and obstructed labour and the direct causes include malaria, anaemia, HIV/AIDS, and cardiovascular disease (Ehiri, 2009).

2.3.9 Reducing the Occurrence of Maternal Death

White (2014) reported that among the major contributors to maternal death are a lack of safe motherhood knowledge and cultural misconceptions related to pregnancy, labour, and postpartum period. In support of this, Gyawali, Paneru, Jnawali and Jnawali (2013) argued that there are significant breaches in knowledge and practices with high rates of home delivery and low postnatal service utilization practices by mothers. Due to the above said statements, there should be strategies to reduce maternal death need to include wide distribution of safe motherhood information to community members at the grassroots level (White, 2014).

On the other hand, Kunthea (2009) reported that efforts to reduce the maternal death rate in Cambodia during childbirth have been determined by a lack of outreach on the part of public health officials as well as rural villagers' preference for traditional midwives, according to parliamentarians. The World Bank (2006) suggested that outreach programmes should focus on maternal health and safe delivery. The World Bank further stated that the availability of professional midwives in rural areas reduced maternal death rate in Malaysia and Sri Lanka. Dhaar and Robbani (2008) asserted that a socio-economic development that promotes emancipation of women and recognises their right to health and fertility control, with equal participation of the partners, can promote the health of women and reduce

maternal mortality.

Dhaar and Robbani (2008) also suggested the importance of health education of mothers about maternal conditions to reduce maternal death and indicated that health education provides a sensible approach for reducing maternal death rate and it is a means of producing a favourable change in the health behaviour of women in their reproductive age period. Health education should aim at increasing the consciousness of women on factors leading to maternal morbidity and mortality, with special emphasis on infection, malnutrition and uncontrolled reproduction (Dhaar & Robbani, 2008). On the other hand, Mbizvo and Say (2012) have found that emphasis on in-service training of midwives has been among the policies for reducing maternal death globally and, therefore, if utilised efficiently could aid in reducing maternal death rate.

Group therapy has been found to be amongst the remedies that could help midwives adapt after maternal death. Goldberg (2014) explains group therapy as an arrangement of individuals who share common problems, like depression or anxiety, and who meet together to discuss their experiences, share ideas, and provide emotional support for one another. It is further explained that a support group is led by a member who has had some training in facilitating group discussions, and unlike formal group therapy, self-help support groups are usually not led by a professional therapist such as a social worker, psychologist, nurse, or psychiatrist. This can be a helpful coping tool to complement formal treatment. For some types of problems, such as bereavement after the death of a loved one, or coping with a chronic medical condition like cancer, hospitals or community agencies often provide group therapy led by a social worker or other counsellor (Goldberg, 2014).

The biggest advantage of group therapy is helping an individual realize that he or she is not alone; that there are other people who have the same problems and this is often a revelation and a huge relief to the person, being in a support group can also help an individual develop new skills to relate to others, and in addition, the members of the group who have the same problems can support each other and may suggest new ways of dealing with a particular problem (Goldberg, 2014).

2.3.10 Lack of Appreciation

Byaruhanga (2012) indicated midwives were not appreciated for their work and said that, “what is not usually considered is the excessive work done by midwives to save mothers and their babies, and the impression created is like a maternal death is a cause for celebration to the midwife.” Lack of appreciation of midwives may lead to prolonged distress which may predispose the midwives to poor adaptation.

2.3.11 Social Grant

The introduction of the child support grant in South Africa has encouraged concerns and frequent discussion regarding maternal welfare, and a school of thought was developed in South Africa which claims that the child support grant has some willful motivations, one of which is to encourage women, especially teenagers, to have more children (Makiwane, Desmond, Richter & Udjo, 2006). Since teenagers are at risk for maternal complications such as eclampsia which is amongst the leading causes of maternal death, then social grant has an impact on maternal mortality which affects midwives.

2.3.12 Poverty

The Economic and Social Commission for Asia and Pacific (ESCAP) reported that poverty increases the risk of maternal mortality through several intermediate factors, especially the inability of the poor to obtain adequate health care (UNPF, 2010). Such poverty has an impact on maternal mortality and consequently increasing the effects of maternal deaths on midwives.

2.4 Conclusion

This chapter outlined some of the traumatic events that midwives are faced with, after experiencing maternal deaths. Even though the midwives were under those unpleasant circumstances, it has been highlighted that they received no support from their supervisors. This chapter has also exhibited that insufficient research has been done on the experiences and adaptations of midwives after maternal deaths.

Chapter 3 will present an account of the methodology used for the study.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses how the study was conducted. A detailed description of the research procedures and processes which were followed to answer the research question and to achieve the objectives of the study is provided. The chapter also outlines the manner in which the participants were drawn and the limitations of the study. The aim of the study was to determine the adaptations of midwives after maternal deaths at a tertiary hospital complex in Limpopo Province.

3.2 Research Methodology

A qualitative research approach was followed in this study with the aim of determining the adaptations of midwives after maternal deaths at a tertiary hospital complex in Limpopo Province. Sharan (2009) defined a qualitative research approach as an umbrella term encompassing an array of interpretive techniques which seek to describe, decode, translate, and otherwise come to terms with the meaning, not the frequency, of certain or more or less occurring phenomena in the social world. The researcher wanted to attain a dense description and excellence of the study without any deficiencies.

3.2.1 Study Site

The study was conducted at a tertiary hospital complex in Limpopo Province. The hospital has two campuses namely, Polokwane Hospital campus and Mankweng Hospital campus. The tertiary hospital complex has been chosen on the basis that most of the maternal deaths in the province occur at the tertiary hospital complex as it is a referral hospital for the district and regional hospitals in the province and it is

also called a level 3 hospital.

Limpopo Province is one of the nine provinces of the Republic of South Africa and is situated in the far northern part of the country and is dominated by rural areas. The capital city of the Limpopo Province is Polokwane which is situated in the Capricorn district. Both hospital campuses are found in the Capricorn district, with Polokwane hospital campus being situated in the northern site of Polokwane city and Mankweng hospital campus situated in Sovenga township 30 km East of Polokwane.

Mankweng Hospital has 6 maternity units, namely: antenatal wards (28 beds), ANC (4 doctor's consulting rooms and 4 examination rooms), maternity high care (6 beds), obstetric theatre (has 1 operating room), postnatal wards (25 post-normal vaginal delivery beds and post-Caesarian section 27 beds) and labour wards (comprises of 6 latent phase beds and 8 delivery rooms). The whole maternity unit comprises of 39 midwives; 11 allocated in postnatal, 5 in obstetric theatre, 1 in ANC and the remaining 22 rotates around the residual units on 3 months rotation. The total number of births at the time of the study were 489 (normal vaginal deliveries = 385 and Caesarian section = 104).

Polokwane Hospital has four 4 maternity units, namely: ANC, antenatal wards (comprising of 14 beds), labour wards (3 delivery rooms and 6 latent phase beds) and postnatal ward (28 beds). The maternity unit has 38 midwives. The postnatal ward has 15 midwives and the remaining 23 midwives are shared among the other 3 maternity units. The total number of births at the time of the study were 279 (normal vaginal deliveries = 187 and Caesarian section = 92).

3.2.2 Research Design

A qualitative, phenomenological, exploratory, descriptive and contextual, research design was followed in this study with the aim of exploring adaptations and describing the experiences of midwives after maternal death at their work setting (Wilson, 2010). This research design has been chosen because it allowed the researcher to be in contact with the participants, observing their feelings and

emotions, and the researcher was able to seek clarity and conduct follow-ups, at the environment where the events took place.

3.2.2.1 Phenomenological Research Design

De Vos, Strydom, Fouché and Delport (2012) defined phenomenological design as a strategy in which the research is aimed at explaining how the subjects developed, and experienced their lives. The researcher got into the life-worlds of the participants. The researcher was able to observe the participants' feelings and the emotions as if it just happened and was able to discern how severe the damage could be. Phenomenology seeks to see the researcher entering the field with an open mind, leaving preconceptions behind. The researcher seeks to complete descriptions that encompass a full range of everyday life experiences, which are gathered from the participants through what is heard, felt, seen, remembered, acted on and decided (Moule & Goodman, 2009).

Phenomenological research studies often involve bracketing, intuiting, analysis phase and the descriptive phase.

❖ Bracketing

Bracketing is the process of identifying and holding in abeyance preconceived beliefs and opinions about the phenomenon under study (Polit & Beck, 2012). These authors further explain that it is difficult to achieve bracketing totally, but the researcher strives to bracket out the world and any presuppositions in an effort to confront the data in pure form. In this study, the researcher did hold back any ideas and beliefs about the phenomenon during data collection to avoid biasness. Even if the researcher had some information about the study, which has not been mentioned by the participants it was not included in the study.

❖ Intuiting

Intuiting occurs when the researcher remains open to the meanings attributed to the phenomenon by those who have experienced it (Polit & Beck, 2012). The researcher took participants' information as it was given to her by the participants

and did not manipulate it, even if there were some information that the researcher had knowledge about.

❖ **The Analysis Phase**

In the analysis phase the researcher extracts significant statements, categorises and makes sense of the essential meanings of the phenomenon (Polit & Beck, 2012).

❖ **The Descriptive Phase**

In the descriptive phase the researcher comes to an understanding of and defining the phenomenon. The researcher has interpreted the data and drew a conclusion of the study findings as provided by the participants.

3.2.2.2 Exploratory Research Design

According to Churchill and Iacobucci (2010), exploratory research is conducted to gain new insight, discover new ideas and to increase knowledge about a phenomenon. In this study, the researcher has explored the experiences of midwives after maternal death through probing and asking follow-up questions. The researcher gave the participants enough time to voice their experiences while observing any feelings and emotions that required clarity where it was needed.

3.2.2.3 Descriptive Research Design

Descriptive research focuses on providing an accurate description or picture of the status or characteristics of a situation or phenomenon. The focus of descriptive research is not on discovering something by a determined search of cause – and – effect relationships, but rather on describing the variables that exist in a given situation and, sometimes, on describing the relationships that exist among those variables (Johnson & Christensen, 2013). In this study, the researcher described the participants' experiences after maternal death in a report based on the participants' information.

3.2.2.4 Contextual Research Design

Allen and Chudley (2012) defined contextual research as an exploration in which the researcher gets out of his/her workplace into the real world, in the places where the participants conduct their everyday task or where the experiences take place. In this study, most of the participants were interviewed at their workplace where the maternal deaths occurred with the view that the environment, setting, and the situation surrounding the event or occurrence may stimulate them to provide enough or sufficient information. This has triggered the participants' emotions and feelings as it reminded them exactly of what happen.

3.2.3 Population and Sampling

3.2.3.1 Population

Castillo (2009) defines a population as the total amount of individuals that is the main focus of a scientific inquiry, and the individuals have common, binding characteristic or traits. The study population included 71 midwives employed in the maternity units of Mankweng and Polokwane Hospital Campuses in the Limpopo Province.

3.2.3.2 Sampling

Snowball sampling was used to obtain the 22 midwives that participated in the study. The first midwives who were interviewed referred others who met the inclusion criteria outlined below in both hospital campuses until data saturation occurred. Snowball sampling is defined as a non-probability sampling where interviewed participants are often asked to suggest other individuals to be interviewed who meet the criteria for participation in the research study (Babbie, 2015).

Inclusion criteria were based on the following:

- A registered midwife allocated in the maternity unit.

- Personally experienced a maternal death.

Exclusion criteria were based on the following:

- A registered general nurse without midwifery.
- A registered midwife who experienced maternal death but on leave during the data collection period.

3.2.4 Data Collection

Data were collected using a semi-structured interview with a guide. A semi-structured interview is constructed around a core of standard questions, and allowed the participants to provide detailed information about their experiences after maternal deaths and the types of adaptations mechanisms they use as guided by Botma, Greeff, Mulaudzi and Wright (2010).

The central question was as follows:

“What are your experiences of maternal death?”

The researcher expanded on any question in order to draw in-depth information from the participant’s response. The researcher was able to ask follow-up questions additional to the standard questions when an unexpected or interesting answer was provided as guided by Mitchell and Jolley (2013). This allowed the researcher to be clarified in any statement that was not clearly understood.

An example of a probing question that was asked was:

“How do you deal with that experience?”

A voice recorder was used to record the interview and its use was explained to the participants. The duration of the interviews ranged between 30 and 45 minutes.

Field notes were taken together with the recording in order to enable coding. Open-ended questions were provided on an interview guide to steer the participants' responses and data were collected until saturation was reached (Botma et al., 2010).

The advantages of the interviews were as follows:

- The researcher met with the participants and was able to observe the reactions and the emotions of the participants.
- It was easy to make follow-ups and statements that were not understandable were clarified.
- Sometimes the researcher would observe that the participants were disinclined to give full detailed information, but probed more until that information was provided.
- Participants expressed their views without limitation. Participants also had a chance of asking clarity where they did not understand.
- The researcher was able to go back to the participants when clarity was needed.

Disadvantage of interviews

The disadvantage of interviews was that sometimes participants were held up at the time agreed for interviews and the sessions were postponed.

3.2.4.1 Preparation Phase

The researcher followed the preparatory phase of data collection as outlined by Hennink, Hutter and Bailey (2011). The researcher physically contacted the Chief Executive Officers (CEOs) of both hospital campuses to build rapport and to explain the participants' involvement in the study and then CEOs granted the researcher an opportunity to take the matter to the involved hospital campuses' nursing managers.

The planned dates and periods of data collection were highlighted. The researcher briefly explained the aim, objectives and the significance of the study to the nursing managers, and provided them with the approval letter from Medunsa Research Ethics Committee (MREC), the Polokwane/Mankweng Research Ethics Committee, the permission letter to collect data from Mankweng Hospital Campus and also the permission letter to collect data from the Limpopo Province Department of Health provincial office, Permission was therefore granted by the CEOs of both the hospital campuses and the maternity unit nursing managers. The midwives allowed the researcher to continue with the preparations for the interview sessions that were to follow the preparation phase. The researcher identified potential participants and made contact with them in the hospital campuses.

3.2.4.2 Information Session

The information session was conducted few days before the day of discussion with the participants in the semi-structured interviews and also on the days that the interviews took place. The researcher outlined issues related to what is expected of the participants during the interviews, explained the aim, objectives and significance of the study together with the central question to be asked as well as the questions in the interview guide, during the information session. The period for interviews was confirmed by the researcher with the managers of the maternity unit and the midwives.

The researcher explained the informed consent forms to all participants who agreed to participate in the study. The use of a voice recorder and its purpose were also outlined. The participants were assured of their privacy and the confidentiality of their information. The researcher also explained to the participants that they can withdraw from the study at any time if they wish to do so without being victimised, but the information they would have given at the time of withdrawal could be utilised for study purpose.

3.2.4.3 Interview Phase

❖ Conducting the Semi-Structured Interview

At the beginning of each interview session the researcher greeted the participant with a warm welcome. The researcher started by introducing herself to the participant and assured the participant that the permission to conduct the interview session had been granted by the involved personnel and showed them all the letters which were granted as evidence. The aim, objectives and significance of the study were explained again, the participant's anonymity was ensured, as names were not used but alphabets instead and the data recording process was explained. The confidentiality of the information was also explained to participants. The interview sessions commenced after the participants had signed informed consent forms.

The research environment was quiet, relaxed and a well-ventilated venue and had no disruptions, and in line with de Vos et al. (2012) that the setting for the interview should provide privacy, be comfortable and in a non-threatening environment which is easily accessible. No barriers were encountered during the interviews—the participants were able to describe their experiences and their adaptations after maternal death freely. The researcher avoided personal questions as they would have occasioned discomfort to the participants and therefore could have hindered the yielding of more data (Hennink et al., 2011).

The researcher was able to gather more information from the semi-structured interviews on the adaptations of midwives after maternal death. All the interview sessions were recorded with the voice recorder. The researcher also took field notes to complement the recordings since the voice recorder could not record the non-verbal communication cues. The central question was posed to the participant at the beginning of the interview and was pursued by follow-up questions depending on their responses.

The researcher did not rush the participants when they were answering the questions and therefore they were relaxed. The following communication techniques were used by the researcher during the interviewing sessions: listening skills (probing, clarification, summarization, reflection) and observation. A good researcher must have good listening skills which will help to obtain quality information during an interview. The researcher maintained good listening skills that enabled the researcher to draw more information from participants, have more

understanding of the problem studied and to encourage the participants to talk more when they were being listened to. As a result, the researcher was able to maintain a continuous and harmonious interaction with the participants and obtained clarity and meaning about the problem studied.

❖ **Probing**

According to Zikmund and Babin (2010), probing is an interview technique that tries to draw deeper and more elaborate explanations from discussions. More probing was done depending on the participants' responses to obtain greater depth of information as the participants were persuaded to give more information about their experiences after maternal deaths and how they adapted—this was done in line with Rubin and Bellamy (2012) who asserted that probing for greater depth is a priority in interviews. The purpose of probing was to deepen the understanding on the researcher's part by asking comprehensive questions as guided by Flick (2006). The participants were able to elaborate more on their experiences and their adaptations after maternal deaths and the researcher maintained a good atmosphere in the conversations to keep the participants relaxed while getting more information.

❖ **Clarification**

Munden (2006) explained that clarification is used to clear up confusing, vague or misunderstood information. The researcher used clarification whenever the provided statements by the participants were not clear and understandable, and more elaboration was needed. Clarification was also used to check whether the provided information was correct. This was done in line with Cormier, Nurius and Osborn (2013) who stated that clarification may be used to make a participant's statement explicit and to confirm the accuracy of the researcher's perceptions about the statement. Clarification also helped the researcher to translate what the participants have said into more familiar language so that it could be more understandable and also helped the participants to restructure their perceptual field as guided by Kadushin and Kadushin (2013).

❖ **Summarization**

Munden (2006) described summarization as restating the information as given by the participants. The researcher used summarization at different points of the interview to structure the interview, aiding with transition and to ensure that the data collected was accurate and complete. Participants were able to add more information when they thought the information they have provided was still not enough.

❖ **Reflection**

This is a process of reflecting back on something important that the participants have said in order to get them to expand on that idea (de Vos et al., 2012). Munden (2006) also delineated reflection as repeating something that the participant has just said to obtain more specific information. The researcher repeated some information as given by the participants to confirm what they meant about the provided statements.

❖ **Observation**

Cohen, Manion and Morrison (2011) explained observation as looking and noting systematically at participants' behaviours. The researcher used observation to interpret and validate participants' non-verbal behaviour. Some participants were emotional as if they had just experienced the maternal death at that moment.

3.2.4.4 Post-Interview Phase

The semi-structured interviews lasted for 30 to 45 minutes. The researcher thanked the participants and reminded them about coming back to them should a need arise; and the participants agreed. The researcher assured the participants that arrangements would be made with the unit managers that they could be offered counselling since the maternal deaths have caused them psychological disturbances. This was done for the participants who were emotional during interview session.

3.2.5 Pilot Study

A pilot study was conducted on the first three (3) midwives to pre-test the interview guide. The midwives who have participated in the pilot study were not included in the main study. The purpose of conducting the pilot study was to ensure that vague questions and the contents of the guide could be rectified before the main study. The pilot study was also recorded and it alerted the researcher to do more probing.

A qualitative, phenomenological, explorative, descriptive and contextual research design was used for the pilot study. The participants of this study were registered midwives working in maternity units of the tertiary hospital complex and have experienced maternal death. The results indicated that the midwives' experiences of maternal deaths were unpleasant and it was difficult for them to cope. Lack of support from unit managers was also a challenge to these participants. The participants, however, did not experience too much of a problem with the patients who demised while being very ill, but were traumatised by those patients who came walking to the hospital, but demised. The pilot study was able to yield information that revealed that there were problems that midwives are faced with after maternal deaths. It also assisted the researcher about the areas that needed improvement when conducting the interviews. The interview guide was able to yield information that was of interest to the researcher.

3.2.6 Bias

Bias is defined as a process where scientists performing research influence the results in order to portray a certain outcome (Shuttleworth, 2009). The researcher tried hard not to influence the data when sampling the population, constructing the interview guide, and also when conducting the interviews. Before conducting an interview with each participant, the researcher made sure that detailed information about the study purpose, objectives, significance and participants' expectations are explained.

3.2.7 Data Management

Data management is defined as a designed structure, method or strategies for systematising, categorising, and filing research materials to make the data efficiently retrievable and duplicable (Guest, Namey & Mitchel, 2013). The collected data materials were locked up in the researcher's office, in a cabinet and were only made accessible to the individuals concerned in the research.

3.2.8 Data Analysis

Babbie, (2013) defined qualitative data analysis as methods for examining social research data without converting them to a numerical format for the purpose of discovering underlying meanings and patterns of relationship. The researcher transcribed the tapes verbatim into transcripts. The researcher adopted Tesch's eight steps as shown in Table 3.1 to analyse the qualitative data provided by Creswell (2009).

Table 3.1: Tesch's eight steps of qualitative data analysis

Step	Procedure
1.	Firstly, the researcher listened to the recorded interviews and transcribed the information verbatim. The entire transcripts were then read carefully to obtain a sense of the whole and some ideas were written down.
2.	One interview was selected and read to try to get in the information, writing down thoughts that came to mind. A table was made with all the topics and sub-topics that emerged, but were not grouped. The researcher took another transcript, read it trying to relate it with the first one. Other topics and sub-topics emerged and were added to the previous ones.
3.	The researcher then made a list of all the topics. Similar topics were grouped together to form themes and sub-themes. The themes and the sub-themes were then named using words that best described all the grouped sub-themes. Where necessary, the themes were changed into sub-themes and the sub-themes also were rearranged as themes.
4.	The themes were abbreviated as codes, which were written next to the appropriate segments of the transcripts. The researcher tried this preliminary organizing scheme to see whether new themes and codes emerged. Whenever a new sub-theme emerged, it was added on to the

	appropriate theme.
5.	The researcher came up with the most descriptive wording for the themes and sub-themes. Lines were drawn between themes to show the relationships.
6.	The researcher made a final decision on the naming for each theme and separated the themes and the sub-themes in that manner. The themes were arranged in a manner that outlined the midwives' information from their experiences to adaptations strategies.
7.	The data materials that belonged to each theme were assembled and a preliminary analysis was made. These data materials were further supported by literature of previous studies about the experiences of midwives after maternal deaths globally.
8.	The researcher re-coded existing material where necessary. The researcher came up with a summary of the themes and sub-themes, and the data were sent to the independent coder. The researcher and the independent coder's common themes and sub-themes were summarised and discussed in detail in Chapter 4 of the study.

3.2.9 Measures to Ensure Trustworthiness

Fenton and Mazulewicz (2008) explained trustworthiness as supporting the argument that the study's findings are worth paying attention to. The researcher has proved that the information provided was true and had not been manipulated. To ensure trustworthiness in the study, the following were adhered to:

3.2.9.1 Credibility

Credibility is the evaluation of whether or not the study findings represent a credible conceptual interpretation of the data drawn from the participants' original data (Fenton & Mazulewicz, 2008).

The researcher ensured credibility through prolonged engagement with the participants which lasted 4 months. The researcher visited the participants on 3 different days prior the commencement of the actual data collection, trying to establishing rapport. The researcher asked the supervisors to listen to the voice

recordings in order to validate the data. Follow-up interviews were done on one participant (A) to clear misunderstandings. The researcher contacted the participant telephonically explaining that she needs clarity on the information given and an appointment was secured. The participant gave more information on how reacted after the maternal death in the second interview as compared to the first interview.

3.2.9.2 Dependability

Fenton and Mazulewicz (2008) explained dependability as an assessment of the quality of the blended process of data collection, data analysis and generation. This refers to the stability of data over and over conditions (Polit & Beck, 2010). Pitney and Parker (2009) called this process “external audit”, whereby someone examines the research process and product to ensure that the study’s findings are consistent with its data. The researcher ensured dependability by compiling the raw data, data collection and analysis products, process notes and the reflection of the researcher, and handed them over to an independent coder with expertise in qualitative research to confirm the findings and also made them available for future reference.

3.2.9.3 Confirmability

Confirmability is defined as a measure of how well the study’s findings are supported by the data collected, referring to the objectivity or neutrality of the data and interpretations (Fenton & Mazulewicz, 2008; Polit & Beck, 2010). The researcher ensured confirmability by providing the raw data as evidence from the participants to the supervisors and the independent coder. The researcher provided all data that was given by the participants and has ensured that by making available all the data collection tools as evidence. The supervisors conducted an audit trail by listening to the voice recordings and read transcribed data and field notes.

3.2.9.4 Transferability

Tappen (2011) defined transferability as the applicability of the findings to other situations and other individuals. The sampling method and the data collection method used enable the decision of the extent to which the findings may be

transferred to other individuals and other situations. However, the study findings cannot be generalised, but can be transferred in other maternity institutions.

3.3 Ethical Considerations

3.3.1 Ethical clearance and Permission

Ethical clearance was obtained from the University of Limpopo's Medunsa Ethics and Research Committee, Permission to conduct the study was obtained from the Department of Health Limpopo Province, Polokwane/Mankweng Hospital Ethics Committee and Mankweng Hospital Chief Executive Officer.

3.3.2 Informed Consent

The participants were informed about the purpose and objectives of the study. The participants' expectations during the study were also indicated. The researcher explained to the participants that they could withdraw from participating in the study if they wished to do so without being victimised by the employer, but the information that would have been given by the time of withdrawal could be used for study purposes. The participants were given a chance to choose to participate in the study by signing a consent form.

3.3.3 Confidentiality

The researcher maintained confidentiality by not divulging the participants' names, thereby, protecting the participants' privacy and dignity (Babbie, 2013). The participants were informed that their information would not be linked to their names during report writing, presentations at conferences and publications.

3.3.4 Anonymity

Anonymity was guaranteed through making sure that the participants were not identified with their names, rather the researcher used alphabets so that the

participants' response would not be identified with them thus protecting the participants' identity (Babbie, 2013). Participants were also informed that their names would not appear anywhere in the study.

3.4 Conclusion

This chapter discussed the research approach and research design, population and sampling method, data collection and analysis. Measures to ensure trustworthiness and ethical considerations were also discussed. Chapter 4 will discuss the results and the adaptation strategies.

CHAPTER 4

DISCUSSION OF RESULTS, LITERATURE CONTROL AND ADAPTATION STRATEGIES

4.1 Introduction

This chapter discusses the results of the study and the adaptation strategies. Four themes emerged from the data analysis and are poor adaptation mechanisms, limited support from management, midwives experienced distress and sub-standard midwifery interventions. Four-teen sub-themes emerged from the themes and were explained. The strategies to enhance adaptations of midwives were formulated and also explained in this chapter.

4.2 Characteristics of the participants

The characteristics of the participants are shown in Table 4.1.

Table 4.1: Characteristics of the participants

Characteristics	Number
Participants	
Midwives who experienced maternal death	19
Gender	
Females	19
Males	0
Units where participants were drawn from	
Postnatal wards	5
Labour wards	10
Antenatal wards	1
High care units	2
Obstetric theatres	1
Hospital campuses	
Mankweng	10

Table 4.1 shows that nineteen midwives have experienced maternal death and consented to participate in the main study. Only females participated in the study as no males were employed in maternity units. The participants were drawn from the postnatal wards, labour wards, antenatal wards, high care units and obstetric theatres of the tertiary hospital complex.

4.3 Discussion of the Results

Four themes and fourteen sub-themes emerged from the data as shown in Table 4.2. The themes and sub-themes are further discussed in detail in the subsections.

Table 4.2: Themes and sub-themes on adaptations after maternal death

Themes	Sub-themes
1. Poor adaptation mechanisms	1.1 Inability to adapt 1.2 Blame upon midwives 1.3 Intruding images 1.4 Difficult to inform relatives
2. Limited support from management	2.1 Lack of support from supervisors 2.2 Lack of professional counselling 2.3 Manipulation during statement writing
3. Midwives experienced distress	3.1 Emotional distress 3.2 Psychological distress 3.3 Physical distress
4. Sub-standard midwifery interventions	4.1 Delay in referring women timeously 4.2 Negligence of midwives 4.3 Shortage of material resources 4.4 Shortage of midwives and advanced midwives

4.3.1 Theme 1: Poor Adaptation Mechanisms

The midwives experienced poor adaptations after maternal death. Four sub-themes emerged from this theme namely, inability to adapt, blame upon midwives, intruding images and difficulty to inform relatives. Michael (2014) asserted that poor adaptation mechanisms involve poor behavioural and cognitive responses to stressful situations. People who face loss or sudden change will experience an upset in their emotions. However, the emotions are expected to return towards normal once the individual adapts to the new circumstances, but it may also last for a longer period.

4.3.1.1 Sub-Theme 1.1: Inability to adapt

Midwives reported that they found it difficult to accept that maternal deaths which serve as the stimuli occurred in their care and therefore find it is difficult for them to adapt to their. They believed that their role was to preserve life. According to Roy's theory of adaptation in the role function mode, an individual has perceptions and expectations. These perceptions and expectations are associated with the role that the individual is playing in the society. When those expectations and the perceptions are met, the individual will have a feeling of fulfillment. The midwives felt that they failed in meeting their expectations and fulfilling their perceptions of their profession. This had a negative influence on the midwives as it made it difficult for them to adapt after the stimuli, and this is referred to in Roy's adaptation theory as the outcome of the adaptation modes.

Participants said:

"It was not easy for me to accept it, because as I assessed my reaction to her condition I found that I acted as fast as possible."

"It tends to be with you for a longer period, even when you are at home you will think about what could have gone wrong. What is it that I did not do that could have prevented the maternal death? It is not easy to forget about maternal death."

“Dealing with maternal death is very much difficult. Sometimes it is because we just tell ourselves that we are coping, but most of the times when you are alone you feel that really I am not coping.”

Mander (2001a) agrees with the findings that the midwives felt unprepared for the mothers' deaths. Some said they just could not believe it was happening to them. The midwives did not accept prior the experience that a mother could die in their care. Raynor et al. (2005) asserted that midwives can be seriously traumatised following involvement in a maternal death and it is difficult to think of a situation more traumatic in the maternity unit than a maternal death.

One midwife reported that she was affected to such an extent that she did not want anybody near her after the maternal death and isolated herself in order to adapt to work again:

“Actually, the whole situation is overwhelming. In times like this, I usually want myself alone to deal with the loss. That is why I want myself alone. I just want to deal with the whole situation alone. I do not need any interference from somebody else. Actually I do not want to talk immediately after maternal death.”

This isolation leave other midwives with increased workload as the affected midwife would not want anybody near her and this validate that this midwife's adaptation is on bad impact to the unaffected midwives and patient care.

Another one also indicated that for her to adapt she cries and go away from the work environment.

“I cried, went to nurses home and I never came back. I came back the following day”.

This however leaves the midwives who remain at work with an increased workload which do not solve the problem.

Whereas other participants indicated that,

“I even thought of going home and sleep”.

“I often thought of just staying at home, going to the obstetrician and tell them that I am sick. You will feel that you are sick even when you are not, after encountering maternal death”.

“I tend to discuss with other midwives and get their side of the story. They would share about what they do in maternal death situation especially the older midwives who have been dealing with these maternal deaths for a longer period. I ask them about what they used to do when maternal death happened. They would tell me that when they are not feeling well after maternal death, they sometimes speak to their supervisor. The supervisor would then provide me with counselling sort of. They explain to me that this is not the first time and it will never be the last, and therefore I should learn from the mistakes that would have happened that led to that maternal death”.

The midwives' adaptations strategies compromise patient care and do not alleviate the effects of maternal deaths on the midwives hence strategies to assist midwives to adapt to their work after maternal death would be developed. De Leo, et al (2014) asserts that after a traumatic event, an individual may withdraw from others and or make excessive sick leave at work.

4.3.1.2 Sub-Theme 1.2: Blame upon midwives

Midwives reported that they often blamed themselves for maternal deaths and often experience guilt, anger, tears, sadness, and depression which are all common responses of a maternal death. The midwives felt that they contributed to the death as the woman was under their care.

One participant indicated that:

“There are these things of self-blame, feelings of guilt; just to ... I have got this feeling that if ever I have done things differently the maternal death could have been prevented. Though you can see that the woman was very sick and death was imminent. That feeling of guilt cannot go away. Blaming also occurs if during incident

reporting other staff members say that you should have done this or that. Then you think the problem was with you. However, there might be problems that caused the maternal death. So, after discussion you will feel like it was your problem that the woman died.”

Another participant said:

“I feel guilty why this woman died in my hands. That is the blame I put on myself. Why did I not anticipate that something like this would happen? I felt very bad, and I felt guilty even though there was nothing wrong I did. I just felt guilty as a human being that maybe I could have realised that the woman was complicating. These guilty feelings that we feel about the maternal death thinking, maybe if we could have done things different, the woman would be alive, had we seen that she was going to complicate, had we succeeded with the resuscitation maybe she would be alive, but it was something that was beyond our control. Everybody was there it is just that she slipped through our fingers.”

Yet another participant expressed that:

“The obstetricians are shifting the blame to the midwives that this maternal death just happened because the midwife did not give him what he wanted at that time. You will find that some of them they do blame us that we did not monitor the woman closely. I do not think it is true because I think the obstetrician just want to shift the responsibility that he was trying to resuscitate a woman and then if he was given what he needed in time maybe the woman would be alive which we do not know.”

Block (2007) indicated that midwives suffered “vicious attacks”; they were called “dirty, filthy and unscrupulous” beings and that the midwives were still being blamed for maternal deaths by the New York Obstetrical Society. The self-concept group identity mode of Roy’s adaptation theory indicates that when midwives are always

blamed for maternal deaths, even when it is found that they have done something wrong, since they are not well approached, they lose dignity, confidence and self-worth.

4.3.1.3 Sub-Theme 1.3: Intruding Images

Midwives reported that they experienced flashbacks of the incidences of maternal deaths that they have encountered. These experiences were unpleasant to them. The flashbacks always brought back the bad memories. The images made the midwives to re-live the trauma they had after maternal deaths.

The participants indicated that:

“Even now when I come across a pregnant woman who is very sick, the image of the previous woman who demised in my care comes to my mind. It has got draw backs, yes and every time I look at the baby, I think of the mother”

“It is difficult, especially for the first two days because all the time when you are busy working you will be recalling the maternal death and it is stressing.”

Mander (2001a) concurs that the midwives had a problem of having flashbacks about the events surrounding the maternal death they had. These memories made it difficult for the midwives to sleep at night and to proceed with their normal daily working duties as it disrupts their minds. These intruding images have a tendency of manifesting themselves at difficult times. One midwife thought she was going to die when she was giving birth because she experienced complications which triggered the maternal death she experienced. These flashbacks that are experienced by midwives are often triggered by other factors Mander (2001a). According to Roy's adaptation theory these flashbacks contribute the outcome, which is negative since the midwives fail to adapt and forget about the incident.

4.3.1.4 Sub-Theme 1.4: Difficulty to inform relatives

The midwives expressed that after maternal death it was difficult to inform the relatives of the woman.

One participant said:

“When the relatives came to collect the woman’s luggage, I was not that brave to face them.”

Another participant said:

“When the family members arrived in the unit, I felt bad and could not deal with the situation.”

Muliira and Bezuidenhout (2015) agreed with the findings that when maternal death occurs, the midwives’ role includes informing and supporting the affected family members.

4.3.2 Theme 2: Limited support from management

The midwives experienced limited support from management after maternal death. Three sub-themes emerged from this theme namely, lack of support, lack of professional counseling and manipulation during statement writing. Support and appreciating employees’ work is a potentially powerful motivator of employee performance. People who are doing good need to know they are doing good work. Having known that they are doing well, employees should know when they are not particularly doing well, and be assisted on what could be done to correct the behavior (Phillips & McConnel, 2005). Andress (2009) agrees that employees will go the extra mile if they are receiving positive reinforcement. Confidence coupled with genuine appreciation give an employee benefit which in turn means more productivity on their job.

4.3.2.1 Sub-Theme 2.1: Lack of Support from Supervisors

The midwives expressed that supervisors do not show any support about maternal death. This lack of support is often coupled with the lack of appreciation towards the midwives' good and hard work.

The lack of support was expressed as follows:

"We do our best; theirs (the supervisors) is just to check the mistakes on the file. The little thing that the midwives did not do, like measuring the arm circumference on that day can be used against the midwife as a cause for maternal death."

"Whenever a maternal death occurs in the unit, the supervisors would come and scrutinise the file only looking for omissions. They do not look at the positive things that the midwives have done to the woman."

"Sometimes we find that it is very much difficult and painful because we do not find support from your superiors. They are always blaming us even though some of the conditions are not preventable. For example, a cardiac woman coming to the unit walking, being in labour while she knew that she was not supposed to fall pregnant."

"It is painful especially when you do not get counselling and support from the supervisors or whoever should support you. But, I cannot say they support us because there is nothing that is done after a maternal death. There was never a time where I was asked how I feel about this, unless I go to them and explain myself".

"Whenever a maternal death occurs in the unit, the supervisors come and scrutinise the file looking at the omissions only. They do not look at the positive things that the midwife has done to that woman. They only look at the omissions and the negative things so that they could lay blame on someone."

Muliira, Sendikadiwa and Lwasampijja (2014) asserted that the supervisors of midwives can initiate support programs for midwives who have experienced death anxiety to promote positive coping. The support programs can focus on activities such as peer support, counselling, mentoring, debriefing sessions after death experiences. The support activities can provide midwives with opportunities for sharing experiences, interpersonal learning, catharsis, self-awareness, self-care and to establish a healthy basis for handling future death.

The role function mode of Roy's adaptation theory indicates that every individual should realise that s/he cannot exist alone in the universe and needs other people to survive and should find a better way of relating with other people. Byaruhanga (2012) agrees with the expressions of the participants in this study by indicating that in Uganda many people have tended to associate maternal deaths with poor attitude of midwives, negligence, absenteeism and stealing of medicines from the health facilities and what was not regularly considered was the great work done by midwives to save mothers and their babies. The impression created was that a maternal death is like a cause for celebration to the midwife (Byaruhanga, 2012).

Block (2007) found that lesser women died in the care of midwives even though the study design favoured physicians. That is, if a woman died in childbirth and had been in the care of a midwife at any time, the death was recorded to the midwife, but not to the physician. However, if the woman lived but had been in the care of both a physician and a midwife, the case was recorded to the physician only (Block, 2007). The interdependence mode of Roy's adaptation theory stipulates that, midwives and their supervisors need to have a good working relationship which will lead to a better outcome after seized by stimuli.

4.3.2.2 Sub-Theme 2.2: Lack of Professional Counselling

The midwives experienced lack of professional counseling after maternal death which served as stimulus and these were expressed as follows:

“During the incident reporting when we mention that we need counselling the supervisors said they will come up with a plan. They

always say: 'we need to this, we need to hire a psychologist for you, this is traumatising' but after that discussion everything is closed, we just continue and nothing happens."

"Many times, they always say that they will arrange for the midwives to get counselling, but so far we have never received any counselling."

"It is sad and especially that after maternal death there is no counselling that we get from our employer."

"Usually after these incidents we just console each other. We comfort each other as midwives by talking to each other saying we tried our best. We knew that at least we did this and that even though we failed to save the woman's life. So, there is no any other thing we could have executed."

"We support each other as midwives. Some of the midwives have been long in the service and they have an experience of working in the maternity units. When they see that the midwives are sad they would sit with them and talk about the incident. They assist the midwives to accept what happened telling them that when nursing the women is either they recover from that illness and go home or they die. The experienced midwives tell them to accept the situation and continue on nursing other women."

"I tend to discuss with other midwives and get their side of the story. They would share about what they do in maternal death situations, especially the older midwives who have been dealing with these maternal deaths for a longer period. I ask them about what they used to do when maternal death happened. They would tell me that when they are not feeling well after maternal death, they sometimes speak to their supervisor. The supervisor would then provide me with counselling sort of. They explain to me that this is not the first

time and it will never be the last, and therefore I should learn from the mistakes that would have happened that led to that maternal death.”

Midwives need each other for them to fully render their services. It is difficult for the midwives to work in collaboration with each other if they are not relating well; do not trust each other, behave badly towards each other. The midwives need support during maternal deaths, especially from their colleagues, but if they do not get it, they isolate themselves. Hughes et al. (2012) explained that counselling offers the opportunity to talk things out with a trained counsellor. This can help an individual to make sense of their feelings and offers encouragement. However, during the counselling the individual is not told what to do, but offered new ideas for coping.

Muliira and Bezuidenhout (2015) indicated that there is a necessity for midwifery practice settings to provide relief care, education on coping with death experiences and counselling after traumatic experiences which is maternal death in order to maintain the well-being of midwives. As occupational exposure to maternal death can have a negative effect on the well-being of midwives, lack of counselling affect their midwifery practice. Mander (2001b) elaborates that many midwives considered having counselling because it was not easily available. The midwives' recovery from the death of a mother was therefore made more difficult.

Roy's adaptation theory explains how midwives' supervisors should assist midwives with regard to adaptation and has stated that, "In the theory, midwives' supervisors assist other midwives to expand their ability to adapt. Their goal should be to promote adaptation in all four modes of life" (Sherman, 2013). The theory further explains that for the midwives' supervisors to accomplish the promotion of adaptation in all the four modes of life, they must assess the midwife's behaviour and other factors influencing the midwife's power to adapt and intervenes to help adapt better. The supervisor should also assess the midwife's adaptation problems; sets goals for improving it; takes steps toward the goals; and finally evaluate the effectiveness of the interventions.

Midwives perform crucial duties in the health of mothers and babies, but if they are

not taken care of, they end up losing hope in what they are doing and become demoralised. Byaruhanga (2012) stated that in Uganda many people have tended to associate maternal deaths with poor attitudes of midwives, negligence, absenteeism and stealing of medicines from the health facilities. However, what is not usually considered is the great work done by the midwives to save mothers and their babies. The impression created is like a maternal death is a cause for celebration to the midwife.

Kenworthy and Kirkham (2011) indicated that support made a difference after maternal death, although it was not always available. The authors concluded by indicating that midwives were particularly dependent on colleagues as their support system after maternal death. It is evident from these study findings that midwives received little support from their colleagues however this played a role in helping them to continue with their daily duties as supported by the interdependence mode of the Roy's adaptation theory.

4.3.2.3 Sub-Theme 2.3: Manipulation During Statement Writing

Midwives reported that they were often forced to write statements and reports which deviate totally from what actually transpired on the day of maternal death.

One participant indicated that:

"I was called to the manager's office to rephrase my statement. I was told to rephrase my report and that is where the argument started. I wrote everything I saw on the woman and I was advised to manipulate the report, which I did not like and I refused."

Another participant gave another version:

"Sometimes the supervisors do not want the midwives to write what actually happened while they were not there. They will instruct the midwife to write what suits them or what protects them. I am not sure whether they want midwives to be exposed or they want to protect themselves as management so that they would not be blamed."

Hynes (2009) disagrees with these findings and indicates that an incident report should be written objectively by the person who directly observed the incident. The report should bring the problem to light in a non-blaming way and can provide a catalyst for changing the practice that contributed to the fault.

4.3.3 Theme 3: Midwives experienced distress

Midwives experienced emotional, psychological and physical distress after maternal death.

4.3.3.1 Sub-Theme 3.1: Emotional distress

Maternal death causes emotional distress and the midwives in this study felt like going home after the experience.

Participants indicated that:

“I cried, went to nurses home and I never came back. I came back the following day.”

“It was painful because I was crying. Immediately when the woman passed away I cried. I crashed down and I was crying.”

“I thought of going home and get away from the stressful maternity unit.”

“It is very traumatic and it makes one to lose hope, it is very painful. Instead you will be blamed, whereas you did not do it deliberately. It is very painful. The mood was very much low, especially that in most cases you find that we have maternal deaths that follow one another. We really work in a very stressful situation, especially when there is maternal death, the mood is never high.”

Chimwaza et al. (2014) indicated that some midwives narrated death-related incidents that made them want to leave their jobs because their colleagues blamed them for maternal deaths. Kenworthy and Kirkham (2011) concurs that the extent of

shock midwives experienced when involved with maternal death showed their unpreparedness towards its occurrence. Mander (2001a) agrees that a maternal death places stress on the affected midwives.

Muliira and Buzuidenhout (2015) supported that when maternal deaths occur, midwives often experience emotional distress while striving to perform their work and that this may have a negative impact on their well-being.

4.3.3.2 Sub-theme 3.2: Psychological distress

The midwives experienced psychological distress after maternal death. Some of the midwives could not cope with the experiences and would crash down when faced with the maternal death. This was also evident in the following statement by one participant in this study:

Participants expressed psychological distress as follows:

“We were all depressed I am telling you, we were all depressed. It is really traumatising and depressing to lose a woman in maternity.”

“It is tough because in most cases I become stressed and it became stressful to all the midwives in the maternity unit. Maternal death is very much heart-breaking. It is sad and especially that after maternal death we get no counselling.”

“I was so sad. I was very down and I felt like crying. I could not work afterwards. We spend some hours just sitting there looking at that woman. We were all sad because we did not expect the maternal death to happen. The atmosphere was so bad. One could see that the morale is low and the midwives’ spirits are down. We were not talking, and we were not active. When you walk you feel frail. I do not know how to explain it, but you could see that we were negatively affected.”

After maternal death the midwives were emotionally affected and that impeded their productivity in the workplace. The study conducted by Mander (2001a) on the impact of maternal death on midwives showed similar findings. The findings indicated more trauma on the midwives experiencing maternal death than stillbirths. Davies (2011) reported that midwives deal with subsequent deaths of mothers and babies which is a highly emotional experience.

Kenworthy and Kirkham (2011) have also found that the extent of the shock midwives experienced when involved with maternal death showed the degree to which the midwives felt unprepared for both the maternal death, and dealing with their own subsequent emotions precipitated by maternal death. Kenworthy and Kirkham (2011) further emphasised that midwives can be seriously traumatised following involvement in a maternal death.

Raynor et al. (2005) accentuated that it was difficult to think of a situation more traumatic in the maternity unit than a maternal death. Muliira and Bezuidenhout (2015) agree with the findings that maternal death was associated with psychological distress. Roy's adaptation theory indicates that after experiencing a maternal death the midwives respond differently, depending on the circumstances surrounding the stimuli. Other midwives became shattered, stressed, traumatised, suffered blackouts or cried whereas others accepted faster.

Hughes et al. (2012) elaborated that appropriate and timely support for midwives is considered as a key protective factor to prevent serious outcomes following traumatic exposures. The involved midwives require support to prevent a disruption of patient care. It is evident from this study's findings that lack of support resulted in midwives being psychologically affected.

4.3.3.3 Sub-Theme 3.3: Physical distress

The experience of maternal death by the midwives led to their physical distress and burnout. The midwives reported that they often become demotivated to go to work due to the maternal death situations. They felt hopeless when bearing in mind that their duty was to preserve life and said:

“I often thought of just staying at home, going to the doctor and tell them that I am sick. You will feel that you are sick even when you are not, after encountering maternal death.”

“I was shocked and helpless throughout the day and it was difficult to work. At some stage you will feel like you can stop working in the maternity ward. It is very traumatic and it makes one lose hope.”

“You get demoralised by these maternal deaths and you would want to stop working in maternal ward.”

Another participant stressed that maternal death is physically exhausting to the midwives when saying:

“I do not think we are coping. We are always exhausted; because we spend the whole day no lunch no break. If you need to eat you just grab something while busy. It is stressing because the body also needs to rest”.

De Leo et al. (2014) asserted that after a traumatic event, an individual may withdraw from others and/or take excessive sick leave from work. The Roy's adaptation theory explains this as the response and the coping mechanism which the midwives undergo after being invaded by the stimuli.

Davies (2011) stated that burnout appears to be common among maternity unit midwives providing antenatal, delivery and postnatal health services in a district referral hospital in Malawi. Chimwaza et al. (2014) reported obstetrician and midwives narrated death-related incidents that made them want to leave their jobs, because maternal deaths left them demotivated as most the deaths were preventable. Chimwaza et al. (2014) further reported that a midwife wanted to leave a health facility because a fellow midwife had given his name to the community after a maternal death occurred in his hands and the husband of the deceased kept threatening him.

4.3.4 Theme 4: Sub-Standard Midwifery Interventions

Participants expressed sub-standard midwifery interventions when they reflected after maternal death. Four sub-themes emerged namely, delay in referring women timeously, negligence of midwives, shortage of material resources, shortage of midwives and advanced midwives.

4.3.4.1 Sub-Theme 4.1: Delay in referring women timeously

The midwives expressed that most of the maternal deaths were caused by a delay in referring women to the hospital complex by the referring hospitals and that the pregnant women were referred to the tertiary hospital being at their worst stage of the illness. The expressions were as follows:

“We find that most of the time women from the peripheral hospitals are referred to our hospital being in a critically ill stage. We just try our best, but since the women are critically ill you find that it takes long they end up demising.”

“Most of the women come from other hospitals being referred late by the referring obstetricians. They are referred when their condition is worse that we cannot help them because some of them while we are still taking her to the bed you can see that this woman is gasping or just demise.”

“Even if you try your best there is nothing you can do. In case of women who come from other hospitals with conditions like eclampsia being referred late I do not know if maybe it is insufficient knowledge of referring obstetricians or what since other women will be referred with wrong diagnosis or with insufficient treatment.”

“I can also blame the referring obstetricians; some of them just delay referring the women and then when they refer the woman you find that it is too late. You cannot even help that woman or is either the woman loses the baby or we lose both of them. And it is painful. The woman was cyanosed on the lips,

the nail beds, and she was having a pulse rate of 53 beats/min. The woman of that presentation was actually supposed to be admitted in the high care unit. Unfortunately, the obstetrician concerned overruled my decisions and the woman demised.”

ESCAP (UNPF, 2005) reported that late referrals to an appropriate health facility or delays in handling the women at the health facility are also recognised factors that contribute to maternal death.

4.3.4.2 Sub-Theme 4.2: Negligence of Midwives

The study revealed that negligence of midwives led to maternal deaths. Midwives sometimes perform their duties in error which result in maternal death.

One participant said:

“Sometimes the midwives neglect women in postnatal unit, although the woman bled intra-operatively, but it was not much. I think there was a little bit of negligence in the postnatal unit by the midwives.”

Another participant said:

“There are negligent midwives. I cannot say they do it deliberately, but sometimes it is due to lack of experience or knowledge or maybe taking things lightly. At the end one could see that this midwife has been negligent like when you see that the woman has got elevated blood pressure but you do not act, it will go up until it complicates the situation.”

Yet another participant expressed that:

“Let me say the inexperienced midwives, especially if they could not manage high risk conditions like PPH. When you deliver a woman and then she bleeds then you fail to observe the PPH or you fail to

manage it. Sometimes the blood pressure could be too high, but as a midwife you fail to notice it or act on it.”

If midwives cannot use their discretion as one of the attributes that midwives should have when managing women, then the situation of maternal death will take time to be resolved. Levy (2012) asserted that a mother who previously had a Caesarean section died few hours after giving birth following PPH and cardiac arrest. A midwife told the mother that it was safe to give birth at home and she was to help her with the delivery. After giving birth, the midwife performed the third stage of labour aggressively leaving the mother in a pool of blood. The mother sustained a tear and some part of the placenta remained in the uterus, but the midwife told the woman's husband that the remaining placenta will come out naturally and the tear did not need suturing. The mother bled excessively which resulted in cardiac arrest. The midwife came later after repeated contact. She performed cardio pulmonary resuscitation (CPR) which she was not well skilled in. The mother was then rushed to hospital; she was examined by a gynaecologist who found that 30% of the placenta remained in the uterus. The woman went into shock and died later that day (Levy, 2012).

This study has, however, discovered that another factor contributing to the high rate of maternal death is lack of advanced midwifery skilled midwives which leaves the midwives at jeopardy in times of emergencies and at a need for critical care. Smith and Dixon (2008) reported that the lack of experience and midwifery skill in newly qualified midwives can be a problem, as they may be less likely to recognise sick mothers. This can leave midwives struggling to distinguish between normal and abnormal situations. Midwives are routinely unable to recognise the difference between normal and abnormal scenarios, resulting in inappropriate interventions for low-risk women and lack of referral in higher-risk situations, resulting in poor outcomes.

One participant indicated that another problem leading to maternal death is the allocation of newly qualified nurses at the clinics without experience and those nurses are not doing justice to the women there:

“You know there is a problem with these newly qualified nurses. Most of them they do not want to find themselves working in the hospitals. The department just employ them at the clinic and there is a disaster there. You will find that they are all new and young nurses so they are not experienced, you see? Such women they need experienced nurses.”

This is supported by Evans (2015) who asserted that a mother died due to inexperienced midwife’s errors. The report indicated that the midwife did not monitor the vital signs of the mother and failed to detect that the mother had extra amniotic fluid around the foetus. However, the midwifery council has ruled out the fact that the midwife was responsible for the maternal death since it was amniotic fluid embolism that killed the mother.

4.3.4.3 Sub-Theme 4.3: Shortage of Material Resources

This study showed that midwives were faced with a challenge of not having material resources which resulted in compromised woman care leading to maternal deaths. Participants expressed their experiences as follows:

“The Emergency Medical Services personnel could not supply us with an ambulance to transport a pregnant mother to hospital. Nevertheless, the transport used for transporting the pregnant woman was a condo which was not a suitable transport for such a woman. The woman’s condition complicated and resuscitation was done with failure, she demised.

“Sometimes the primary health care midwives would send a woman with a referral letter because they could not get an ambulance to transfer the woman to the hospital. They think if they give the woman a letter she will reach the hospital in time. Unfortunately, the woman sometimes they do not come straight to the hospital. They go home first saying: ‘am going to pack my what, what, whatever that I need in the hospital’. The ambulances should be at dispose so

that the woman can get transport easily. We should not send the woman with their own transport to the hospital whereas they are high risk.”

“This thing of shortage of equipment; Let me say if a woman is booked maybe late, is not that some of our women believe in booking at the clinic for ANC when they are already six months pregnant, So you will find that such a woman maybe when she goes to the clinic there is no BP machine and no urine test strips. The midwives cannot diagnose that that woman is hypertensive. Then by the time she is term or maybe the BP is too high will fit and that could have avoided.”

“Sometimes you will find that in the ward the women who are diagnosed with eclampsia admitted in high care do not have monitors. You will find that the monitors are only four and we are having six women. So, you have to remove one monitor from one woman and then you monitor other one which is not ok. Each woman must have her monitor. So you find that the monitors are not enough; when you take the blood pressure you find that the blood pressure has gone up.”

Lack of drugs, equipment, and other supplies affect the performance of clinical duties (Chimwaza et al., 2014). Chimwaza et al. (2014) further indicated that some of the equipment was in short supply in the maternity units. The maternity units ran out of curtains for privacy, blood pressure (BP) machines, glucometers, and delivery packs.

Dhaar and Robbani (2008) pointed out that when ambulances or other vehicles are multipurpose, they may not be available when needed for obstetric women, therefore, strategies to ensure the full-time availability of such vehicles must be developed.

4.3.4.4 Sub-Theme 4.4: Shortage of Midwives and Advanced Midwives

The midwives in this study have reported a shortage of midwives and advanced midwives. This shortage has been found to contribute greatly to maternal death and increased workload on the midwives.

Participant indicated that:

“Even when you are busy resuscitating one woman, you call for help and you go there being three due to the need. This means other women are going to be ignored unintentionally. Remember, this is labour ward and is unpredictable. When you are busy resuscitating a woman then on other side another woman want to give birth, so you will need to give attention to both women which is not always possible. We have up to twenty normal deliveries for twenty four hours and then Caesarean section births maybe three or four, if they are emergencies. However there are days when there are elective Caesarean section births where it is usually five electives per day and then they add maybe three emergencies then they make eight.”

Another participant indicated:

“There is shortage of midwives and advanced midwives. You will find that there are only two or three midwives on duty for the day. It is difficult to work in labour ward and in high care unit. If you are two or three, you will find that you are tired and when a woman comes to the unit we would not have much time to assess that woman promptly.”

“We were only two midwives in the labour ward of a tertiary hospital which caters for the whole Limpopo. We have to progress women that are in labour and also go for Caesarean section, being two so you see. We would not have enough time to observe pregnant women. There is an increase in the number of pregnant women that

are delivered in this tertiary hospital complex as normal cases that should have been delivered at the clinic level. So that alone poses a great load of work to midwives that are working in the hospital. So, normal cases must deliver at primary health care facilities not the hospital. The workload will be relieved and midwives will be able to give adequate care according to the needs of the high risk pregnant women.”

“In our unit referring to postnatal the first problem is that we do not have advanced trained midwives. Advanced trained midwives are very few. We do not have a place where we can keep the patients and say that they are safe enough to can go to general unit. I think those are the major problems with our high risks mothers. Firstly, a trained midwife who is advanced trained in midwifery in our unit is only one out of the seven to eight midwives that we have in this unit. We have only one advanced trained midwife. Our operational manager, too, is not advanced trained in midwifery. I think that is the other problem and that the only advanced trained midwife cannot always be on duty.”

“If you are two or three midwives it becomes difficult to work efficiently. We easily get tired and when a woman comes, we do not have much time to assess her due to the busyness of the unit. When there is resuscitation of a woman in high care unit, all the two/three midwives are compelled to go assist due to the need. We are always exhausted because we spend for the whole day without a break, including lunch.”

Gray and Hunt (2013) asserted that understaffing can result in substandard care and may lead to an increased likelihood of errors made by health care professionals. Shortage of midwives in maternity units has negative impact on service delivery and quality woman care which result in midwives being overworked. The DoH (2007 & 2012b) have indicated that in each province in South Africa, the health service facilities should operate in a way such that patients should be treated from primary

health facility going up in the system until the tertiary institutions if there is a need for more advanced and speciality treatment. In this study, the participants have highlighted that the health system sometimes disadvantage them by receiving women with poor prognosis or being mismanaged by referring hospitals. This intensifies the midwives' workloads and consequently increases the rate of maternal deaths in the hospital complex.

Mohapi and Basu (2012) reported that under the National Health Insurance, a hospital is expected to provide service to women based on its category. However, in reality the tertiary hospitals offer every level of care, resulting in poor quality of care and over-expenditure. This is the same with the tertiary hospital complex; it delivers tertiary health care as well as some secondary and primary health care services.

Chimwaza et al. (2014) asserted that midwives were expected to attend to a number of wards at the same time. One midwife was left to attend to ANC, OPD and the labour wards. Another midwife was left alone to attend to the labour and postnatal wards in one night. Seeing that the labour ward was full the midwife asked for extra help from the matron who told her there was no one to help her out because of staff shortages.

This is in agreement with the study by Davies (2011) that the hospital staff in Malawi reported that they suffered stress and fatigue from a relentless workload. These have increased over the past two to three years since government policy began to drive for all women to give birth in health facilities. However, the supply of hospital beds, drugs and staff has not kept pace. Davies (2011) further stated that there are insufficient midwives in Malawi. The health care staff members, therefore, work long hours and have short resting periods. It has also been observed that maternal and newborn health staff are overworked and underpaid. In addition, the death of mothers and babies is a highly emotional encounter. These led to allegations that midwives are rude and negligent whereas the current working environment places a heavy burden on the midwives. The health of a midwife is never considered by policy makers and the general public (Byaruhanga, 2012).

Chimwaza et al. (2014) supported the fact that midwives were overworked when

asserting that midwives were expected to attend to a number of wards at the same time. That is, one midwife was left to attend to ANC, OPD and the labour wards. They further reported another incidence where a midwife experienced burnout due to excessive workload. This workload resulted from receiving extra women with gynaecological complications from a nearby hospital that was under reconstruction. In the same study, another midwife was left alone to attend to the labour and postnatal wards.

4.4 Strategies to Enhance the Adaptations of Midwives after Maternal Deaths

Based on the findings, the strategies to enhance adaptations of midwives after maternal deaths are shown in figure 4.1.

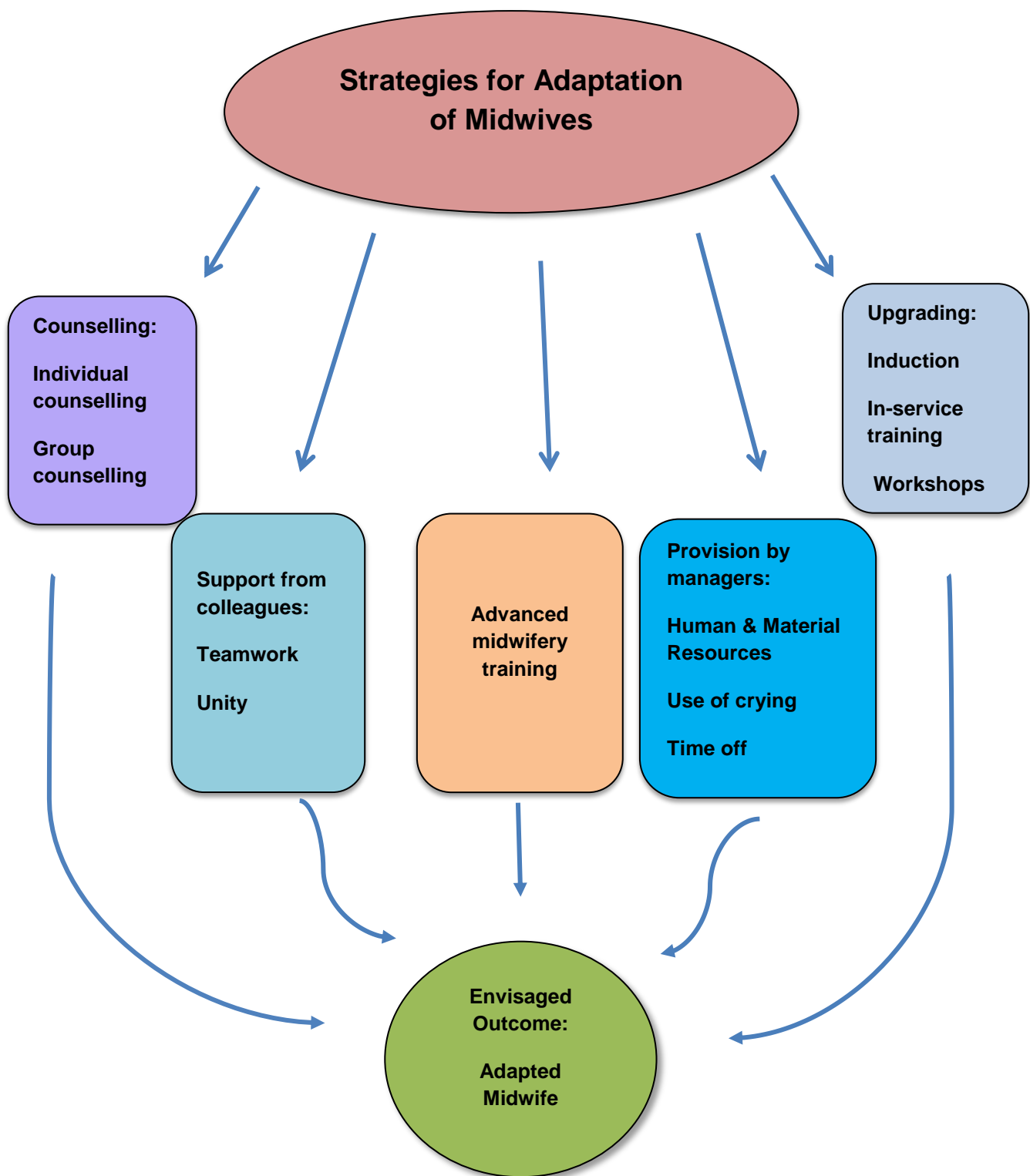


Figure 4.1: Strategies to enhance adaptation of midwives after maternal deaths

The strategies shown in figure 4.1 are counselling, support from colleagues, advanced midwifery training, provision by managers, and upgrading.

4.4.1 Counseling

- ❖ **Objective:** To enhance the adaptation mechanisms of midwives after maternal death

Individual and Group Counselling

Individual and group counselling should be provided to the midwives after maternal death to enhance adaptation.

- **Individual counselling**

Individual counselling should be arranged for midwives after maternal death to help them deal with the situation.

Professional counselling services for midwives will lessen emotional, psychological and physical distress experienced by midwives in this study.

Roy's adaptation theory indicates that if the outcome of the coping mechanism of the midwife is negative, the midwife concerned should be referred for professional counselling.

- **Group counselling**

There should be an organised group counselling where the affected midwives can meet with those who have been in the midwifery practice for a longer period to share their experiences and how they dealt with maternal death. The counselling could help the midwives to realise that they are not alone in these situations. The Interdependence mode of the Roy's adaptation theory states that the midwives' social support system is of vital importance in helping them to adapt. The midwives should collaborate with their colleagues to enable them to adapt after maternal death.

According to the self- concept group identity mode of the Roy's adaptation theory, the midwives should believe in themselves and have confidence about the service that they provide.

4.4.2 Support from colleagues

- ❖ **Objective:** To enhance support among midwives in maternity units after maternal death.
- Team work and unity among midwives in maternity units is essential as it will reduce distress and enhance adaptation.
- The midwives need support during maternal deaths, especially from their colleagues. Without this type of support, the midwives will adapt poorly to maternal deaths, hence it is important for the maternity units' managers to promote unity amongst midwives in their units.
- The role function mode of Roy's adaptation theory indicates that every individual should realise that he or she cannot exist alone in the universe. Midwives need each other to enable them to render proper midwifery services to pregnant women.

4.4.3 Advanced Midwifery Training

- ❖ **Objective:** To capacitate midwives to reduce and prevent maternal deaths.
- Advanced midwifery training could reduce the occurrence of maternal deaths and consequently reduce its effects on the midwives since the midwives will be able to handle complicated maternal cases as suggested by the midwives in this study.
- This training could keep up with the demands of the tertiary hospital particularly that most of the pregnant women who are admitted in this institution are high risk.

4.4.4 Provision by Managers

- ❖ **Objective:** To alleviate distress and sub-standard midwifery practice.
- Management should provide additional midwives and advanced midwives in the maternity units of the tertiary hospital for prevention of maternal death, thereby minimising distress on the midwives.

- There should also be provision of equipment to enable midwives to effectively execute their role such as the monitoring of pregnant women that could reduce the occurrence of maternal death thereby minimising its effect on the midwives.

4.4.5 Upgrading of the Midwives

- ❖ **Objectives:** To empower midwives in the reduction of maternal deaths and also to adapt in case such deaths occur.
- Upgrade midwives during induction of the newly-employed and newly qualified midwives to make them to be at par with the current midwifery practices that reduce the occurrence of maternal deaths and consequently reducing the effects of maternal deaths on midwives and promoting their well-being as indicated on the sixth domain of the national core standards.
- Conducting in-service education and workshops to improve the standard of midwifery care, thereby reducing maternal deaths in maternity units could assist midwives with knowledge and skills that will help them manage maternal conditions well.

4.4.6: Use of crying

- ❖ **Objectives:** To lessen emotions brought by maternal deaths.
- Maternity units' managers can reinforce crying as a coping strategy after encountering maternal deaths as a way of trying to bring the midwives emotions down if they wish to do so without victimising them.
- This will also give the units managers the opportunity to assess the extent to which the maternal death has affected the midwives and to determine the level of support they need.

4.4.7: Time off

- ❖ **Objectives:** To promote better working conditions for midwives.

- Instituting time off after maternal deaths could minimise the effects of maternal deaths on the midwives and the midwives will have time to gather themselves together. However, thorough assessments should be done before instituting this strategy.

4.4.8 Outcome: Envisaged adapted midwife

The outcome of the strategies is the envisaged adapted midwife.

4.5 Conclusion

This chapter discussed the results of the study and the strategies to assist midwives to adapt after maternal deaths. The results revealed that midwives had problems of adaptation after maternal death and strategies such as counselling, advanced midwifery training, team work, support and upgrading of midwives have been developed. Chapter 5 will incorporate the conclusions, limitations and the recommendations of the study.

CHAPTER 5

SUMMARY, LIMITATIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter discusses the summary of the study, the limitations and recommendations. The summary is discussed in alignment with the objectives and the achievement of the objectives based on the findings are also outlined.

5.2 Summary of the Study Findings

5.2.1 Aim of the Study

The aim of the study was to determine the adaptations of midwives after maternal deaths at a tertiary hospital complex in Limpopo Province.

5.2.2 Objectives of the Study

The objectives of the study were to:

- Explore the experiences of midwives after maternal deaths at a tertiary hospital complex in Limpopo Province.

The objective was achieved as the participants were able to share their experiences after maternal death. These experiences were inability to cope, limited support from management, midwives experienced distress and sub-standard midwifery interventions.

- Describe the adaptations of midwives after maternal deaths at a tertiary hospital complex in Limpopo Province.

This objective was achieved as the participants shared that they were adapting poorly after maternal deaths in maternity units.

- Develop strategies that will assist midwives to adapt after maternal death.

The strategies developed that could help midwives adapt after maternal deaths were outlined in chapter 4. These strategies focused on counselling, team work, advanced midwifery training, support, upgrading of midwives, use of crying and time off after maternal death. The outcome of the strategies was the envisaged adapted midwife.

5.3 Limitations of the Study

The study was limited to midwives working in the maternity units of the Polokwane/Mankweng Tertiary Hospital Complex. Therefore, the results cannot not be generalised to other hospitals in South Africa. However, the research methodology can be used for midwives in other hospitals' maternity units.

5.4 Recommendations

The recommendations of this study were guided by the themes which emerged from the semi-structured interviews with the midwives namely, poor adaptation mechanisms, limited support from management, midwives experienced distress and sub-standard midwifery interventions.

5.4.1 Department of Health

- Strengthening of professional counselling and debriefing for midwives who experienced maternal death.
- Employment of additional midwives and advanced midwives for tertiary

hospital complex.

5.4.2 Support from Management

- After the occurrence of maternal death, the manager should have a debriefing session with the midwives involved and assess the severity of psychological impact on the midwives.
- Employee Assistant Program should be strengthened to assist the affected midwives.

5.4.3 Education and Training Section

- Capacity building for midwives regarding incident and report writing.
- The training of midwives on Essential Steps in Management of Obstetric Emergency (ESMOE) should be strengthened.
- Evaluation of the effects of the capacity building workshops should be conducted.
- The criteria for referral of pregnant women to the tertiary hospital complex should be adhered to.

5.4.4 The midwives

- The midwives should avail themselves for counselling in case they have experienced maternal deaths.

5.5 Conclusion

Chapter 5 outlined the summary of the study, limitations and recommendations. The recommendations were focused on the Department of Health, support from management, education and training with the hope of improving the adaptation of

midwives after maternal deaths.

REFERENCES

- Allen, J. & Chudley, J. 2012. *Smashing UX design: Foundation for Designing Online User Experiences*. Chichester: John Wiley & Sons, Ltd.
- Alligood, M.R. 2014. *Nursing Theorists and Their Work*. 8th edition. Missouri: Mosby Elsevier.
- Andress, A.A. 2009. *Saunders Medical Office Management*. 3rd edition. Missouri: Elsevier.
- B-Lynch, C., Keith, L.G., Lalonde, A.B. & Karoshi, M. 2006. *The Textbook of Postpartum Hemorrhage: A Comprehensive Guide to Evaluation, Management and Surgical Intervention*. India: FOGSI.
- Babbie, E. 2013. *The Practice of Social Research*. Wadsworth: Cengage Learning.
- Babbie, E. 2015. *The Practice of Social Research*. 14th edition. Boston: Cengage Learning.
- Babbie, E. & Mouton, J. 2009. *The Practice of Social Research*. 9th edition. South Africa: Oxford University press.
- Block, J. 2007. *Published: The Painful Truth About Childbirth and Modern Maternity Care*. USA: Jennifer Block.
- Botma, Y., Greeff, M., Mulaudzi, F.M & Wright, S.C.D. 2010. *Research in Health Sciences*. Cape Town: Pearson Education.
- Burnard, P. 2005. *Counselling for Health Professionals*. 4th edition. London: Phillip Burnard.
- Byaruhanga, B.E. 2012. *Midwives Unfairly Blamed for Maternal Deaths*. GHD online, 28 July. <http://www.ghdonline.org/nursing/discussion/midwives-unfairly-blamed-for-maternal-deaths/> accessed 05June 20135.
- Castillo, J.J. 2009. Research population. Available from: <https://explorable.com/population-sampling> accesses 08 July 2013.

- Chimwaza, W., Chipeta, E., Ngwira, A., Kamwendo, F., Taulo, F., Bradley, S. & McAuliffe, E. 2014. *What Makes Staff Consider Leaving the Health Service in Malawi?* 10.1186/1478-4491-12-17, March 2014. [Online]. Available from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3974437/>.
- Churchill, G.A. & Iacobucci, D. 2010. *Marketing Research: Methodological Foundations*. USA: South-Western Cengage Learning.
- Cohen, L., Manion, L. & Morrison, K. 2011. *Research Methods in Education*. 7th edition. Oxon: Routledge.
- Cormier, S., Nurius, P.S. & Osborn, C.J. 2013. *Interviewing and Change Strategies for Helpers*. 7th edition. USA: Brooks/Cole Cengage Learning.
- Creswell, J.W. 2009. *Research design: Qualitative, Quantitative, and Mixed Approaches*. California: SAGE Publications.
- Daftary, S.N. & Chakravarti, S. 2005. *Manual of Obstetrics*. 2nd edition. India: Elsevier.
- Davies, R. 2011. *Midwife Burnout Poses Threat to Reducing Maternal Mortality*. UK: Guardian News & Media Limited.
- De Leo, D., Cimitan, A., Dyregrov, K., Grad, O. & Andriessen, K. 2014. *Bereavement After Traumatic Death: Helping the Survivors*. USA: Hogrefe Publishing.
- de Vos, A.S., Strydom, H., Fouché, C.B. & Delpont, C.S.L. 2005. *Research at Grass Roots : For the Social Sciences and Human Service Professions*. 3rd edition. Pretoria: Van Schaik Publishers.
- de Vos, A.S., Strydom, H., Fouché, C.B. & Delpont, C.S.L. 2012. *Research at Grass Roots : For the Social Sciences and Human Service Professions*. Pretoria: Van Schaik Publishers.
- Department of Health, 2007. *Guidelines for Maternity Care in South Africa: A Manual for Clinics, Community Health Centres and District Hospitals*. Pretoria: Government Printers.

- Department of Health, 2011. *National Core Standards for Health Establishments in South Africa*. Pretoria: Government Printers.
- Department of Health, 2012a. *Saving Mothers 2008-2010: Fifth Report on the Confidential Inquiry into Maternal Deaths in South Africa*. Pretoria: Government Printers.
- Department of Health, 2012b. *Regulations Relating to Categories of Hospitals: Government notices, NO.R. 185*. Pretoria: Government Printers.
- Dhaar, G.M. & Robbani, I. 2008. *Foundations of Community Medicine*. 2nd edition. India: Elsevier.
- Ehiri, J. 2009. *Maternal and Child Health: Global Challenges, Programs and Policies*. New York: Springer.
- Evans, G. 2015. *Series Of Mistakes Led to Death of Young Mum and Her Baby – Coroner*. Available from: <http://tvnz.co.nz/national-news/series-mistakes-led-death-young-mum-and-her-baby-coroner-6226397> accessed 08 June 2015.
- Fenton, B. & Mazulewicz, J. 2008. *Trustworthiness*. <http://www.omniverse.com/research/trustworthiness.htm> accessed 25 January 2013.
- Flick, U. 2006. *An Introduction to Qualitative Research*. 3rd edition. London: SAGE Publications Ltd.
- Freeman, S.M. & Freeman, A. 2005. *Cognitive Behaviour Therapy in Nursing Practice*. New York: Springer Publishing Company, Inc.
- Gerrish, K. & Lacey, A. 2006. *The Research Process in Nursing*. 1st edition. South Africa: Blackwell Publishing Ltd.
- Goldberg, J. 2014. *Anxiety and Panic Disorder. Health Centre: Support Groups*. Available from: www.webmd.com/anxiety-panic/anxiety-support-group accessed 14 April 2015.
- Gray, T. & Hunt, P. 2013. *Maternal Mortality, Human Rights and Accountability*. USA: Routledge.

- Guest, G., Namey, E.E. & Mitchell, M.L. 2013. *Collecting Research Data: A Field Manual for Applied Research*. Los Angeles: SAGE Publications.
- Gyawali, K., Paneru, D.P., Jnawali, B. & Jnawali, K. 2013. Knowledge and Practices on Maternal Health Care Among Mothers: A Cross Sectional Study From Rural Areas of Mid-Western Development Region Nepal. *Journal of the Scientific Society*, 1(40): 9-13.
- Hellriegel, D. & Slocum, J. 2010. *Organizational Behavior*. USA: Cengage Learning, Inc.
- Hennink, M.M. 2007. *International Focus Group Research: A Handbook for the Health and Social Sciences*. New York: Cambridge University Press.
- Hennink, M., Hutter, I. & Bailey, A. 2011. *Qualitative Research Methods*. London: SAGE Publications Ltd.
- Hughes, R., Kinder, A. & Cooper, C.L. 2012. *International Handbook of Workplace Trauma Support*. UK: John Wiley & Sons Ltd.
- Hynes, J.E. 2009. Do not be Intimidated by Incident Reports. *Nursing Center*, 5(2): 4-5.
- Johnson, B & Christensen, L. 2012. *Educational Research: Quantitative, Qualitative, and Mixed Approaches*. 4th edition. UK: SAGE Publications Ltd.
- Kadushin, A. & Kadushin, G. 2013. *The Social Work Interview: A guide for Human Service Professionals*. 4th edition. New York: Columbia University Press,
- Kenworthy, D. & Kirkham, M. 2011. *Midwives Coping with Loss and Grief: Stillbirth, Professional and Personal Losses*. London: Radcliffe Publishing Ltd.
- Kunthea, M. 2009. *High Maternal Mortality Rate Blamed on Lack of Outreach*. Cambodia: The Phnom Penh Post.
- LaFranchi, H. 2012. *Half as Many Women Die During Pregnancy, Childbirth as in 1990*. USA: Christian Science Monitor.

- Laurence, J. 2012. *Doubling of Maternal Death Rate Blamed at Shortage of Midwives*. The Independent, 30 April 2012. <http://www.independent.co.uk/life-style/health-and-families/health-news/doubling-of-maternal-death-rate-blamed-on-shortage-of-midwives-7689172.html>.
- Levy, A. 2012. *Inquest Told Midwife Who 'Brainwashed' Woman into Having Home Birth Made a Series of Errors that Led to Mother's Death*. Mail Online, 06 September. Available from: <http://www.dailymail.co.uk/health/article-2198725/Claire-Teague-death-Wife-bleeds-death-midwife-Rosie-Kacary-persuaded-homebirth.html>.
- Makiwane, M., Desmond, C., Rithter, L. & Udjo, E. 2006. *Is the Child Support Grant Associated with an Increase in Teenage Fertility in South Africa? Evidence from National Surveys and Administrative Data*. Available from: [file:///users/thato/Downloads/4481 MakiwaneChildsupportgrant.pdf](file:///users/thato/Downloads/4481%20MakiwaneChildsupportgrant.pdf). accessed 21 July 2014.
- Mander, R. 2001a. The Midwife's Ultimate Paradox: A UK-Based Study of the Death of a Mother. *Midwifery*, 17(4): 248-258, December 2001. [Online]. Available from: <http://www.idealibrary.com>
- Mander, R. 2001b. *Supportive Care and Midwifery*. London: Blackwell Science Ltd.
- Marshall, J. & Raynor, M. 2014. *Myles Textbook for Midwives*. Churchill Livingstone: Elsevier.
- Matt, V. 2014. *Sister Callista Roy's Adaptation Theory of Nursing*. Available from: <http://nurseslabs.com/sister-callista-roys-adaptation-theory/> accessed 05 June 2015.
- Mbizvo, M.T. & Say, L. 2012. Global Progress and Potentially Effective Policy Responses to Reduce Maternal Mortality. *International Journal of Gynaecology and Obstetrics*, 119 (2012): S9-S12.

- McCready, S. & Russell, R. 2009. A National Survey of Support and Counselling After Maternal Death. *US National Library of Medicine: National Institutes of Health*, 64(11):1211-7.
- Meleis, A.I. 2012. *Theoretical Nursing: Development & Progress*. 5th edition. Philadelphia: Lippincott Williams & Wilkins.
- Michael, J. 2014. *Five Stages of Emotional Adaptation*. UK: Demand Media.
- Muliira, R.S. & Buzuidenhout, M.C. 2015. Occupational Exposure to Maternal Death: Psychological Outcomes and Coping Methods used by Midwives Working in Rural Areas. *Midwifery*, 31(2015): 184-190.
- Muliira, R.S., Sendikadiwa, V.B. & Lwasampijja, F. 2014. Predictors of death anxiety among midwives who have experienced maternal death situations at work. *Maternal and Child Health Journal*, 18(6): 1293-1552.
- Mitchell, M.L & Jolley, J.M. 2013. *Research Design Explained*. Wadsworth: Cengage learning.
- Mohapi, M.C. & Basu, D. 2012. PHC Re-Engineering May Relieve Overburdened Tertiary Hospitals in South Africa. *The South African Medical Journal*, 102(2):79-80.
- Moosa, S. 2011. *Training More Midwives Will Cut Maternal Deaths*. Available from: <https://sites.google.com/a/drmoosa.co.za/jozi/resources/Posts-ALL/4-April-2012/April-2012/trainingmoremidwiveswillcutmaternaldeaths-report> accessed 05 June 2015.
- Moule, P. & Goodman, M. 2009. *Nursing Research: An Introduction*. London: SAGE Publications Ltd.
- Munden, J. 2006. *Professional Guide to Assessment*. USA: Lippincott Williams & Wilkins.
- Nour, N.M. 2008. An Introduction to Maternal Mortality. *Reviews in Obstetrics and Gynaecology*, 1(2): 77-81.

- Ntuli, S.T. 2012. *Evaluation of Maternal Mortality: Limpopo Initiatives*. Polokwane: Limpopo Government Printers.
- Ntuli, S.T. & Ogundanjo, G.A. 2014. Midwifery Workforce Profile in Limpopo Province Referral Hospitals. *African Journal of Primary Health Care & Family Medicine*, 6(1). 25 April 2014. [Online]. Available from: <http://www.scielo.org.za/pdf/phcfm/v6n1/09.pdf>.
- Oermann, M.H. & Hays, J.C. 2010. *Writing for Publication in Nursing*. 2nd edition. New York: Springer Publishing Company, LLC.
- Parker, M.E. & Smith, M.C. 2010. *Nursing Theories and Nursing Practice*. 3rd edition. Philadelphia: F.A Davis Company.
- Perry, S.E, Hockenberry, M.J, Lowdermilk, D.L. & Wilson, D. 2014. *Maternal Child Nursing Care*. 5th edition. Missouri: Mosby Elsevier.
- Phillips, R.L. & McConnell, C.R. 2005. *The Effective Corrections Manager: Correctional Supervision for the Future*. 2nd edition. Sudbury: Jones & Barlett Publishers.
- Pitney, W.A & Parker, J. 2009. *Qualitative Research Physical Activity and the Health Professions*. USA: William A, Pitney and Jenny Parker.
- Polit, D.F. & Beck, C.T. 2010. *Essentials of Nursing Research: Appraising Evidence for Nursing Practice*. Philadelphia: Lippincott Williams & Wilkins.
- Polit, D.F. & Beck, C.T. 2012. *Nursing Research: Generating and Assessing Evidence for Nursing Practice*. Philadelphia: Lippincott Williams & Wilkins.
- Raynor, M.D., Marshall, J.E. & Sullivan, A. 2005. *Decision Making in Midwifery Practice*. Churchill Livingstone: Elsevier.
- Rubin, A. & Bellamy, J. 2012. *Practitioner's Guide to Using Research for Evidence-Based Practice*. 2nd edition. New Jersey: John Wiley & Sons, Inc.
- Schabracq, M.J., Winnubst, J.A.M. & Cooper, C.L. 2003. *The Handbook of Work and Health Psychology*. 2nd edition. England: John Wiley & Sons, Ltd.

- Shaffer, D.R. & Kipp, K. 2010. *Developmental Psychology: Childhood and Adolescence*. 8th edition. Wadsworth: Cengage learning.
- Sharan, B.M. 2009. *Qualitative Research: A Guide to Design and Implementation*. San Francisco: Jossey-Bass.
- Sherman, F. 2013. *Roy Adaptation Theory*. Demand media, Inc. http://www.ehow.com/about_6618932_roy-adaptation-theory.html accessed 16 March 2003.
- Shuttleworth, M. 2009. *Research Bias*. [n.p]. Available from: <https://explorable.com/research-bias>. Accessed 01 June 2015.
- Sitzman, K. & Eichelberger, L.S. 2011. *Understanding the Work of Nurse Theories: A Creative Beginning*. 2nd Edition. Sudbury: Jones & Bartlett publishers.
- Skolnik, R. 2008. *Essentials of Global Health*. Sudbury: Jones & Bartlett publishers.
- Smith, A. & Dixon, A. 2008. *Health Care Professionals' Views About Safety in Maternity Services*. UK: King's funds.
- South African Nursing Council. 2005. Nursing Act, 2005. Act No. 33 of 2005. Pretoria: Government Printers.
- Tappen, R.M. 2011. *Advanced Nursing Research: From Theory to Practice*. Sudbury: Jones & Bartlett learning.
- Torrey, T. 2011. *Levels of Medical Care: Primary, Secondary, Tertiary and Quaternary Care*. About.com. <http://women.about.com/od/moreprovidersbeyonddocs/a/Stages-Of-Care-Primary-Secondary-Tertiary-And-Quaternary-Care.htm> accessed 02 September 2013.
- Turnock, B.T. 2012. *Public Health: What is it and How it Works*. Burlington: Jones & Bartlett Learning.
- Tuteur, A. 2013. *Midwives Responsible for Nearly 1/3 of UK Direct Maternal Deaths*. UK: The sceptical OB. <http://www.skepticalob.com/2011/07/midwives-responsible-for-nearly-13-0f-html> accessed 24 January 2013.

- Vingerhoets, J.J.M. & Cornelius, R.R. 2012. *Adult Crying: A Biopsychosocial Approach*. Hove: Brunner-Routledge.
- UCLA. 2016. *UCLA Dual Diagnosis Providers*. LA: UCLA Dual Diagnosis Program. Available from: https://www.semel.ucla.edu/dual-diagnosis-program/Our_Team accessed 24 February 2016.
- UNPF. 2010. Emerging Issues of Health and Mortality in the Asian and Pacific Region. *An Asia Population Studies Series No. 163*. Thailand: United Nations publications.
- Warsh, C.K. 2010. *Prescribed Norms: Women and Health in Canada and United States Since 1800*. Canada: University of Toronto Press Incorporated.
- White, R.C. 2014. *Global Case Studies in Maternal and Child Health*. Burlington: Jones and Bartlet Learning.
- Wilson, J. 2010. *Essentials of Business Research: A Guide to Doing Your Research Project*. London: SAGE Publications.
- World Bank. 2006. *World Development Reported: Equity and Development*. Washington DC: The International Bank for Reconstruction and development/The World Bank.
- World Health Organisation. 2012. *Media Centre: Maternal Mortality*. <http://www.who.int/mediacentre/factsheets/fs348/en/index.html/> accessed 09 February 2013.
- World Health Organisation. 2013a. *Health Topics: Midwifery*. <http://www.who.int/topics/midwifery/en/> accessed 24 January 2013.
- World Health Organisation. 2013b. *Maternal Health Epidemiology*. http://www.who.int/maternal_child_adolescent/epidemiology/maternal/en/index.html accessed 17 March 2013.
- World Health Organisation. 2014. *Media Centre: Investment in Midwifery Can Save Millions of Lives of Women and Newborns*.

www.who.int/mediacentre/news/releases/2014/investment-midwifery/en/
accessed 14 April 2015.

World Health Organisation. 2015. *Health Statistics and Health Information Systems*.
www.who.int/healthinfo/statistics/indmaternalmortality/en/ Accessed 01 June
2015.

WHO, UNICEF, UNFPA & the World Bank. 2010. *Trends in Maternal Mortality: 1990-
2010*. Available from:
[http://www.unfpa.org/webdav/site/global/shared/documents/publications/201
2/Trends_in_maternal_mortality_A4-1.pdf](http://www.unfpa.org/webdav/site/global/shared/documents/publications/2012/Trends_in_maternal_mortality_A4-1.pdf) accessed 20 June 2013.


Zikmund, W.G. & Babin, B.J. 2007. *Essentials of Marketing Research*. 5th edition.
USA: South Western Cengage Learning.

Zikmund, W.G. & Babin, B.J. 2010. *Essentials of Marketing Research*. 9th edition.
USA: South Western Cengage Learning.

APPENDIX 1

APPROVAL LETTER FROM MEDUNSA RESEARCH AND ETHICS COMMITTEE

UNIVERSITY OF LIMPOPO
Medunsa Campus



MEDUNSA RESEARCH & ETHICS COMMITTEE
CLEARANCE CERTIFICATE

MEETING: 09/2013

PROJECT NUMBER: MREC/HS/316/2013: PG

PROJECT:

Title: The adaptations of midwives after maternal deaths at a tertiary hospital complex in Limpopo Province


Researcher: Mrs C Ngoatle
Supervisor: Prof ME Lekhuleni
Co-supervisor: Mrs MK Thopola
Department: Nursing & Human Nutrition
School: Health Sciences
Degree: Master of Nursing Science

DECISION OF THE COMMITTEE:

MREC approved the project.

DATE: 07 November 2013

Pp Mbrabuni
PROF GA OGUNBANJO
CHAIRPERSON MREC



UNIVERSITY OF LIMPOPO
Medunsa Campus

2013 -11- 07

MEDUNSA RESEARCH ETHICS COMMITTEE
MREC CHAIRPERSON


The Medunsa Research Ethics Committee (MREC) for Health Research is registered with the US Department of Health and Human Services as an International Organisation (IORG0004319), as an Institutional Review Board (IRB00005122), and functions under a Federal Wide Assurance (FWA00009419)
Expiry date: 11 October 2016

Note:

i) Should any departure be contemplated from the research procedure as approved, the researcher(s) must re-submit the protocol to the committee.

ii) The budget for the research will be considered separately from the protocol. PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES.

Finding Solutions for Africa



APPENDIX 2

LETTER REQUESTING PERMISSION TO CONDUCT THE STUDY

University of Limpopo
School of Health sciences
Department of Nursing
Private Bag X1106
Sovenga
0727
2013

The CEO

Polokwane Hospital Campus

I (UL student) hereby request to be granted a permission to collect research information on the following topic: The adaptations of midwives after maternal deaths at a tertiary hospitals complex in Limpopo Province.

Information will be collected from affected midwives in the maternity units (Postnatal wards, ANC wards, Labor wards, obstetric theatre, maternity high care & ANC clinic) with the following characteristics:

- A registered midwife working in the maternity unit.
- Personally experienced a maternal death directly or indirectly.


The study has been approved by the University of Limpopo and the Department of Health and Social Development. The study will provide information on the experiences, feelings, views and fears of the affected midwives after maternal deaths in the maternity units at Mankweng Hospital Campus.

Researcher's Signature:Date:2013

Cell number:

APPENDIX 3

APPROVAL LETTER FROM LIMPOPO DEPARTMENT OF HEALTH

 **LIMPOPO**
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HEALTH

Enquiries: Latif Shamila Ref:4/2/2

Ngoatle, C
University of Limpopo
Private Bag X1106
Sovenga
0727

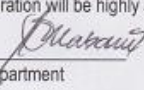
Greetings,

Re: The adaptations of midwives after maternal deaths at a tertiary hospital complex in Limpopo Province.

The above matter refers.

1. Permission to conduct the above mentioned study is hereby granted.
2. Kindly be informed that:-
 - Further arrangement should be made with the targeted institutions.
 - In the course of your study there should be no action that disrupts the services.
 - After completion of the study, a copy should be submitted to the Department to serve as a resource.
 - The researcher should be prepared to assist in the interpretation and implementation of the study recommendation where possible.

Your cooperation will be highly appreciated.


Head of Department Date 03/03/2014

18 College Street, Polokwane, 0700, Private Bag x9302, POLOLKWANE, 0700
Tel: (015) 293 6000, Fax: (015) 293 6211/20 Website: <http://www.limpopo.gov.za>

The heartland of Southern Africa – development is about people

APPENDIX 4

APPROVAL LETTER FROM MANKWENG HOSPITAL CAMPUS



LIMPOPO

PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HEALTH

MANKWENG HOSPITAL

ENQUIRIES: LEHLOKOA MJ

TELEPHONE No: 1044/1014

REFERENCE No: SS/3/4

DATE: 15-05-2014

Ngoatle C

University of Limpopo

Private Bag X1106

Sovenga

0727

Department Of Health
Mankweng Hospital
Receiver: <i>Mosha</i>
2014 -05- 15
Office No. 106
Tel: 015 286 1016
LIMPOPO PROVINCE

PERMISSION TO CONDUCT RESEARCH AT MANKWENG HOSPITAL

1. The above matter has reference.
2. Your request for permission to conduct a research is approved.
3. The institution has no objection provided during your stay in the institution does not disrupt service delivery.

Your cooperation in this regard would be highly appreciated

CEO

DATE

APPENDIX 5

ETHICAL CLEARANCE FROM POLOKWANE/MANKWENG HOSPITAL COMPLEX



LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

**ETHICS COMMITTEE
CLEARANCE CERTIFICATE
UNIVERSITY OF LIMPOPO
POLOKWANE MANKWENG HOSPITAL
COMPLEX**



PROJECT NUMBER : PMREC – 78/2014

TITLE : The adaptations of midwives after maternal deaths at a tertiary hospital complex in Limpopo province

RESEARCHER : Ms C Ngoatle

ALL PARTICIPANTS : N/A

Supervisor : Prof Lekhuleni ME

DATE CONSIDERED : 06 May 2014

DECISION OF COMMITTEE

- Recommended for approval

DATE : 08 May 2014

PROF A J MBOKAZI
Chairperson of Polokwane Mankweng
Hospital Complex Ethics Committee

NOTE: *The budget for research has to be considered separately. Ethics committee is not providing any funds for projects.*

APPENDIX 7

INTERVIEW GUIDE

Introduction

- The researcher will greet the participant.
- Then introduces herself.
- Explain her purpose of coming to the institution.
- Outline the purpose, duration, ethical considerations and the significance of the study to the participant and what is expected of the participant during the interview.
- Outline the inclusion criteria.
- Explain anonymity and use of alphabets instead of participants 'names.
- The purpose of the voice recorder will also be explained to the participant.
- The participant will have to sign a consent form if they agree to participate in the study.

The interview questions

Central Question

Can you please share with me your experience of maternal death?

Probing questions

- How do you adapt after maternal death?
- How do you deal with that experience?
- How did you react to the maternal death?
- What effects did maternal death have on you and other midwives?
- What is the cause of these maternal deaths?
- Do you think your managers support you enough to deal with maternal death? If yes/no, elaborate.
- Have you ever blamed yourself for maternal death? Provide reasons for your response.

- Are there measures in place to help you deal with the condition? If yes explain?
- Is there any kind of counselling that you received after you have had maternal death? Please share with me the type of counselling.
- Do you think you need counselling after the loss? Provide reasons for your response.
- If I was to do a programme to help midwives adapt after maternal death, what would you like me to include in the programme?

APPENDIX 8

EXAMPLE OF A CONDUCTED INTERVIEW

Interviewer: Ngoatle Charity Interview number: 09

Interviewee: I

Interview date: 20/02/2015

Interviewer: Researcher

Interviewee: Participant

Researcher: Evening

Participantl: Evening

Researcher: My name is Charity Ngoatle; I am a masters' student from the University of Limpopo doing Master of Nursing Science. I am doing research about the adaptation of midwives after maternal death. My purpose for coming here is that I am requiring information about how midwives adapt after they have had a maternal death and also to share with me about their experiences of maternal death. The duration of this interview will be 20 to 30 minutes depending on how far we can go. I also have a permission to conduct this research from Polokwane/Mankweng Hospital Complex Ethics Committee, the University of Limpopo Ethics Committee, and the Limpopo Department of Health. I hope this study will help alleviate the effects of maternal death on the midwives. For you to participate in this study you should have had a maternal death directly or indirectly. Indirectly meaning that you might not have been involved with the maternal death but then you were present when the maternal death happened. I am also going to use a voice recorder because I cannot

capture everything at the same time, and also this is to serve as a true record that I did not fake the information you gave me. I am not going to address you by your name but I am going to give you a letter like I am going to say you are 'I' to protect your identity and also for privacy purposes. Should I require further clarity after this interview I can come again and interview you provided you have given me consent (participant says ok you can come). If you then agree to participate in this study you will have to sign for me a consent form.

Participantl: Ok, no problem I will sign.

Researcher: Ok I. Can you share with me your experience of maternal death?

Participantl: One of the maternal deaths that I cannot forget it happened while we were in theatre. They have extracted the baby and then after that I showed the mother the baby and we were laughing. While I was busy with the baby, the mother just collapsed and then the operating team tried to resuscitate her and but they failed. That is the one which I cannot forget but I have experienced many maternal death of which most of them happened in high care. With that one I can still remember even the face of that woman.

Researcher: Was this woman showing any sign of distress?

Participantl: Nothing because she was just booked for elective Caesar and then just after the baby was extracted the just collapsed and I do not know what happened.

Researcher: If you still remember, what was the problem with that woman?

Participantl: The woman was a previous Caesar X3 with Grande multi-parity. I do not remember the age but it was above 35 years and the parity also I do not remember it well. She was booked for elective Caesar because she wanted to BTL (bilateral tubal ligation). That was the only reason for booking her, she wanted BTL. So, when you look at her she was physically well and not showing any sign of any illness.

She was not having any elevated blood pressure, she was ok.

Researcher: How did you react to that maternal death?

Participantl: I was so sad. I even wanted to cry because when I looked at that baby knowing that that baby would not remember the face of the mother it was so painful. It was so painful. I did not cry literally but inside I was crying.

Researcher: Remember after a maternal death life still continue, you still have to continue nursing other women, what are the strategies that you use for you to cope so that you can continue nursing other women efficiently?

Participantl: Like in the ward we just share with other sisters or other midwives about what I have experienced. I have seen one two three four and then we just take it from there.

Researcher: Personally do you have any coping mechanism that you use?

Participantl: Myself eish, I cannot tell that I do this or that but sometimes I just pray to God inwardly telling Him: 'God just help us so that we cannot have any other maternal death in the ward' because it is so painful. We also support each other as midwives.

Researcher: So, what kind of support as midwives do you give each other?

Participantl: Like some of the midwives it is long that they have been in practice and have experience of working at the maternity, so if they can see that you are so sad they just sit with you and then talk to you, encouraging you to accept what had happened. They will tell me that when we are nursing a woman is either the woman will recover from that illness, get well and go home or the woman dies. So, you have to accept and then go on nursing other women.

Researcher: How did you deal with that maternal death?

Participantl: I was so shocked and it was painful because she was like a sister to me especially that she was of my age group. So, I did not have a coping mechanism that I used properly. Should we have gotten support, the professional support maybe it was going to be better. But we just talk, talk and talk. Some of the sisters who were there in labour ward for sometimes they just maybe hug us. They can give you a hug and then talk to you.

Researcher: How did this maternal death affect you and the midwives in the unit?

Participantl: We were so shocked. Yes, I was so shocked because I was not expecting death from that woman because she was here for caesarean section only. It was so painful and I was shocked.

Researcher: How was the atmosphere in your unit?

Participantl: The atmosphere was sad. I remember when I took the baby to neonatal there was one sister there who saw the baby. When I gave the report that the baby brought in neonatal because the mother has demised she then she looked at the surname and recalled the mother. She then came to us and found me while I was still sad. She said: 'ah I know this person'. She even entered into the theatre because that woman was still there. She also was depressed.

Researcher: Are the two somehow related?

Participantl: She said they grew up together. She knew her while she was still young.

Researcher: Ok. What are the causes of these maternal deaths in your unit?

Participantl: Most of them because our hospital is a referral hospital, they are from other hospitals and when they come here some of them because the referring obstetricians did refer them late when the condition is worse that we cannot even help them. Some of them while we are still taking them to the bed you can see that this person

is gasping, there is no one there. The other one the other one passed on while in theatre. So, it is related to anaesthesia. So, most of them they are for elevated blood pressure – eclampsia, what I have seen most of them are due to eclampsia and the other ones are HIV/AIDS related.

Researcher: If you were to classify these maternal deaths, are they woman related or medical staff related?

Participantl: I can say it is 50/50. What I have observed mostly with women diagnosed eclampsia is that they are unbooked. It is like these women just go to the clinic when they feel that they are not alright. When their blood pressure is checked you may find that it is 200/160mmHg. They are then referred to the nearby hospital and then that hospital will refer that woman to our hospital. We find that the damage is already being done by the time the woman arrives here. So, I can also blame the referring obstetricians because some of them they just delay referring the women. By the time they refer the woman you will find that it is already late. You will find that it is impossible to help the woman. It is either the woman loses the baby or we lose both of them and it is painful.

Researcher: Do you think your managers support you enough to deal with maternal death?

Participantl: I can say she does if she is on duty. When she sees that you are so distressed she would take you to the corner somewhere and just talk to you; hug you, give you support, if she is there. She does talk to us.

Researcher: What happens then when she is not available?

Participantl: When she is not there, there is no one to support us but sometimes one of the midwives who is not a manager. However if the manager is there she help us.

Researcher: Ok. In case of night duty where there is no a manager, what happens

in the morning when you give your manager report that you had a maternal death during the night? How does your manager perceives that report?

Participantl: She also appears disturbed. Most of the time one could see that the death has touched her too. When some of the midwives cannot cope due to maternal death that happened during the night, they do call the manager through their cell phones while the manager is at home and tell her that they had a maternal death and they are not coping. So, she is available because even if since she could also be called during the night and she would talk to you.

Researcher: If I recall very well, are you saying that you are not coping with maternal death?

Participantl: Yes, I can say we are not coping. Nonetheless, there are some women whom you expect them to be treated well and then go back home to be with their families. We expect such a woman to go home with a baby who is not ill and not bad.

Researcher: Is your manager aware that you are not coping after maternal death?

Participantl: I do not think she is aware.

Researcher: Have you ever made her aware?

Participantl: No we never told her. She would just see because I remember we were having one midwife in our unit, when she was nursing a woman and then that woman dies, she would crash. That one would cry in front of the women so we knew that if there is a maternal death while she is on duty she was going to cry. So you can see that that person needs support from the professional supporters like a psychologist. Myself too I do not manage.

Researcher: Have you ever communicated that to your manager that you need professional support?

Participantl: No, we never communicated to her.

Researcher: Can you share with me why?

Participantl: Maybe we do not know that we have the right to tell her that we need these services in our ward as in in other hospitals where there are support groups or something but we have never talked to her that we need this type of support. But because we are working with death everyday I think if they could do that it is going to be better.

Researcher: Ok. Since you are aware that one of your colleagues does not cope especially that she just breaks in front of everybody, what is it that is being done or has been done for this person?

Participantl: Nothing. We just only comfort her only. When we are not busy that day the manager can just release her to go home and rest and then she will come to work tomorrow.

Researcher: Has it that ever happened?

Participantl: No, that one I have never seen it happening.

Researcher: Ok. So, you are just suggesting that maybe it could help?

Participantl: Yes.

Researcher: Ok. Have you ever blamed yourself for a maternal death?

Participantl: Sometimes I do blame myself that if I could have seen that this person is not going to make it (live). Thinking maybe if the obstetrician available. If I called the obstetrician early maybe something better could have happened. I just blame myself sometimes.

Researcher: Ok. On the issue of blaming yourself, when you evaluate your management towards that woman who has demised do you find faults in that management so that you can validate your blame?

Participantl: It is like I just blame myself but it is not me actually who caused the maternal death. Most of the time it is like if the obstetrician was there or if the obstetrician who referred the woman did refer the woman early something could have been done. Then I as a midwife I could have helped them with the midwifery care on that woman maybe, but I do not remember hearing that I have done anything which contributed to the maternal death.

Researcher: Are there any measures in your workplace that help you cope with maternal death?

Participantl: I do not remember any. I have never seen one.

Researcher: Do you receive any kind of counselling?

Participantl: There is nothing. You mean from the professional counsellor?

Researcher: Then within your ward do you have any?

Participantl: We do not have." I do not know any who is a counsellor.

Researcher: Do you think you need counselling?

Participantl: Yes we do need counselling because that is something which is within, it causes damage inside. If you do not receive counselling sometimes you can be affected and then you can end up being sick because of stress which was never addressed in order for you to cope with it or to relieve it or to lessen it. I have heard that like I do not know whether is true, or not that the corps are taken to the counsellors to be counselled regularly just because they work involve killing people. So, we also need a counsellor in our ward or in our hospital that will be with us all the time.

Researcher: So, according your assessment you think counselling can do you better?

Participantl: It can help us. If we can have a counsellor and then if there is

maternal death in our ward especially that those who were nursing the woman directly could get counselling. I think that could help.

Researcher: Ok. If I was to do a programme that will help midwives to cope after they have had a maternal death, what would you want me to include on that programme?

Participantl: I think you can include the counsellor. Can you come again with your question just elaborate it?

Researcher: Ok. I am saying, if I was to do a programme that will help midwives to adapt after they have had a maternal death, since you have told me that you do not actually adapt or cope so I want to come up with a programme that will help midwives to cope so, what is it that you would like to have on that programme or will like me to have on that programme?

Participantl: I think the counsellor. If we can get a counsellor even if that counsellor is not stationed in our ward but then if we know that these people have had a maternal death and then we take them to that counsellor who will counsel them there. I think it is going to help us. Even when there is a maternal death we must not blame each other but rather have a look at what contributed to that maternal death. If it is our mistake we should correct it. Let us say maybe if a woman was referred being on a critical stage and then if possible we can talk to those hospitals that when you refer a woman please refer the women early so that we can be able to manage them because most of the statistics in our hospital Mankweng is high. In addition, most of them maternal deaths if you check the records the women did not even spent more than two or three days in Mankweng bed. That shows that she came here when it was too late. So if there could be collaboration between us and the referring hospitals so that they can refer women early. The women also should be advised to book early for ANC. For some of them women one could see that they have never ever gone to the clinic. So if they can book early at least we

can help.

Researcher: Ok. Do you think these women do not know that they should book early?

Participantl: Some of them they say they do not know that they should book early but I am not sure whether they are telling the truth or not. Though, some of them will tell you that they are not pregnant. Yes, they will say I am not pregnant. I am just surprised today that I am going to give birth which is not true.

Researcher: In other words this issue the women not booking early we cannot generalise it and say they do not know?

Participantl: Yes, we cannot say they do not know because I think on the radio, the TV and everywhere there is health education.

Researcher: Can we say that it is negligence?

Participantl: We can. I do not know whether it is negligence because some of them they will tell you that they are afraid to go to the clinic because of the attitude of nurses which I am not sure of. So, I do not know whether she is telling the truth or she is just covering herself. So, you would not know.

Researcher: On the issue of blaming each other, do you blame each other in the unit when there is a maternal death or wherever when there is a maternal death?

Participantl: It happens between us and the obstetricians like maybe when we are resuscitating a woman and then they want an object from the emergency trolley and then the following day when they report the maternal death they will say: 'I said to the sister to give me something and then the sister just went away for a long time or the sister was struggling to give me that because she does not know that thing'. So, you will find that there is a friction between us and the

obstetricians.

Researcher: What do you think are the causes for the delay or the friction?

Participantl: I think they do not want to be responsible?

Researcher: Who?

Participantl: The obstetricians because they are shifting the blame to the nurses that this maternal death just happened just because the midwives did not give me what I wanted in that time. So, we do not know if the sister could have given the obstetrician that object in time the woman could have survived or not. So happens between the midwives and the obstetricians after the maternal death. You will find that some of them they do blame us that we did not monitor the woman closely. At times you will find that in the ward women diagnosed with eclampsia in high care do not have individual monitors. There are only four monitors available and then you will find that we are having six women. So, you have to remove this monitor from this woman and then you monitor that one which is not ok. The woman must have her monitor and then the other one also have her monitor. So you find that the monitors are not enough; when you take the blood pressure you find that the blood pressure has gone up.

Researcher: In other words you are saying lack of equipment do contribute to maternal death?

Participantl: Yes.

Researcher: On the issue of blaming each other, I just need clarity there. You said the obstetrician may ask for something and then the midwife delays, when you do the assessment or you evaluate the whole scene, is it indeed true that the nurse did not give that thing on time or the did not know whatever that was asked? Are the allegations true? Do they come out being true?

Participantl: I do not think it is true because I think the obstetrician just want to shift the responsibility that he himself was trying to resuscitate that woman and then if he was given that thing in time maybe the woman would be alive which we do not know if it is true. So, but most of us in labour ward we have experience of working here in high care even in labour so I do not think that I can just take more than five minutes to look for something if it is an emergency. When there is an emergency what we do we just come from all the units to assist there.

Researcher: So in other words if I want to round this up, this thing of the obstetrician coming up with stories about resuscitation, what could be the reason for doing that?

Participantl: I am not sure. I just cannot give the correct answer. However, it is what I heard one day when we were having a maternal death. I was not there, the maternal death happened during the night and then we were given the report by our manager and then was saying that the obstetrician is not happy; the obstetrician says the midwives do not know the resuscitation equipment which is not true because he said he want this one and then the sister just took a long time before she can give the obstetrician that thing, and then unfortunately that woman passed away.

Researcher: Ok. Do you have anything that you want to add that you think maybe is of interest to the study about maternal death?

Participantl: No. I do not have much. What I can say is that if we can be supported by our managers and then also we as a staff support each other if there is a maternal death. I think it can help us and then work as a team, we can make it.

Researcher: So, your manager is not supporting you, is that what you are trying to say?

Participantl: She is supporting us but I cannot say hundred percent. She is

supporting us. She is there because even our manager if we are busy she will just close the office and then come and help us.

Researcher: Ok. I thank you for your participation and your time. I hope the information you have provided me with will be beneficial to the study.

Participantl: Ok, thank you.

APPENDIX 9

LETTER FROM INDEPENDENT CODER

Qualitative Data analysis

Masters of Curatoris degree (Nursing Science)

Ngoatle Charity

THIS IS TO CERTIFY THAT:

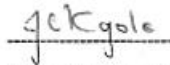
Prof. Jermina Chuene Kgole has co-coded the following qualitative data:

19 Individual interviews and field notes

For the study:

**THE ADAPTATIONS OF MIDWIVES AFTER MATERNAL DEATHS
AT A TERTIARY HOSPITAL IN LIMPOPO PROVINCE**

I declare that the candidate and I have reached consensus on the major themes reflected by the data during a consensus discussion. I further declare that adequate data saturation was achieved as evidenced by repeating themes.



PROFF JC KGOLE(Diitt et Phil)

APPENDIX 10

CONFIRMATION BY LANGUAGE EDITOR



UNIVERSITY of the
WESTERN CAPE

FACULTY OF NATURAL SCIENCES

DEPARTMENT OF MEDICAL BIOSCIENCES

Donavon C. Hiss
University of the Western Cape
Private Bag X17
Bellville 7535
South Africa

Tel: 021 959 2334
Cell: 0722001086
Fax: 021 959 1563
E-mail: dhiss@uwc.ac.za or hiss@gmx.us

7 October 2015

To Whom it May Concern

This serves to confirm that I have edited the language, spelling, grammar and style of the Master of Nursing Science dissertation by **Charity Ngoatle**, titled: **“The Adaptations of Midwives After Maternal Deaths at a Tertiary Hospital Complex in Limpopo Province.”**

Sincerely Yours

A handwritten signature in black ink, appearing to be 'D. Hiss'.

Dip. Freelance Journalism, Dip. Creative Writing, MSc (Medicine), PhD