# AN EMPLOYEE ASSISTANCE PROGRAMME (EAP) TO SUPPORT MIDWIVES AFFECTED BY MATERNAL DEATHS AND STILLBIRTHS IN KHOMAS REGION, NAMIBIA

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***ABSTRACT***

Globally, Employee Assistance Programme (EAP) has become a vital workplace programme that assists employees in managing personal and work-related problems. EAP aims to provide midwives with the ability to cope with the demands of their professional and private lives through various mechanisms. EAPs can play an essential role in helping midwives and their family members balance work and personal life demands whilst supporting employers' goals towards improved and continuing levels of workplace productivity. Since midwives work autonomously, they are inherently exposed to traumatic situations, such as Maternal Deaths (MD) and Fresh Still Births (FSB), which may occur daily due to the nature of their work. However, this programme is considered a neglected component in attempts to uphold and improve midwives' wellbeing in the midwifery profession as there is limited literature for Namibia. Therefore, this study targeted the Khomas Region because it has the highest MD and Stillbirths (SBs) in Namibia.

The study aimed to develop an EAP that supports midwives affected by maternal deaths and stillbirths in the Khomas Region. The study was conducted with a pragmatic worldview at two public referral hospitals in the Khomas Region. The study was based on a mixed method approach that includes a convergent parallel design in which the qualitative part used a descriptive, exploratory and contextual design. In addition, the quantitative part used cross sectional design. The study was conducted in three phases: Phase 1 comprised of situational analysis based on the four objectives that correspond with the study population: midwives. Qualitative data was collected to explore and describe midwives' experiences affected by MD and FSB using Focus Group Discussions (FGDs) and individual interviews. Four FGDs and four individual interviews were conducted with midwives from two state hospitals. Midwives were purposively sampled, and a total of 29 midwives participated in the qualitative part of the study. FGDs and individual interviews were audiotaped and transcribed verbatim. Qualitative data was analysed using content analysis and coded using Tech's steps of open-coding. Five themes and 21 sub-themes were identified. In addition, quantitative data was collected using a questionnaire to determine the occupational exposure of midwives to MD and FSB, evaluate the self-reported level of stress among midwives due to exposure to MD and FSB, and to determine the coping mechanism used by midwives to cope with MD and FSB in the absence of EAP. Since the population was small, a

total population sampling was used (n=140). Quantitative data was analysed using the Statistical Package for Social Sciences (SPSS) version 27 and SPSS AMOS version 23. The study showed that the midwives experienced varied challenges such as MD and FSB effects on midwives, high exposure to MD and FSB with inadequate professional and environmental support, death distress among midwives, and difficulties related to the emotional versus problem focused coping mechanism.

The study's phase 2 conceptualised the findings from phase 1 and led to the development of the study's conceptual framework based on the Practice Theory by Dickoff, James and Wiedenbach (1968) survey list components such as agent (the researcher, counsellor and management), recipient (midwives), context (health facilities), dynamics (challenges hampering the successful development of an EAP), procedure (EAP and implementation strategies developed) and terminus (the ability of midwives to cope with MDs and FSBs). In addition, Phase 3 of the study developed an EAP to support midwives affected by MDs and SBs in the Khomas Region. The EAP was developed according to Lokanadha and Mohan (2010) Quality of Work Life Model. The programme description includes a philosophical basis, aim, principles, objectives, approach, the content of EAP/activities, expected outcome and evaluation of the process. The implementation strategies for the programme were also developed according to Howe's (2011) Compass Aligned Performance System (C@PS) model which is a strategic management tool simplify the strategies and plan to implement designed strategies. Four strategies were developed, and these are the provision of support services to midwives through EAP at the workplace, training of midwives on how to deal with MD and FSB, motivation of midwives through a visible support system from management and training of supervisors on the EAP, and how to make referrals. A team of experts verified the EAP and implementation strategies after development. Based on the findings, it is concluded that MD and FSB affect midwives, high exposure, high death distress, and midwives use various coping mechanisms, hence the need to address these challenges. The study made recommendations based on the study findings for practice, education and future research. It is further recommended that hospitals in the Khomas Region implement the EAP to support midwives on how to cope with MD and FSB.

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## LIST OF ACRONYMS

AA - Alcoholic Anonymous

ANC - Antenatal Clinic

APA - American Psychological Association

C@PS - Compass Aligned Performance System

CPD - Continuous Professional Development

EAP - Employee Assistance Programme

EAPA - Employee Assistance Professional Association

EAPASA - Employee Assistance Programme Association of South Africa

EASNA - Employee Assistance Society of North America

FGDs - Focus Group Discussions

FSB – Fresh Stillbirth

GAD – Generalized Anxiety Disorder

HPCNA - Health Professions Councils of Namibia

ICM - International Confederation of Midwives

IHO - Intermediate Hospital Oshakati

IHK - Intermediate Hospital Katutura

ILO - International Labour Organisation

IMANA - Independent Midwifery Association of Namibia

MD - Maternal Death

MMR - Maternal Mortality Ratio

MoHSS - Ministry of Health and Social Services

PPH - Postpartum Haemorrhage

PTSD - Post-Traumatic Stress Disorders

QWL - Quality of Work Life

SADC - Southern African Development Community

SAEAPA - South Africa Employee Assistance Programme Association

SB - Stillbirth

SMEs - Small and Medium Enterprises

SOPs - Standard Operating Procedures

UK - United Kingdom

UNAM - University of Namibia

WCH - Windhoek Central Hospital

WHO - World Health Organisation

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Finally, I thank my husband for his unwavering support and encouragement throughout the course of my studies. I also appreciate my daughters and son for their patience during my absence from home and hard times in the course of my study; I hope someday this will encourage them to reach their full potentials.

## ***DEDICATION***

I dedicate this study to my late mother and grandparents.

***DECLARATION***

I, Tuwilika Endjala, hereby declare that this study is my own work and is a true reflection of my research, and that this work, or any part thereof has not been submitted for a degree at any other institution.

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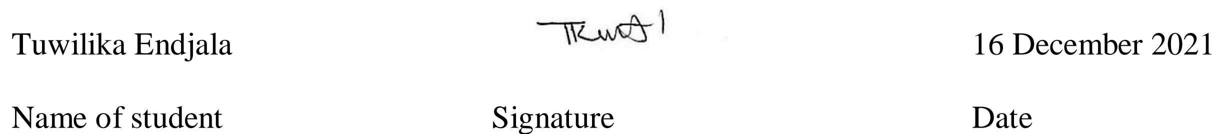

| Tuwilika Endjala | | 16 December 2021 |
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| Name of student | Signature | Date |

CHAPTER ONE

# INTRODUCTION AND BACKGROUND TO THE STUDY

## 1.2 INTRODUCTION OF THE STUDY

Employee Assistance Programme is a worksite-based occupational health and wellness initiative designed to assist organisations in addressing productivity issues and employees in identifying and resolving professional and personal concerns that may affect job performance.[1] This programme is an essential aspect in the workplace and is considered as a neglected component of the wellbeing of midwives in the midwifery profession.[2] EAP aims to provide employees with the ability to cope with professional and private life through various mechanisms [3] Furthermore, EAPs seek to improve the health and productivity of the employees at the workplace by assisting them with personal, family and work-related problems and avoiding personal, family and work-related issues and undesirable impacts to the workplace.[3] Job stress is one of the reasons why midwives might seek support through an EAP after experiencing an adverse workplace event such as death.[4]

Historically, EAPs have focused on characteristics of employees' problems such as alcoholism and not on organisational situations that contribute to employees' problems[5]. Employers provide EAPs for various reasons, including the desire to support employees and their family members to promote productivity in the workplace and protect their organisations from losses due to liabilities and legal issues.[5] In addition, EAPs assist stressed and burned-out employees and reduce turnover through counselling, offering therapeutic services and confidential evaluations.[6] In addition, employers have, in recent years, realised that employees who are happy and healthy are more productive.[7]

EAP services have two components; where the first focus on the employee and their family members. The second component concerns itself with the services offered to the organisation by the employee.[3] Organisational services can include organisational assessments and development, management consultation, and crisis response services and management.[4] The benefits for the

employees and their families may consist of psychological services on coping with mental and emotional difficulties, family issues, substance abuse, financial problems, legal issues, separation and loss, balancing family and work and many more other problems.[5] Employees can develop coping strategies to manage their cases, improve their resilience and work towards resolving their problems.[8]

Furthermore, EAPs enable organisations to adhere to occupational health and safety rules set by the International Labour Organization (ILO) and the World Health Organization (WHO).[9] This assists in reducing stress among employees, bringing positive change and improving organisational culture. The EAP is prominently used in high stress and high risk fields such as the police and health sectors.[1] In the health and police profession, EAP is pivotal as these fields exert more pressure on the employees. In addition, the stress among employees in the professionals mentioned above is believed to emanate from exposure to long standing hours, shift work, and to deal with death cases and their families.[7,1]

EAPs can play an essential role in helping employees, and their family members balance work and personal life demands while also supporting the employer's goals for improved and continuous levels of high workplace productivity.[4,8] Addressing the fundamental problems that impair employees' work performance improves employees' productivity within organisations drastically improves and reduces absenteeism levels from work. This is because employees are less likely to take time off to deal with their problems or recover from physical or mental health conditions related to or arising from these issues owing to the existence of EAPs.[4,8] Joseph and Walker[8] opine that organisations that offer EAP as a support service to staff meet the terms of employees' psychological contracts and thus contribute positively to staff wellbeing. Hence, the workplace is well-positioned to offer support to employees with their problems and at the same time improve employee morale and performance.[5]

## 1.2 BACKGROUND OF THE STUDY

EAPs were first introduced in the United States of America (USA) in the early 1940s to target alcoholics during the rise of the alcoholism occupational industries.[10] During this time, drinking at work was a norm, and as such, the EAP was formed from occupational programmes that dealt with alcoholism.[11] In Australia, the EAP was established in 1977 by the Australian government to combat drugs and alcohol abuse.[12] Employers started to realise the impact of drinking while at work on employee productivity and performance.[13] The establishment of these EAPs for alcoholics in the USA was not met with these programmes' success due to the social stigma associated with alcoholism and lack of training of the supervisors tasked to identify the alcoholic employees.[10] Ultimately, the EAP, which was first developed for corporate businesses, has, the overtime, assumed a holistic approach that includes mental health and emotional concern.[14] Hence, the current EAP differs from the earlier American model that only catered for alcoholics.

EAPs was established in Australia and England among other health professionals, such as obstetricians, after both countries' experienced perinatal traumatic events.[15,16] In many countries around the globe, midwives work autonomously under various guidelines for consultation. Due to the nature of their work, midwives are exposed to traumatic situations daily while dealing with women, their partners, and their families.[17] Some of the challenges that the midwives encounter such as emotional stress, feelings of despair, insomnia amongst others resolved themselves, but most of them need the intervention of professionals through work-related programmes, such as the EAP, seeking to assist the midwives in coping. [6,15] Thus, an absence of such programmes can lead some health professionals into disastrous situations due to exposure to traumatic events.

Austin[18] reported that midwives endured emotional stress globally due to traumatic events in the past few decades. Maternal Deaths and stillbirths contribute to stress, as mentioned earlier among midwives in many developing countries.[19] The frequent exposure to high MD rates and SBs is reported to have an increased emotional turmoil among midwives and observed to have adverse effects on the wellbeing of midwives and their families[20]. It is said that little attention has been paid to midwives' emotional state at work as they are expected to cope without EAP.[18] This can negatively influence their performance. Thus, employers should pay attention to midwives' work

to maintain a healthy and motivated midwifery workforce that will continue serving women and their families[15]. These problems are further affected by balancing work while also maintaining a healthy and fulfilling personal and family life. EAPs can thus play an essential role in helping employees and their families balance work and personal life demands while also supporting the employer's goals for improved and sustained levels of high workplace productivity.[5]

The origins and transformation over time of the EAPs are instructive. The US Congress passed the Alcohol Rehabilitation Act (the Hughes Act) in 1970, and it is from this act that EAP stemmed from.[13] The US government mandated all federal agencies and military institutions to institute alcoholism Programmes.[10] In 1980, the Employee Assistance Society of North America (EASNA) was formed to accrediting EAPs.[18] Later on, the Employees Assistance Programme Association (EAPA) was developed to manage the issuing of licences to EAP practitioners. EAPs then moved to the business sector, where employers identified the need to improve the morale of their employees to improve productivity.[11]

Even though workplace wellness and EAPs have become a business imperative for many organisations worldwide, the same cannot be said for programmes for health care workers such as midwives.[13,11] Globally, in the absence of EAP, MDs and SBs are believed to leave midwives with feelings of despair, insomnia and the desire to leave the profession [6,15,16, 17]. Studies on the impact of the ill-health state that midwives get burn out due to the stress they endure at work owing to witnessing MDs and SBs and that this has led to a high rate of attrition amongst midwives.[20,21] Furthermore, SBs were found to affect both parents' and health care workers' psychosocial wellbeing.[22] EAP is thus believed to reduce occupational health risks and improve work performance, productivity, and employees' quality of life in the workplace.[12,6]

Limited studies have been conducted on EAP in Africa.[11] A study conducted in South Africa on the role of spirituality in EAP practice found strong support for spirituality in the provision of EAP among other health professionals.[7] Kruger[23] indicated that EAP for health care workers was found to tackle challenges experienced by employees in their private lives, professional problems and skills problems. Moreover, these services are not only offered to health care workers but also to their families. The South Africa Employee Assistance Programme Association (SAEAPA) has

thus developed standards to guide the implementation of EAPs in the country.[1] In Ghana, the absence of EAPs has left midwives with feelings of grief after MDs.[24] However, these effects could be prevented if individual countries in the world develop and implement EAPs[24]. Actions to keep employees safe and healthy should be considered as part of an organisation's practice and should include the formation of EAPs.[22] Therefore, Dartey et al.[24] noted that EAP can play an important role in helping midwives and their family members to overcome emotional stress that is stemming from the work environment.

In Namibia, limited studies have been done regarding EAPs. Leonard and Terblanche[11] conducted a study to explore personal and work-related problems that impact employees' productivity in Small and Medium Enterprises (SMEs) in Namibia. That study revealed that employees experienced various challenges and that the SME sector is not equipped to deal with employees' psychosocial problems effectively.[11] The same study indicates further that there is a need for an EAP in SMEs to promote employee wellbeing.[11] Unfortunately, the researcher could not find other documents, such as policies, guidelines and studies conducted in Namibia on EAPs that support midwives. Therefore, the effects of MDs and SBs in the absence of EAP could not be determined. For that reason, no known evidence exists to guide best practices on the impact of MDs and SBs among midwives in maternity settings. Due to the unique environment of maternity departments, where death is not routinely anticipated, and unique socio-cultural views surrounding death, there was a need to comprehensively study the impact of MDs and SBs from the perspectives of midwives working in maternity wards.

### 1.2.1 Background: Maternal Death and Stillbirth

Maternal mortality and SB remain major public health problems globally, especially in low-income countries.[25] About 256 000 mothers die annually due to pregnancy and postpartum complications, and more than 2.6 million SBs occur, with half of the SBs happening before a woman goes into labour.[25] Maternal deaths and stillbirths are therefore prioritised as one of the sustainable development goals of the United Nations. Although the global Maternal Mortality Ratio (MMR) has been reduced in high-income countries, developing countries remain with a high

burden of MDs. Maternal mortality had been reduced by nearly half in 2015 compared with the 1990 rate. However, significant discrepancies still remain between regions.[26]

Africa recorded the highest MMR, with the sub-Saharan Africa region alone recording an increased number of 546 that account for 62% of global deaths in 2015.[27] Nevertheless, 13 000 mothers still die daily in sub-Saharan Africa due to poor health care systems.[28] These deaths are believed to leave midwives with effects that could be prevented if individual African countries follow correct measures.[24] Equally, Blencowe et al.[29] report that in 2016 sub-Saharan Africa accounted for the highest SB rate of 28·7 per 1 000 total births and an estimate of 1.06 million SBs. As a result, the Sub-Saharan region implemented Sustainable Development Goals since many countries have not reached the millennium development goals.

In Namibia, MDs account for 9% of all deaths among women aged 15-49.[30] According to the 2013 Namibia Demographic Health Survey (NDHS), MMR has been on the increase, with the statistics showing the prevalence figures standing at 249/100 000 in 1992, 271/ 100 000 in 2000, and 449/ 100 000 in 2006/2007.[30] Although there was a slight decrease in 2013 to 385/100 000 the difference is insignificant as the MMR remains higher in Namibia at 265 per 1 000 live births in 2015.[31] Namibia has thus failed to reach the previous Millennium Development Goals (MDG) target of achieving a reduction of MMR to 56/100 000 by the year 2015.[28] The lifetime MD risk in Namibia is reported to be at 1.4%, and this translates to the risk ratio of 1:71, which is higher than an average ratio of 1:160 for countries in the global south.[31] In 2015, the SB rate in Namibia stood at 17 per 1000 total births.[31] This 2015 rate is higher than the target of 10 deaths per 1000 births.[31] It is vital that measures be taken to address these deaths as nothing can remove the pain and grief that parents and midwives go through after an MD and SB.

## 1.3 STATEMENT OF THE PROBLEM

The development of EAP to support midwives affected by MD and SB was necessitated by reports of the high number of MD at 27% (32) out of 119 countrywide and SBs at 19.2% (608) SBs out of 3169 countries wide that midwives experienced in the Khomas Region in 2018.[32] Khomas Region recorded a high number of MDs and SBs in the country and was followed by Oshana and

Kavango east Regions during the 2012-2015 period.[32] The researcher, as a midwife, observed that no special attention is given to this vital area of employee's health and wellness in Namibia. This lack of attention could be attributed to the little knowledge about EAP and occupational health. Cavert[33,6,18] identified that MD and SB affect the midwives' emotions. This can result from the reality in midwifery; midwives usually care for healthier pregnant women and would expect good pregnancy outcomes. Sadly, MDs and SBs are sudden incidents and thus leave midwives with feelings of failure[34]. Furthermore, in their studies, Schroder[6,18] found experiences such as shame, emotional exhaustion, high resignation rate, career change and insomnia as some of the effects experienced by midwives who did not have access to EAPs after adverse events from MD and SB. In Ghana, for instance, midwives are left with feelings of helplessness, grief and emotional stress after a MD owing to the lack of EAPs.[24]

Midwives exposure to MD was found to cause death distress in the United Kingdom (UK), and high death anxiety, mild death obsession and mild death depression in Tanzania.[34,17] Moreover, after exposure to MD and SB, midwives used various emotional and problem focused coping mechanisms such as leaving their work areas when there is imminent death, using humour, forgetting the event, social support from other people and debriefing.[36,37,38,39] Positive reappraisal and accepting death were among the results found in studies conducted in Slovakia and the U.K.[40,41] Further findings from Uganda and Tanzania on midwife coping strategies included taking action, venting and self-support.[42,17]

The exact effects of these deaths on the midwives in the Khomas Region are unknown as no known scientific studies have been conducted. As such, the absence of evidence-based EAPs to support midwives in the country could exacerbate the effects that may be experienced. Given the impact MD and SBs have on midwives in other countries, the researcher noted the need to explore the effects of MD and SB on midwives in the Khomas Region and describe the midwives' coping mechanism to develop an EAP that supports midwives.

The above-noted focus generated the following research questions:

i. What are the midwives' experiences regarding maternal death and stillbirth?
ii. How are the midwives exposed to maternal death and stillbirth?
iii. What are the self-reported levels of stress among midwives due to exposure to maternal death and stillbirth?
iv. How do midwives cope with the effects of maternal and stillbirth in the absence of EAP?
v. What could be done to support midwives who are affected by maternal and stillbirth in Khomas Region?
vi. What strategies could be developed to facilitate the implementation of EAP?

The researcher supposes that the development of an EAP could be an appropriate intervention to address the above enquiries.

## 1.4 PURPOSE OF THE STUDY

The purpose of the study was to develop an EAP that supports midwives affected by maternal deaths and stillbirths in the Khomas Region.

## 1.5 OBJECTIVES OF THE STUDY

The specific objectives of the study were to:

i. Explore and describe the experience of midwives with regards to maternal deaths and stillbirths [Phase 1],
ii. Determine the midwives' level of occupational exposure to maternal deaths and stillbirth [Phase 1],
iii. Evaluate the self-reported level of stress among midwives due to exposure to maternal deaths and stillbirths [Phase 1],
iv. Determine the coping mechanism used by midwives to cope with the effects of maternal deaths and stillbirths in the absence of an EAP [Phase 1],
v. Develop a conceptual framework that will guide the study [Phase 2],

vi. Develop an EAP that supports midwives to cope with the effects of MDs and stillbirths [Phase 3] and

vii. Develop implementation strategies for the EAP to support midwives that are affected by maternal deaths and stillbirths [Phase 3].

## 1.6 SIGNIFICANCE OF THE STUDY

The findings from this study contribute to an understanding of the challenges on the effects of MD and SBs among midwives. During the study, a conceptual framework was developed, and it forms the foundation for the research and could further be used as a reference by future researchers. Moreover, an EAP was developed, which can support midwives affected by MD and SB. Once implemented, it may consequently reduce the stress levels and grief that midwives experience. The developed implementation strategies would make the EAP to be executed with ease. The EAP shall further improve the coping mechanisms, productivity and healthy behaviour among midwives. When fully implemented, the existence of the EAP may encourage its adoption in other professions within the health field and other sectors. Finally, the study is expected to contribute immensely to the existing body of knowledge of the midwifery profession and inform further research.

## 1.7 PARADIGMATIC PERSPECTIVE

Paradigm refers to the world interpretation, a common viewpoint on complexities of the world and shared beliefs and values of the researcher.[43,44] The purpose of a paradigm is to guide the researcher on what is important, reliable and rational.[45] In this study, the paradigm that guided the research comprised of worldview and philosophical assumptions and described as follow:

### 1.7.1 Worldviews

Worldviews are a lens and set of beliefs that guides the research brought in by the researcher.[46] According to Creswell and Creswell[47] research uses four world views, which are the positivist, constructivist, transformative and pragmatist world view. The pragmatism world view was used during the study as this research used the mixed method. Pragmatism is defined by Creswell and

Clark[46(pg41)] as the world view that focuses on the importance of the question asked rather than the method used. It considers multiple methods of data collection that inform the problems under study and consequences of research. Pragmatism looks at what works best by using different approaches in achieving the aim of the study. Researchers, such as Creswell and Creswell,[47,45] associate pragmatisms with the mixed method because both qualitative and quantitative methods are used in the same study; the research question is always of main prominence; and the focus of the consequence is on the importance of the questions asked instead of the methods used. Moreover, Creswell and Creswell[47] note further that pragmatism is problem-centred, pluralist and oriented to what works in the real-world practice. Nonetheless, pragmatism combines deductive and inductive reasoning as qualitative and quantitative data is mixed [48(pg43).] Creswell and Clark[44] also note that the pragmatist views the world as singular and multiple realities.

In this study, pragmatism guided the research process and a realist approach was adopted whereby singular realities were used. After data collection, the findings were merged in order to develop the EAP to support midwives that are affected by MDs and SBs. Philosophical assumptions were used to explore the participant's experiences and influenced the methodological assumptions on the structure of the study. The pragmatism world views were used to achieve the objectives of this study based on the four philosophical assumptions according to Creswell and Creswel[47].

### 1.7.2 Philosophical assumptions

Philosophical assumptions are needed to guide the research process.[48] A philosophical assumption is defined as a "basic set of beliefs that guide inquiries".[46(pg35)] It is important because it directs the researcher to goals and outcomes and is the basis of evaluating the criteria for research.[48] Mertens[45,47] describes five philosophical assumptions: ontology, epistemology, axiology, methodology, and rhetoric. These five philosophical assumptions are explained in detail.

#### 1.7.2.1 Ontology

Ontology is defined as the "nature of reality or to what is real that the researchers assume when conducting the enquiries".[47(pg37)] An assumption is made when a study is conducted regarding what will be studied and its place in the world. Two basic positions in ontology include realist and

nominalist. The realist sees the world as being out there, while the nominalist assumes that humans never directly experience reality.[49]

This study used the mixed method, and as a result, multiple measures were used to maintain objectivity. For the qualitative part, multiple realities were also used, and here the researcher considered the participants' experiences to understand the phenomena. This was done by collecting data from different data sources such as the Focus Group Discussion (FGD) and individual interviews. For the quantitative part, the researcher used theories and data collection using self-administered questionnaires. Qualitative and quantitative data was then triangulated and interpreted.

#### 1.7.2.2 Epistemology

Epistemology is the "issue of how we know the world around us or make us claim about its truth" or an area of philosophy that is concerned with the creation of knowledge; it focuses on how we know what we know or what are the most suitable ways to reach the truth".[49(pg93)] Epistemology includes what needs to be done to produce knowledge and what the knowledge looks like once it is made. According to Creswell and Clark[46], pragmatists focus on the practicality whereby the researcher collects data to address the research question or objectives. Therefore, researchers that would be using epistemology need to decide on objectivity and consider what works. This study collected data using both the qualitative and quantitative methodology. The two methodologies fit with the epistemology strand since they involve collecting distant and close data, respectively. Epistemology use was therefore needed in this mixed method to produce evidence.

The findings from the qualitative method were obtained from the midwives who shared their experiences and coping mechanisms in their natural work environment through FGDs and individual interviews. Qualitative data was presented using direct quotations from the participants. In the quantitative part, data was collected from a distance using a questionnaire. The researcher did not interfere with the findings of the study as she was an independent researcher.

#### 1.7.2.3 Axiology

Axiology focuses on the role that values play in research and the multiple perspectives that are used.[45] During pragmatism, researchers can use various stances in their studies. For this study, value played a crucial role throughout the study process. In the qualitative part, subjectivity was allowed during data gathering through face to face FGD and interviews. At the same time, objectivity came in during the quantitative part of the study with the questionnaires. The researcher maintained both a subjective and objective view during data collection, data handling, analysis and interpretation of results. This was done through verbatim transcription and direct quotation of data in qualitative research. To avoid prejudice, bracketing was maintained, and the researcher captured and presented factual data throughout the study. Furthermore, the researcher assessed the roles of her values to maintain a neutral position during the study. Ethical principles, such as autonomy, respect, beneficence, non-maleficence and justice, were held during qualitative and quantitative data collection.

#### 1.7.2.4 Methodology

Brink et al.[50] describe the methodology for gaining knowledge about the world and how we collect data during research. A mixed method approach was used in the execution of this study. The researcher collected both qualitative and quantitative data and then merged both. During the qualitative strand, data was collected through FGD and interviews, and inductive reasoning was used during data collection. The qualitative methodology was necessary as the study involved looking at the experiences of participants. The quantitative strand involved collecting data with a self-administered questionnaire on occupational exposure and coping mechanisms, and deductive reasoning was used. The convergent method was thus necessary since this research used mixed methods, a combination of inductive and deductive reasoning.

#### 1.7.2.5 Rhetoric

Rhetoric deals with the language use and writing up by the researcher throughout the research process.[46] In this study, both formal and informal language was used. During the qualitative part of the study, simple colloquial language was used during recording and verbatim transcription of

data, describing, translating, developing the themes and sub-themes. The findings of the study were presented using direct quotations from the participants. The quantitative part of the study used formal language during the construction of the questionnaire, data entry, data analysis and reporting of the findings.

## 1.8 THEORETICAL FOUNDATIONS OF THE STUDY

A theoretical foundation is a crucial component of every research as it guides the research process.[51] A theoretical foundation includes theories and models that enable the researcher to understand the problem under study. In this study, the following theories and models were applied during various phases: Stress Response Theory, Transactional Model of Stress and Coping, Practice Theory, Quality of Work Life (QWL) Model and Compass Aligned Performance System (C@PS) model and they are described below.

### 1.8.1 Horowitz (1986) Stress Response Theory

The Stress Response Theory looks at how an individual reacts to a traumatic event.[52] This theory was used in Phase 1 of the study to guide the situational analysis of the study. It focuses on how a person reacts to stress that results after a traumatic event. The stress response theory consists of two major phases. The first one pertains to the response that includes disturbing repetition of traumatic events and efforts to suppress traumatic or intrusive thoughts that result from trauma. The second phase relates to adjustments to the trauma effects. A pathological phase can also happen immediately after the trauma in the form of a stress response syndrome.[52] In this study, the Horowitz Stress Response Theory was adapted to support how midwives reacted to MDs and FSBs. This theory was applied in Chapter 2, the development of the research instrument in Chapter 3 (see Annexure G) and in the interpretation of the quantitative findings. In addition, the structure of the theory guided the content of the programme. This theory is elaborated in-depth in the next chapter.

### 1.8.2 Lazarus and Folkman's (1984) Transactional Model of Stress and Coping

The Transactional Model of stress and coping focuses on the methods used by individuals to cope with stressful events. This model classifies coping into two ways, namely emotional focused coping and problem-focused coping.[53]

In this study, this model was applied in Chapter 2, and the development of the research instrument in Chapter 3 as the emotional and problem-focused coping aspects from this model relate to the Brief COPE Scale (see Annexure G). This model further guided Phase 1 of the study, specifically sub-objective 3 in the quantitative part that considered the coping mechanism and in the interpretation of the quantitative findings. In addition, the structure of the model guided the content of the programme. This model is elaborated in-depth in the next chapter.

### 1.8.3 Dickoff, James and Wiedenbach (1968): The Practice-Oriented Theory

The Practice-Oriented Theory specifies the activities that are essential in the conceptualisation process. This theory consists of three components: the aim that specifies the purpose of activities in any given study narrative on how to accomplish six-fold activities to achieve the overall goal, and finally, the survey list ingredient.[54] The survey list includes the agent, recipient, context, dynamics, procedures and terminus. The theory was applied in this study to develop the conceptual framework in Phase 2 (Chapter 6) of the study. The use of this theory in the study assisted in the conceptualisation process of the study's findings. This theory is explained in detail under Chapter 6 (page 194).

### 1.8.4 Quality of work life model by Lokanadha and Mohana (2010)

The Quality of Work Life (QWL) model focuses on the relationship between the employees and their work environment and how it affects the institution's proficiency and productivity and employee satisfaction with low order needs and high order needs.[55] The purpose of this model is to provide an appropriate safe work environment, occupational health care and suitable working time to maintain and promote employees' health.[56] This model has five components: health and

wellness, job security, job satisfaction, competency development, and work and non-work life balance. This study used the QWL model to develop the EAP in the thesis's Phase 3 (Chapter 7). The application of this model is explained in detail in Chapter 7 of the study (page 214).

### 1.8.5 Compass Aligned Performance System (C@PS) model

The Compass Aligned Performance System (C@PS) model is a strategic management tool that seeks to simplify the strategies and plan to implement designed strategies to be achieved by an organisation.[57] This model comprises six main components: vision, values, critical success factors, key performance indicators, and strategic objectives. The application of the C@PS model of Howe[57] is made in Phase 3 of the study (Chapter 7), where the strategies for implementation of EAP to support midwives are developed in line with this theory. The detailed application is described in Chapter 7 of the study (page 212).

## 1.9 CONCEPTUAL FRAMEWORK OF THE STUDY

A conceptual framework is defined as a written or graphic abstract of information and background of a subject that guides the study.[50] This framework is established by identifying and describing concepts and suggesting connections between them. This study used the Carver (1997) Death Distress Scale and Abdel-Khalek (2011) Brief COPE Scale.

### 1.9.1 Carver (1997) Death Distress Scale

The Death Distress Scale is a tool that Carver developed in 1997. This scale aims to measure how individuals react to death events according to the variables on the scale. This scale consists of 3 subscales, death obsession, death anxiety and death depression, with each subscale comprising eight items.[58] In this study, the Death Distress Scale has been used to measure the self-reported stress level among midwives after experiencing MDs and FSBs (Annexure G).

### 1.9.2 Abdel-Khalek (2011) Brief COPE Scale

Abdel-Khalek developed the Brief COPE Scale in 2011 to assess the different coping actions and feelings people may have in response to a specific situation.[59] This scale consists of 13 constructs that are divided into two items each as follows: self-destruction, active coping, denial, substance abuse, emotional support, instrumental support, behavioural disengagement, venting, planning, acceptance, religion, self-blame and positive reframing.[59] The study used the Brief COPE Scale to measure the coping mechanisms used by midwives after experiencing MDs and FSBs (Annexure G).

## 1.10 RESEARCH DESIGN AND METHODS

This study used a mixed method using a convergent parallel design, as illustrated in table 1.2. The study used descriptive, exploratory, and contextual designs during the qualitative part in phase 1. This was done to obtain in-depth information from the participants. For the quantitative part, the study used a descriptive cross-sectional design to achieve the study's objectives. Data was collected from more than one case and at a single point in time to gather measurable data with two or more variables.[60] The data collection process was conducted at two public hospitals in the Khomas Region.

This study was based on Meyer and Van Nikerk[61]. It modified the five phases of programme development into three phases: the situational analysis phase, development of a conceptual framework, and development of an EAP and implementation strategies.

Table 1.1: Modified phases of programme development according to Meyer and Van Nikerk [61]

| Phases | Objectives |
|---|---|
| Phase 1: Situational analysis | • Explore and describe the experiences of midwives with regard to maternal deaths and stillbirths.<br>• Determine the midwives' level of occupational exposure to maternal deaths and stillbirths.<br>• Evaluate the self-reported level of stress among midwives due to exposure to maternal deaths and stillbirths.<br>• Determine the coping mechanism used by midwives to cope with the effects of maternal deaths and stillbirths in the absence of EAP. |
| Phase 2: Development of a conceptual framework | • Develop a conceptual framework that guides the study. |
| Phase 3: Development of an EAP and implementation strategies | • Develop an EAP that will support midwives in coping with effects of maternal deaths and stillbirths.<br>• Develop implementation strategies for the EAP to support midwives that are affected by maternal deaths and stillbirths. |

### 1.10.1 Phase 1: Situational analysis

Phase 1 involved a situational analysis where data was collected from midwives who experienced MDs and FSBs. Focus Group Discussions and individual interviews were conducted with midwives at Intermediate Hospital Katutura and Windhoek Central Hospital to collect qualitative data. In addition, self-administered questionnaires were also used to collect quantitative data on occupational exposure. Two Likert scales, namely; Death Distress Scale and Brief COPE Scale, were used to determine midwives' self-reported level of stress and coping mechanisms due to exposure to MDs and FSBs.

- Death Distress Scale

This scale gathered data on the self-reported stress level among midwives due to exposure to MD and FSB. It consisted of the five-point Likert scale questionnaire that adopted a standardised scale (Death Distress Scale) according to Carver (1997) to measure the self-reported level of stress due to MDs and FSBs. This scale consists of 3 subscales, such as death obsession, death anxiety and death depression, and each subscale has eight items (see Annexure G).

- Brief COPE Scale

This scale collected data that determine the coping mechanism used by midwives to deal with the after-effects of MDs and FSBs in the absence of ad EAP (see Annexure G). A Self-administered four-point Likert scale questionnaire was used adopting a standardised scale (Brief COPE Scale) according to Abdel-Khalek, 2011. This scale measured how midwives coped with MDs and FSBs. It consisted of 13 constructs that have two items each: self-destruction, active coping, denial, substance abuse, emotional support, instrumental support, behavioural disengagement, venting, planning, acceptance, religion, self-blame and positive reframing (see Annexure G).

The detailed information for the methodology is presented in Chapter 3 of this study.

### 1.10.2 Phase 2: Development of a Conceptual framework

The conceptual framework was developed using Dickoff, James and Wiedenbach's (1968)[54] Practice Theory to attain the study's objectives. The outcome of the situational analysis formed the basis of this phase as illustrated in Figure 6.1 (reasoning map) and, more importantly, the dynamic (challenges) Table 5.6 (merging and Chapter 5). The fundamental concepts in this framework are as follows: agent, recipient, context, dynamics, procedures and terminus. These concepts are also referred to as the survey list elements, as explained in Chapter 6 of the study (page 194).

### 1.10.3 Phase 3: Development of an EAP and Implementation Strategies

The findings from the situational analysis laid the foundation for the development of the EAP and implementation strategies. The EAP was developed according to Lokanadha and Mohana's (2010)[56] QWL model. An EAP is a work-based voluntary programme that provides services to employees with personal or work-related problems.[16] This would be provided through a blended approach that includes services from within and outside the organisation. This is explained in detail in Chapter 7 (page 212) of the study.

In addition, the implementation strategies were developed in line with the C@PS Theory of Howe (2011)[57]. Four strategies were developed, and these are the provision of support services to

midwives through an EAP at the workplace, training of midwives on how to deal with MDs and FSBs, motivation of midwives through a visible support system from management, and training of supervisors on the EAP and how to make referrals. A comprehensive discussion of this phase is done in Chapter 7 (page 226) of the study.

## 1.11 DEFINITION OF KEYWORDS

The concepts defined are delivered from the title " the experiences and challenges of midwives on maternal deaths and stillbirths: developing an Employee Assistance Programme for midwives in Khomas region, Namibia " and include some significant concepts and variables for this study.

### 1.11.1 Employee Assistance Programme

An EAP is a worksite-based occupational health and wellness program designed to assist organisations in addressing job performance issues and employees to identify and resolve professional and personal concerns.[1] In this study, EAPs are rigours evidence-based programmes delivered from the systematic process to assist midwives affected by MDs and SBs in the Khomas Region of Namibia.

### 1.11.2 Support

In this study, support included the provision of psychological assistance to midwives after experiencing a MD and FSB.[62] Support is planned to be provided by an employer through an EAP counsellor, Psychologist, Psychiatrist and management of the health facilities where the programme will be implemented. After a midwife experiences an MD or FSB, they can visit the EAP services voluntarily or make a referral by the supervisor.

### 1.11.3 Midwives

A midwife is a person who successfully completed a midwifery education programme that is based on the International Confederation of Midwives (ICM) Essential Competencies for Basic Midwifery Practice.[63] For the purpose of this study, midwives who participated in this study were

working at public hospitals in the Khomas Region and are licensed (registered or enrolled) by the Health Profession Council of Namibia (Nursing council in particular) to practise as a midwife in the country.

### 1.11.4 Affected

Affected refers to the influence in a wrong way by an external factor.[16] In the context of this study, affected relates to exposure to MDs and FSBs.[64] Midwives working at Windhoek Central Hospital (WCH) and Intermediate Hospital Katutura (IHK) who experienced MDs and FSBs while working at the hospitals are therefore regarded as affected by MDs and FSBs.

### 1.11.5 Maternal death

Maternal death is a woman's death while pregnant or within 42 days of termination of pregnancy from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes[31]. This study considered MDs experienced by midwives during their midwifery practices while working at the maternity departments in the hospitals in Namibia.

### 1.11.6 Stillbirths (SB)

A stillbirth is a baby born with no signs of life at or after 28 weeks' gestation.[65] This study considered the FSB as the death of the foetuses during labour that happened at maternity wards in the hospitals. These cause more effects to midwives than macerated stillbirths.[32] There was no specific year considered for the exposure to Fresh stillbirths (FSBs) during this study.

## 1.12 OUTLINE OF THE CHAPTERS

The chapters in this research are aligned as follows:

**Chapter 1:** Introduction and background of the study

The chapter introduces and explains how the problem of the study was identified, the purpose of the study and its objectives. The significance and a brief introduction to the pragmatic perspective of the study are presented here n as well as the theoretical foundation that guides the study. In

addition, the chapter discusses the conceptual framework and concludes with the highlight of the study's research design and the definition of relevant terminologies used in the study.

**Chapter 2:** Review of related literature

The chapter reviews existing research that focuses on the study topic. The review focuses first on the background of MDs and SBs and then goes on to an overview of the main topic (EAP) and good practices and models of the EAP. A discussion on the effectiveness of the EAP challenges experienced by midwives after MDs and SBs, occupational exposure to MDs and SBs and self-reported level of stress among midwives, and coping mechanisms used by midwives in dealing with MDs and SBs are considered in this review. In addition, the chapter concludes with a detailed description of the theories and models used in the study. These include the Stress Response Theory (Horowitz, 1986)[52], Transactional Model of Stress (Lazarus and Folkman, 1984)[53] and Coping, The Practice Theory (Dickoff et al., 1968)[54], Quality of Work Life model (Lokanadha and Mohana, 2010)[56] and Compass Aligned Performance System model (Howe, 2011)[57].

**Chapter 3:** Methodology

The chapter explains the study designs and methods used in the execution of the study. It explains the reasoning strategies that the researchers can use to do logical thinking and come to conclusions. Phase 1 covers the situational analysis approaches and methodologies. This phase used mixed methods (qualitative and quantitative strands). The discussion focused on designs, population, sampling and sample, data collection and analysis, trustworthiness, credibility, reliability and validity of the study. Phase 2 of the study discussed the development of the conceptual framework. Phase 3 on the other hand covers the development of an EAP and implementation strategies. This chapter concludes with a description of the ethical aspects that were applied during the study process.

**Chapter 4:** Phase 1: Qualitative findings and discussion

This chapter covers the part of the situational analysis findings which described phase one of the study. Qualitative findings from the study are presented in regarding midwives' experiences after MDs and FSBs. The chapter begins with a presentation of the demographic characteristics of participants and then goes on to the main findings. The findings are presented in a summarised table with themes and sub-themes and in a narrative format. Six themes, namely, psychological,

physical, social effects, effects on career/ work performance, emotional and problem focused coping mechanisms, are discussed with literature control.

**Chapter 5:** Phase 1: Quantitative results and discussion

This chapter forms part of phase one and presents the quantitative results and discussion of the results. The chapter starts with the demographic characteristics of respondents in the study. The results and discussion regarding the level of occupational exposure to MDs and FSBs, self-reported level of stress and coping mechanisms of midwives after MD and FSB is also made in this chapter. In addition, the chapter discusses the results from an analysis of quantitative results done by descriptive statistics, correlations and confirmatory factor analysis. The chapter presents the results in tables, pie charts, bar graphs and models. Finally, the chapter ends with a merging and interpretation of qualitative findings and quantitative results that is compounded with an identification of the noted challenges.

**Chapter 6:** Phase 2: Conceptualisation of the study

This chapter covers phase 2 of the study. It describes the conceptual framework of the study. The Practice theory by Dickoff et al., (1968)[57] is used in this phase to conceptualise the outcome of the situational analysis and connect them to the Practice Theory of Dickoff, et al., (1968)[57] concepts such as agent, recipient, dynamics, procedure and terminus are explained in this chapter.

**Chapter 7:** Phase 3: Development of the EAP and implementation strategies to support midwives that are affected by maternal deaths and stillbirth.

The chapter focuses on developing the EAP programme to support midwives based on the results from the situational analysis. An overview and structure of the EAP are presented. The structure consists of the philosophical basis, aim, principle, approach, objectives, content, and expected outcome of the EAP presented in this chapter. In addition, the challenges identified in the situational analysis phase are used to develop implementation strategies. The structure of the implementation strategies included the philosophical basis, rationale, guiding principles, and developed strategies are discussed comprehensively in this chapter. The chapter concludes with an evaluation process of the programme and implementation strategies.

**Chapter 8:** Conclusions, contribution, limitations and recommendations of the study

This concluding chapter presents the conclusions made from the study. The purpose of the study is provided in this chapter, and conclusions are done according to the different phases of the study. Contributions to the body of knowledge are made, and limitations from the study are identified. This chapter finally outlines the recommendations for practice, education, future research and general recommendations.

## 1.13 CHAPTER SUMMARY

This chapter introduced the topic of the study, problem statement and objectives and significance of the study. It also presented the paradigmatic perspective of the study and outlined the theories used in the study and the definitions of concepts. The next chapter presents the literature review related to the study, while the research design of this study is presented in table 1.2 below.

Table 1.2: The research design

| Phases | Objectives | Methodology |
| --- | --- | --- |
| Phase 1: Situational analysis | • Explore and describe the experience of midwives with regarding to maternal deaths and stillbirths (Objective 1) | Approach: Qualitative<br>Design: Exploratory, descriptive and contextual<br>Population: Senior, registered and enrolled midwives at two (2) Health facilities (n= 160)<br>Sample and sampling: Purposively selected (n=29)<br>Instrument: FGD, individual interviews, field notes, audio recorder.<br>Analysis: Interpretive analysis of qualitative research<br>Trustworthiness: Credibility, Transferability, Dependability and Confirmability |

| | | |
|---|---|---|
| | • Determine the midwives' level of occupational exposure to maternal deaths and stillbirths (Objective 2)<br>• Evaluate the self-reported levels of stress among midwives due to exposure to maternals and stillbirths (Objective 3)<br>• Determine the coping mechanism used by midwives to cope with the effects of maternal deaths and stillbirths in the absence of EAP (Objective 4) | Design: Cross-sectional<br>Population: Senior, registered and enrolled midwives<br>Sample and sampling: Total population sampling (n=140) was done.<br><br>Instrument: Self-administered questionnaire<br>Analysis:<br>• Stage 1 (Descriptive statistic), stage 2 (Inferential and multivariate statistical analyses and using SPSS version 27 and stage 3 Structural Equation Modelling (SEM) and Confirmatory Factor Analysis (CFA) using SPSS AMOS version 23<br>Validity: Content, construct, internal, external and face validity.<br><br>Reliability: Using standardised instruments, piloting, running Cronbach alpha test.<br><br>Procedure for merging of findings related to objectives 1, 2, 3 and 4: A side – by side comparison approach or parallel database variant was used. |
| Phase 2 : Conceptualisation Phase | • Develop a conceptual framework that would guide the study (Objective 5) | Findings of objectives1, 2 3 and 4 informed the conceptualisation process using The Practice Theory (Dickoff, James & Wiedenbach (1968)[56]<br>• Agent: Researcher, Hospital management, Counselor, Psychiatrist<br>• Recipient: Midwives<br>• Context: Health facilities |

| | | |
|---|---|---|
| | | • Dynamics: Challenges<br>❖ MDs and FSBs effects on midwives<br>❖ High exposure to MDs and FSBs with inadequate professional and environmental support<br>❖ Death distress among midwives<br>❖ Emotional focused versus Problem – focused coping mechanisms<br>Procedure: EAP and Implementation strategies developed<br>Terminus: Ability of midwives to cope with MDs and FSBs |
| Phase 3 Developmental Phase | • Develop an EAP that supports midwives in coping with effects of maternal deaths and stillbirth (Objective 6)]<br>• Develop implementation strategies for the EAP to support midwives that are affected by maternal deaths and stillbirths (Objective 7) | Findings for phase1 and 2 derived the challenges such as (i) MD and FSB effects on midwives, (ii) high exposure to MDs and FSBs with inadequate professional and environmental support, (iii) death distress among midwives and (iv) emotional focused versus problem focused coping mechanisms that informed the content of the EAP and implementation strategies.<br>Theories used:<br>• Quality of work life model by Lokanadha and Mohana (2010)[58]<br>• Compass Aligned Performance System Compass (C@PS) of Howe (2011)59 |

# CHAPTER 2

# REVIEW OF RELATED LITERATURE

## 2.1 INTRODUCTION OF THE CHAPTER

The previous chapter (Chapter 1) presented an overview of the study. This chapter presents a review of literature focusing on the EAP. The review begins with MD and SB using the funnel approach. The literature that discusses the experience of midwives regarding MDs and SBs and coping strategies used by midwives in dealing with the effects of MDs and SBs is also reviewed in this chapter. Moreover, an overview and best practices of the EAP and its various models are evident in different parts of the world. The chapter further evaluates the effectiveness of EAPs globally. Finally, multiple theories that guided the study and their applications are also reviewed. This exploration guides the study in terms of what is already known and what needs to be done in the context of EAPs in maternity departments.

## 2.2 MATERNAL DEATHS AND STILLBIRTHS

Even though every pregnant woman expects a good outcome at the end of pregnancy, sometimes the outcome is not always as expected as MDs and SBs can happen. There is however a decrease in MD and SB noted around the world.[66] This is due to poor access to health care services during pregnancy, delivery and postpartum. Stillbirths are invisible in many societies and worldwide agendas, such as the current Sustainable Development Goals (SDG) and yet real women and midwives experience pain daily.[31] This section discusses the background of MDs and SBs worldwide in the African continent and Namibia.

### 2.2.1Maternal Deaths and Stillbirths Worldwide

The average lifetime risk for a woman to die from pregnancy-related causes in developing regions is 1 in 150.[67] This burden of MD occurs due to the developing world’s young population and high fertility. The same risk in a high-income country is 1 in 4900. In 2015, the global average MMR

was estimated at 216 per 100,000 live births, while in Oceania, it stood at 187 and South Asia at 176 maternal deaths per 100,000 live births.[67] Various factors contribute to these outcomes from the health care system to social determinants of health and underlying health conditions.[68] Most of these MD could be prevented through the provision of high quality care. The WHO set up global targets of maternal targets of <70 per 100 000 births and that no country should have an MMR of more than 140 per 100 000 live births by the year 2030.[29,68] The target for SBs is for each country to have a maximum stillbirth rate of 12 per 1000 live births by 2030. [29,68] These are not easy targets to meet, and individual countries have to reduce barriers that prevent access to quality maternal and child health care services. Therefore, healthcare providers should plan, prioritise, implement frameworks, and scale-up essential obstetric maternal and child health services to achieve the WHO targets.

Stillbirths has been a neglected component in the maternal and child health landscape until the past five years.[67] In many countries around the world, SBs are not counted in national statistics, and thus records, especially in the third world countries, are poor. Moreover, inconsistency in the use of SB terminology contributes to low-quality data and frequent misclassification of SBs and early neonatal deaths.[68]

Most SBs have been happening during the antepartum period in high-income countries, commonly due to unknown disorders. On the contrary, SBs in developing countries, predominantly in South Asia where high rates of SBs are 25·5 per 1000 births, occur during the intrapartum period.[70] International intrapartum estimates are reported to be at 45%.[71] When an SB happens during the intrapartum period, it is regarded as a result of poor obstetric care, poor Antenatal Clinic (ANC) attendance, lack of skilled birth attendance, low socioeconomic status and poor nutrition, prior SBs and advanced maternal age.[71] Stillbirths can be fresh or macerated, and evidence has shown that FSB result from the quality of intrapartum care while macerated death results from the quality of ANC.[31]

Disparities in MDs and SBs have been reported around the world. In 2015, low and middle income countries contributed 98% of MD globally, with sub-Saharan Africa and South Asia contributing about 77%.[70] In the same year, the estimated SBs were 18.4 per 1000 births with the highest burden of mortality.[70]

Maternal death and stillbirth usually occur due to the global governance systems and medical causes, such as haemorrhage and hypertension.[72] In Bangladesh, the risk of MD on the day of birth increases 100 times and 30 times on the first day after birth.[73] The cause of MDs are divided into direct and indirect causes, with the direct causes contributing to 73% of MD worldwide and 23%, respectively.[73] A study conducted in Sri Lanka estimates that a high proportion of skilled birth attendance that can provide quality care can only be achieved after 75 years.[71] Hence, the need to develop an interim strategy of training community health care workers to provide primary care during delivery. This is proven by results that showed a significant reduction SBs in Pakistan, where births are mainly conducted by traditional birth attendance after they were trained.[72]

### 2.2.2 Maternal Deaths and Stillbirths in Africa

Various women in developing countries, especially those from countries on the African continent, face the challenges of inaccessibility to obstetric care. In the areas where the services are available, the health care providers lack skills, with the health facilities lacking the necessary equipment required to provide care.[74] This poses a danger to these women's pregnancy outcome and results in some and their babies dying. Rural women are likely to die more than urban women due to long distances to access health facilities. In sub-Saharan Africa, MDs account for 66% out of 99% that happened in Africa.[75]

A study in sub-Saharan Africa indicates that women in the region now give birth in hospitals.[76] Growing evidence suggests that, although a high number of deliveries are happening in facilities, maternal and neonatal mortality remains high in Low- and Middle-Income countries. A survey conducted in Kenya indicates that only 18% of the deliveries occurred in health facilities with a high level of care.[77] Furthermore, an evaluation of Zambian quality of care of ANC found that only 3% delivered optimum care while about 50% provided sub-standard ANC care.[72] However, more than half of the SBs in sub-Saharan Africa occur during the intrapartum period, mostly at term or during the late preterm period with an MMR of sub-Saharan Africa at 546.[69,67] In Malawi and Zambia, SBs of 30-40 per 100 births are common.[72] Therefore, the prevention of MDs and SB can be achieved through good quality peripartum obstetric and midwifery care and has become the focus of safe motherhood programs. A cross-sectional study in Kenya established that women who

had lower perceived quality of ANC services were more likely to have had their first ANC visit late and thus at risk of MD and SB.[77]

### 2.2.3 Maternal Deaths and Stillbirths in Namibia

In Namibia, most women seek care at health facilities for ANC and delivery. According to the WHO, women who give birth at health facilities in Namibia were at 88% while 97% of pregnant women received ANC from a skilled provider; however, the proportion of women attending four or more ANC visits has decreased from 70% in 2006 to 63% in 2015.[28] Even though the ANC coverage in Namibia is high with mothers giving birth at healthcare facilities being assisted by skilled birth attendants (88%), mothers and babies are still dying.[30] The stakeholders, such as the WHO and other United Nations (UN) agencies, have supported the increase in the deliveries at hospitals and ANC attendance of women through various campaigns to provide quality maternal at health facilities. However, the number of maternal and neonatal mortality has not reduced as envisioned.

A study on the perceived quality of maternal, neonatal and antenatal care conducted in Namibia indicates that about 82% of the health facilities were categorised as sub-standards to intermediate.[76] This shows that more women in Namibia are delivering in facilities that offer substandard care, and there is a need to improve the quality of care.[76] The high MD and SB cases in the country are not surprising as the healthcare facilities' services are mainly of low quality. This observed low quality implies a need to strengthen skills in maternal and child care among health professionals.

Most attention is given to survival after livebirth, MDs or safe motherhood and child survival, and recently survival of newborn babies with a rare focus on SBs. Stillbirths remain ignored in many strategies and programmes both at national and regional levels. A review of all MDs reported to have occurred in public facilities in 14 regions shows that the leading causes of MD and SB in Namibia are obstetric haemorrhage, pregnancy-related sepsis and hypertensive disorders.[31] Obstetric haemorrhage was the most common direct cause of MD in Namibia (25.4%).[31] Delays, such as failure of staff to assess and act and failure to involve senior staff in care, is also reported

to be the cause of MDs and SBs in Namibia.[31] The leading cause of SBs in Namibia is reported to be birth asphyxia.[31]

Regional disparities of SBs were reported in 2015, with the Hardap region recording the highest rate of 26/1000 births.[31] In addition, 36% of SBs recorded in 2015 were FSB, with the Kunene Region recording the highest figure of 70.4% compared to the 23% found in the Erongo Region.[32] Since FSB is an indicator of intrapartum care, there is a need to interrogate the intrapartum practices nationally to address the variances in FSB birth rate.

## 2.3 EXPERIENCE OF MIDWIVES AND CHALLENGES AFTER MATERNAL DEATHS AND STILLBIRTHS

After an incident of MD, midwives are left with conflicting roles, including remaining strong and giving support to the family members and themselves getting affected by the death of the woman with whom they would have had a close relationship[24]. In his study, Cavert[33] reports that midwives experience physiological and psychological effects after MD. These effects can result in dysfunctional health organisations and counterproductive behaviours.

A study carried out in Australia notes that midwives suffered grief after witnessing MDs, and as a result, some of the midwives suffered from illnesses such as depression and anxiety[42]. Other studies found that midwives feared their death because death end dreams and individuals' ambitions .[15] In his study, Jarvis[92] illustrates that health care practitioners, including nurses and midwives, experience a lot of grief and display signs such as crying and inability to sleep. In some settings such as Ireland, SB were, however, found to be less traumatic than MDs.[64]

Stress and anxiety were some of the signs displayed in some studies conducted around the world. Stress and anxiety were found to escalate in maternity wards.[91,86] A survey on health professionals in the USA indicated that suicidal ideation, anxiety, depression, and concern about the ability to perform one's job were experienced by health professionals, including midwives after MDs. In another study, 43.7% of midwives reported that they consulted their family physicians because of stress or anxiety-related symptoms, with 37 of these midwives (79%) having received treatment for the problems.[16]

Post-Traumatic Stress Disorders (PTSD) after a poor birth outcome is also one of the psychological effects that health professionals, such as midwives, go through as they start to relive the traumatic events they experienced.[93] Midwives in previous studies experienced PTSD signs such as insomnia, nightmares, anger, flashbacks and guilt.[86,94] Anger was noted among the peritraumatic distress in the midwives.[91,95] A scoping review in Australia and a study conducted in Israel revealed that midwives and obstetricians suffered from poor sleeping and nightmares after witnessing traumatic MDs and FSBs.[15,95] On the contrary, a study by Sheen et al.[86] did not identify previous life trauma as a predictor for the post-traumatic syndrome, especially insomnia, among midwives. Nonetheless, poor sleeping can contribute to health care and consequently the poor quality of life among midwives. Thus, they need psychological support to overcome the sleeping disorders that may affect their work performance.[24,42]

Intrusion repetition, as explained in Horowitz's (1986)[52] theory, was found in some studies such as Wahlberg et al.[96,34,93], and it showed itself among midwives through re-experiences of the death events. Consequently, it is argued that trauma memories might certainly not be 'erased' and anticipated to resurface when the midwife is faced with a similar traumatic incident.[93]

Moreover, in their studies, Schroder[6,18,97] found effects such as shame and emotional exhaustion as some of the after-effects of adverse events, including MD and SB. This outcome concurs with Young et al.[33,] who report similar findings from their study in New Zealand that midwives experienced guilt and decreased work expectations after a MD. Other studies established that MD has a notable lasting impact on midwives as they are left with feelings of grief and shame, which they are hesitant to verbalise.[98,6,18] This can lead some midwives to suffer in silence as they are ashamed to talk about their experiences of the death events. The result here could be a decreased work expectation as observed in New Zealand and Switzerland. [99,100] Furthermore, Dartey et al.,[101] opine that emotional exhaustion might risk the midwife and other patients as the midwife could make enormous mistakes due to reduced attention. This may result in job insecurities as the chance of losing their employment increases when faults are made, contributing to the workplace's perceived blame culture.[102]

However, Huston[104] argued that negative perceptions after MD are perceived as positive as they direct humans experience on which way to go. Maternal death and Fresh Stillbirth indirectly motivate the development and improvement of a safer health care environment[113]. Harrison et al.[105] argue that supported, valued, and trusted health care professionals feel empowered to improve care after adverse events, which enhances safer practices at medical institutions. Other studies note that most midwives and obstetricians confirmed that they became better clinicians, felt empowered and improved their patient care after experiencing a death trauma.[91,106,24,105] Similar sentiments were reported in a qualitative study in Queensland, Australia, where student midwives indicated that witnessing SB frequently made them mature in the profession.[106] A supportive environment is thus deemed essential for the emotional effects to be translated into a modified practice[24].

A negative perception is perceived as positive as it directs humans experience on which way to go. These experiences act as promoters for developing and increasing safer working environments.[104] Nevertheless, some midwives are reported as having changed careers after witnessing MDs and FSBs. Nightingale et al.[16,86] point out that some midwives in England changed their profession to other professions after experiencing a traumatic perinatal event. Changing careers can decrease the midwife workforce in a situation where midwives are already few around the globe.[74,35] Other studies state that witnessing MD and FSB events erodes confidence to work, reduces work expectation and creates uncertainty about the ability to perform jobs. [107,108,100,99]

Emotional distress has also been reported among midwives in previous studies. Australian midwives were found to have experienced emotional distress because of their incapability to manage the impact of MDs, and this had negative consequences on their work performance.[109] Furthermore, Shorey et al.[110,33] prove that numerous health professionals working in maternity sections who periodically encountered maternal and perinatal deaths developed negative emotional well-being as they felt depressed and burned out and self-blame. This notion is supported by a survey conducted in Liverpool that established that traumatic events in midwifery practice commonly generate feelings of self-blame among midwives.[108]

Furthermore, MDs and SBs were reported to have contributed to a blame game between the midwives and their colleagues, employers and the community. Midwives were found to have

adverse perceptions of their colleagues' conduct and highlighted the problems of "finger-pointing" and blame related to MD.[98,86] Nonetheless, this notion was challenged in another study where low rates of the blame game both among obstetricians and midwives were found, although the professionals were equally worried and fearful.[91] In the UK, midwives, developed negative emotions, frustration, unjustified feelings of blameworthiness and lack of confidence after the blame from the public.[108,107]

In their study, Wahlberg et al.[96] found that midwives lack sufficient formal support and only rely on support from supervisors, colleagues, and friends. Feeling unsupported in the workplace leads to fear and intensified trauma, while feelings of incompetence can affect midwives' future responsibilities.[91, 24] Poor institutional supports to midwives and inadequate resources were thus contributing factors to distress among midwives. [111, 86]

Midwives also reported fear of litigation, which exacerbated perceptions of trauma and created bleak future employment.[24] Other studies indicate that midwives experience a sense of grief and emotional loss after MD.[17] These findings are consistent with qualitative research conducted in Ghana that found grief a major effect among midwives.[24]

In Uganda, midwives were found to experience psychological distress after witnessing MDs.[17] In the same study, young midwives in the early stages of their career were affected more than older midwives. This state that the young midwives find themselves due to limited experience and poor support offered after a death event. Muliira et al. [103] indicate that gender plays a role in how healthcare professionals react to after-death event anxiety as males cope better than women. Muliira et al.[17] concur with the above author. They found similar findings in their study where midwives who were predominantly females were found to experience death anxiety and post-death event depression. In addition, Dartey et al., [24] point out that midwives blame themselves after death events since the patient is usually not physiological sick but only going through the changes of pregnancy.

After the literature review, no known studies have been conducted on midwives' experiences and challenges after MDs and SBs in Namibia. This is, therefore, one of the gaps that this study is addressing.

## 2.4 OCCUPATIONAL EXPOSURE TO MATERNAL DEATH AND STILLBIRTH AND SELF-REPORTED LEVELS OF STRESS AMONG MIDWIVES

Occupational exposure is defined as exposure to potentially harmful chemical, physical, psychological or biological agents, which occurs due to one's occupation that can affect the individual employee.[112] Occupational exposures to MDs and SBs are a common practice in obstetric ward/maternity wards worldwide. Evidence reveals that various women in the global south delay accessing health facilities deliberately or go late due to lack of transport. Delaying access to health facilities can lead healthcare professionals such as midwives to be exposed to many MD and SB cases that may lead to anxiety and other physical and psychological problems.[73] As a result, intensified campaigns seeking to encourage women to reach health facilities on time are carried out. However, studies conducted in some settings discovered that women visit health facilities on time, with some MD and SB cases being the result of third delays in the health care system. [67,112]

Maternal deaths and stillbirths are traumatic events that can prevent health professionals from speaking out after a death event as they would be of the view that they should have saved the lives of the patients under their care.[73] This belief can lead to limited knowledge among health care on how to deal/cope with death events. The effect of occupational exposure to MDs and SBs among health practitioners calls for the need to train health care workers to equip them with means to manage death events.[103] This can be done by providing occupational health services that address the employees' physical, mental and social well-being through programmes, such as EAPs led by occupational health care workers, which will benefit employees and employers.

Folkman and Moskowitz[113] indicate that MDs and SBs may positively affect midwives' adaptation to the events through positive coping behaviours. Moreover, a positive impact can also occur if the midwives attain and exercise control over the death events and are less affected by the events.

Attainment and exertion of control over death events can be obtained through reliance on support in the work environment when dealing with death events that are demonstrated through a positive reflection of personal experience and coping mechanisms.[53] This can be displayed through effective working and professionalism within the work environment.

On the contrary, insufficient support and resources and ineffective coping mechanisms after exposure to MDs and SBs results in short and long term adverse effects such as fear, feeling sick, anxiety disorders, guilt, depression and self-blame among midwives.[96] Intrusive thoughts and feelings of unpreparedness can arise due to MDs and SBs.[113] Emotional effects are severe in instances where midwives fail to control the death event. Hence, the need to effectively address chronic and pathological symptoms that arise after MD and SB exposure to avoid health care providers from distancing from patients.[113]

A quantitative study indicate that professionals who reported exposure to fewer MDs and FSBs reported greater levels of distress (Wallbank, Wallbank, & Robertson, 2016).[44] However, higher death distress in other studies is associated with the young age of midwives and increased exposure to MDs and FSBs.[114,35,110]. Shorey et al.[110] believe that death anxiety can be reduced if FSB and deaths are diminished. Other studies conducted in various countries reveal that midwives continue to work in distress situations after witnessing MDs and perinatal deaths, resulting in maladaptive coping mechanisms. [33, 107, 86]

Other authors opined that SB causes high levels of distress among health care workers such as midwives.[40,95] A study on the effects of SBs in Arizona noted that health care workers experience death anxiety and depression, difficulties expressing empathy and become more distant after a SB.[95] The same study also notes that health professionals encounter problems expressing empathy, communicating with the mothers and becoming more distant.[95] A quantitative study conducted in Israel found high self-reported stress levels among midwives exposed to MDs.[115] This outcome concurs with Young et al.[34,] who report similar findings that midwives in New Zealand stated that they experienced guilt and a decrease in work expectation after a MD. In addition, midwives in Australia were found to have feelings of helplessness, powerlessness and became lethargic after witnessing a MD.[93]

In Africa, Muliira et al.[17] reported that MDs are common in developing countries due to insufficient human resources. A quantitative study conducted in rural Uganda on MD reveals that 94% of midwives in that study were exposed to MDs.[17] Moreover, the same study indicates that midwives have been exposed to an average of four deaths a month before the study. This is an indication that midwives in that study were highly exposed to MDs.

Due to occupational exposure to MDs and SBs, midwives become secondary victims.[103] They are the second victims since the woman or patient is the first victim.[103] Occupational exposures to MDs and SBs can have positive or negative outcomes. The positive outcomes are related to a healthy psychological, physical, social and emotional well-being. Still, when the components mentioned earlier are poor, it is regarded as a negative outcome.[103] The impact can thus be appraised as positive if it improves some facets of midwifery or negative if it has adverse effects on the midwives' psychological, physical, emotional and physical aspects.[17]

In addition, occupational exposure can result in death distress among midwives, leading to burnout, depression and high turnover. [17,103] Death distress was also found to cause high deaths anxiety (93.3%), moderate death obsession (71%) and mild death depression (59%) among midwives in Uganda.[17] In Namibia, no known local study was found on occupational exposure to MD and SB and the self-reported stress level among midwives.

## 2.5 COPING STRATEGIES USED BY MIDWIVES AFTER MATERNAL DEATHS AND STILLBIRTH

Coping strategies refer to specific psychological and behavioural efforts that people can use to cope with a stressful situation.[115] In this study, coping methods refer to how midwives used to survive after experiencing an MD and FSB. These coping strategies are categorised into two parts, namely, problem-focused coping and emotion-focused coping.

### 2.5.1 Emotion-focused coping

Emotion-focused coping is an attempt to reduce or manage distress associated with the onset of stress.[17] It is intended at reducing negative emotions through seeking social support or by avoiding problems. This coping strategy is, however, associated with negative outcomes[15]. Other studies indicate that midwives leave their work areas when there is imminent death or a critical patient in their workplace.[36] Another coping strategy used in the workplace is the avoidance of painful stimuli. Momentary regrouping was a form of escape used by health care workers to leave the area when there was a problem temporarily.[38] This comprises taking a short break in a private place, such as a bathroom, to decompress.[116] Leaving the workstation entirely is another method of escape from the problem cases. This may have led health care workers to develop defensive behaviours, including not communicating with colleagues and accepting self-inflicted behaviour to avoid stress.[114] Leaving the working station was the most used coping strategy among the nurses and midwives after experiencing death.[116] In addition, using humour was found to be helpful and a quick coping strategy used by nurses and midwives that was viewed as a resource for relaxation in the care of dying patients.[117, 115]

Some midwives developed depolarisation and avoidance in the UK after witnessing a miscarriage, SB or neonatal death.[86] Such encounters lead midwives to develop apprehension, making them prone to commit errors as they will be worried about what will happen after the death event. The mindfulness-based stress reduction strategy was established among health professionals. The benefits of this included a reduction in incidences of provider burnout, self-criticism, avoidance behaviours and improved life satisfaction and self-compassion.[105] Another coping strategy that midwives used was forgetting the event. Forgetting is effective as it helps the midwives to suppress their thoughts; however, Nia et al.[114] indicate that this is regarded as a short term coping mechanism.

A sense of consistency emerges that makes the experience of stressful life and work events more tolerable[15]. Individual social support has long been recognised as an effective mechanism for coping with stress.[40] The employee’s social support system (family and friends), supervisors and co-workers can provide valuable information, resources, and emotional support. In his study,

Wallbank et al.[43] underscore the relevance of social support after observing that social support acted as a buffer to adverse events of MDs.

Support from other people such as colleagues, family, and affiliates of the same religion was also found to help midwives cope with the adverse effects of traumatic events such as MDs and FSBs.[114,38] These coping mechanisms are perceived to be particularly useful in societies where EAPs are not predominant. EAPs act as one of the vital mechanisms for assisting an employer in coping with dysfunctional consequences of work and non-work stresses.[13] It is further shown that nurses and midwives felt that culture specific rites and rituals and religious beliefs, such as praying, are an essential coping strategy.[110] By praying, midwives aim at reducing their negative emotions or changing the appraisal of the situation. In addition, formal support provided by the midwives' employers, such as chaplain services, have been found to reduce stress and improve coping mechanisms.[118] Health institutions are therefore required to establish support services dedicated to helping midwives cope with the trauma of experiencing MDs and SSBs.

Since coping is dependent on how an individual perceives the event, some studies reveal that most midwives relied more on their colleagues for support on how to handle the stress after debriefing the whole incident with colleagues at work and talking about the incident during the break.[18,118,117] Other authors argued that debriefing sessions are a helpful coping mechanism to assist midwives after negative events that include MD and SBs.[96] The debriefing model is supported by the Auckland District Health Board[119] that describes the model as the most vital strategy. However, a Cochrane systematic review showed that debriefing everyone does not reduce emotional stress, anxiety or depression and does not eliminate the effects of the event[41]. In some studies, mentoring and debriefing with senior colleagues were found to be effective strategies used by junior colleagues to cope with these adverse effects. [64, 120, 39] Debriefing might afford opportunities to learn and make sense of difficult experiences, but it is challenging to establish its effectiveness.[98]

Sharing the death event with colleagues was helpful and can thus act as a buffer to stress[15, 39]. Nonetheless, colleagues may also have harmful effects. The despair and shock experienced during the death event may be exaggerated and, in that way, cause severe stress when reciting the event to a colleague.[121] Some midwives also coped through informal talks and meet-up sessions with

bereaved parents.[118] This has been found to bring closure and offer an opportunity to learn from these parents' experiences.[98]

Another method that is used to cope with the effects of MDs and FSBs is clinical supervision. Clinical supervision is done when the supervisor hears the distress of the staff members or while looking out for burnout. Then they refer the distressed for appropriate care or support, such as to an EAP if available.[35] In their study, Calvert and Benn[33] point out that midwives preferred supervision over debriefing as they believe it reduces trauma. However, the extent of the effectiveness of supervision remains debatable. Given this, Love et al.[122] state that supervision has a low impact, depending on the quality provided.

In their study, Dartey et al.[101] point out that midwives attended grief rituals such as mother or baby's funerals and provided food to family members to ease the emotional distress they experienced. This was found to bring closure and help midwives in dealing with grief.[17] The midwives felt obliged to witness the end of a life journey for the mother who passed on due to the personal connection that they would have developed with the deceased.[17] This can have a positive effect on health professionals. Midwives in some African countries, such as Ghana, relied on their families for support to relieve their distress.[116]

### 2.5.2 Problem-focused coping

The problem-focused coping approach is a proactive attempt to alter or manage the situation. This type of coping is associated with positive after death event health outcomes among midwives .[40] Problem-focused coping includes directing efforts to handle a distressing situation; gathering information; decision making, conflict resolution; resource acquisition and setting task-oriented goals.[110.]

Positive reappraisal is another method of coping used by health care professionals to deal with the death of their patients. Ribeiro et al.[36] point out that positive reappraisals describe determinations seeking to make positive meanings from problems and provide individual growth that involves the control of feelings associated with grief that serve as a way to reframe, learn and change from a

conflicting incident. The control of the emotions related to sadness serves as a way to reframe, learn and change from a conflict situation. The positive reframing coping method was found to enhance delight and progressive quality of work life.[41] Accepting death is a mental process that may take place over a more extended period, and it is thus viewed as a realistic and coherent way of seeing death as part of life.[117] One study reveals that the positive reappraisal coping mode is associated with age and educational background. A low level of education in that study was associated with less frequent use of positive reframing in older and more experienced midwives in the maternity department.[40] This could be because the maternity department is a positive environment where only joyful events occur; it can therefore be very challenging for health professionals working in maternity to express their negative personal feelings.[41]

Other problem-focused coping mechanisms from the Brief Cope scale, such as active coping and acceptance, were used in different settings. Studies conducted in Slovakia and the UK revealed that health professionals in the midwifery and medical profession used active coping, acceptance and instrumental support as the primary coping strategy after experiencing MDs.[98,40] Moreover, a quantitative study conducted in Uganda shows that most midwives coped with their distress using methods such as venting, positive reframing, and planning on coping after occupational exposure to MD.[17] These assist midwives to overcome and addressing stress stemming from occupational exposure to death events and avoiding a negative impact on the well-being of midwives that can reduce the quality of their work.

Midwives in rural Uganda were reported to use problem-focused coping strategies such as taking action, seeking information through MD audit meetings and taking courses on the management of obstetric emergency care.[42]

In their study, Muliira and Bezuidenhout[17] show that midwives used venting and self-support as some strategies for coping with occupational exposure to MDs. However, self-support could pose negative consequences, such as increased stress and anxiety, to midwives, as found in other studies. [91,114,36] The self-control strategy is thus significant at departments that include maternity where most perilous situations are unforeseen, and decisions need to be made urgently and effectively.

## 2.6 OVERVIEW OF EMPLOYEE ASSISTANCE PROGRAMME

Employee Assistance Programmes are designed to enable employees worldwide to maintain high levels of productivity and general well-being. This synopsis outlines how the EAP evolved, is managed and the problems experienced in the development process of EAPs in the global and African contexts.

### 2.6.1 The Employee Assistance Programmes in the global context

The existence of work-related issues, such as a stressful work environment, has prompted organisations to develop programmes to improve productivity and address employees' concerns.[10] Historically, EAPs were first developed in the early 1940s targeting alcoholics in the industries as Alcoholic Anonymous (AAs) in the United States.[12,10] In the early 1970s, EAPs evolved to help employees with various challenges that stemmed from the workplace.[12] In the past decade, EAPs have expanded rapidly, and their focus has shifted to assisting employees on how to handle all range emotional and behavioural problems that might hamper productivity.[10] Over time, EAPs have progressed and implemented a broader and more holistic approach in response to the emerging influences from within and outside the workplaces. A new perspective was developed after the Employee Assistance Professional Association (EAPA) indicated that the EAP was planned for all employees of the organisation and their family members to support them over a variety of problems.[23] More substantial developments followed when it was suggested that the EAP be designed to support supervisors/managers in managing a troubled employee.[10]

EAPs are at a critical stage, with recent observations indicating that most are considered programs designed to support multiple kinds of employees, their families and workforce performance issues such as short term counselling, critical incident debriefing and support and management coaching.[8] This evolution of the EAP is reported, in a global study conducted in 2018, to be fundamental .[9] Several countries in the world have adopted EAPs, and different EAP models have been utilised to fit their local contexts. Roche et al.[9] found that the provision of counselling after a critical event or trauma is standard around the world. Although counselling is a cornerstone in EAPs, in Canada, EAP services have gone beyond just counselling in recent years. They now include critical incident

stress response and debriefing, topic-specific training, management consultation, employee orientation to EAP and supervisor training.[78]

Employers provide EAPs for various reasons, including the desire to support employees and their family members, accept the scientific evidence that healthy employees promote productivity in the workplace, and protect their organisations from losses due to liabilities and legal issues.[1] EAPs are staffed with EAP practitioners who provide services to the employees who seek assistance and act as a link between the employer and employees. The EAP practitioners also act as behavioural consultants to the organisations' upper management in unforeseen events.[12] Therefore, EAP practitioners work as the first line of defence between the organisation and employees.

### 2.6.2 The Employee Assistance Programme in the African context

Even though EAPs have tripled in many organisations located in the global north, the South Africa Employee Assistance Programme Association[1] found out that EAPs have decreased tremendously in many organisations worldwide, especially in countries in Africa. According to these authors, this is due to the organisations' lack of training and understanding of the need and benefits of such programmes. Van Wyk and Terblanche[7] opine, on the contrary, in their study that EAPs are growing at a fast pace and being recognised in South Africa. In addition, Van Wyk and Terblanche[7] note that most companies are willing to have these programmes for their employees. However, the effectiveness of the implementation of these programmes is questionable, hence h the need to conduct evaluations intermittently.[5,80]

In South Africa, EAPs protect losses from business arising from the unproductivity of employees and their dependents who are troubled .[23] Griggs and Mackey[79] indicated that the EAPs improve the value and business significance of existing programs, standardise the definition of the EAP and the scope of covered services to ensure consistent programme administration, increase the meaning of EAPs and the scope of services covered, and advance the coordination of EAPs by the employer. Once the employers understand the above stated information, it will make it easier for the implementation of EAPs and can address the costs of doing business and diminish business risks.[79]

Although online services improve EAP provision in many parts of the world, especially in remote areas, traditional face to face sessions are favoured in Tanzania due to poor networks connections.[10] Therefore, there is a need to improve network connectivity in many developing countries if online EAP services become a reality.

## 2.7 GOOD PRACTICES AND MODELS OF EMPLOYEE ASSISTANCE PROGRAMME

It is stated that there are no standardised formulas for implementing EAPs as each organisation can develop its unique programme according to its needs and challenges.[79] However, EAPAs the world over have developed standards such as needs assessments, implementation plans, EAP promotion, EAP management reports, complaints procedures, record keeping and standards on service delivery procedures.[23] In recent years, Employee Assistance Professionals Associations (EAPA) focuses have shifted towards work-life and health promotion where a link is made with employee performance and personal life.[81] Despite this, there are similar basic characteristics of EAPs that have been identified. Kruger[23] indicates that an accurate needs assessment should be conducted first before an employee is referred to an EAP. It is thus vital for an EAP to have a formal referral system and a monitoring and evaluation system to ensure fairness for all employees.

E-service provision is increasingly becoming popular in the EAP field. Researchers indicate that online mental health services are clinically effective and particularly appealing to the young working population.[82,83] Online EAP services are also believed to evade ongoing concerns about stigmatisation from accessing services and potentially allowing more people to access interventions.[12] However, it was noted that online services were only as good as the available technical infrastructure, which would be of limited or variable quality in some regions.[83] The question of equitable access was highlighted as a significant future concern, especially for workers in more remote areas that are less well supported by the internet or on-the- ground services.[84] An online study on the implementation of EAPs conducted in the USA found a high number (69%) of external EAPs compared to 31% internal EAPs and that 90% of the employers who participated offered counselling services.[81] Another study conducted by [78] in Canada also found a high number of external EAP vendors. Nonetheless, employers are at liberty to choose the method that suits their organisation, considering the cost implications and risk management involved in providing

such services.[85]

A worldwide study conducted by Roche et al.[10] on the development of EAPs around the globe found out that EAPs are linked to employee insurance plans in the USA. This latest approach was found to be preferred by many corporate employees. However, the same study revealed that the evolvement of EAP to insurance-based EAPs in the USA led to poor EAP service offered due to inexperienced service provider.[10(pg174)]

Frey et al.[4] believe that positive outcomes of EAPs can highlight the significance of adapting an EAP to be responsive to the sector's needs and organisation. The same authors conclude that combining the two methods of EAPs (internal and external) is the best program design. It is proven to have benefited and improved employee participation in the program[4]. A supervisory referral is one of the strategies used during internal or external EAPs[4]. With this strategy, the supervisor plays a confrontation role where they engage an employee who has poor performance or seems troubled[18]. The supervisor can then refer the employee to the available EAP for support. In their study, Calvert et al.[33] indicate that midwives prefer supervision over debriefing as they believe that it reduces trauma. However, the determination of how positive the supervision would be debatable. Austin[18] refutes that supervision has a low impact and depends on the quality provided.

There is another EAP strategy that is self-referral. In this strategy, an individual employee seeks help from the available EAP programme. In recent years, self-referral has been regarded as the best option as it shows personal responsibility and willingness to receive help[4]. A study conducted in New Jersey, USA, on the use of EAPs reveals that self-referral voluntarily was not a common practice.[13]

EAPs can be implemented either internally, externally or through a blended method whereby employees are given a choice to get counselling services at their work environment, outside their work environment or both.[10] Internal EAPs are usually operated by the organisations' staff and housed within the organisation. In contrast, the external EAPs have their own set up (outside the organisation) and serve multiple worksites or organisations[3]. Austin[18] indicates that internal EAPs might be beneficial to midwives because they work shifts. The setups of both internal and external

environments have to be cognizant of the need to maintain both privacy during the session and confidentiality for the employee to open up and air their problems during the sessions[1]. Outreach programmes and offsite EAPs have thus been found to improve the utilisation of the EAPs in various settings.[7]

Different EAPs have varying advantages and disadvantages to the employees, and the success of their implementation depends on the employees' awareness and perception of the EAP[3]. The benefits of internal EAPs include the availability of services within reach of the employees, making it easier and accessible for employees to participate in the programme and do follow-ups without taking extra time from their work. A study conducted at A'ali Health Center in Bahrain found a positive outcome of an internal EAP on employees who were initiated on a health programme.[85] The same study compared before the intervention was made, between sick leaves, diet intake and blood pressure and noted a significant reduction was found after the intervention on the sick leaves taken and blood pressure levels and better improvements in diet intake.[85] However, internal EAPs are prone to stigma as employees can be seen going to the counsellors' offices by colleagues. Graessle et al.[13] indicate that destigmatising EAP use can increase the likelihood of employees seeking help on time. An increase of more than 250% was noted in a study conducted on EAP use at Cooper University Hospital in the USA after graduates were educated and introduced early in their careers on the benefits of EAPs.[13] While internal EAPs can be cost-effective, confidentiality becomes a significant concern, which may lower the utilisation rate on the programme's implementation.[8,82]

The blended approach or hybrid programmes still allow employees to be sent to internal EAPs and be referred to external EAPs for the organisation's services. This can be due to a high number of cases that need service, when there are service gaps and when the staff providing services lacks necessary skills.[10] The blended approach is believed to be “the best of both worlds” (Roche et al.[9(pg173,33)]). There is the opinion that external EAPs may eliminate the stigma, as mentioned earlier, as employees' can access services outside the work environment during their own time. Nonetheless, employees are likely to default on follow up as they might find it challenging to go outside the work environment for services.[9] In addition, communication between the employee and the offsite counsellor might be ineffective due to the distance between the work environment

and service office whilst at the same time, it is found to be expensive to the organisation[12]. On the contrary, an exemplification by an onsite EAP Programme at Midwestern University in Arizona, USA, found that ongoing communication via multiple delivery channels and tailor-made messages were effective.[80,10]

In general, several factors are perceived to hinder the implementation and lessen the utilisation of EAPs models due to trust issues between the client and service provider and poor administrative support of the programme.[80] Moreover, negative feedback from previous users, misconceptions and negative perceptions about the programme by the employees pose a challenge to the implementation of EAPs.[79,12] Finally, it should be noted that consumer demand is classified as the topmost driver of change and thus becomes a challenge to the implementation of the programme once the demand is low.[10]

## 2.8 EFFECTIVENESS OF EAP

Once an EAP has been implemented in an organisation, it needs to be evaluated periodically to measure the programme's effectiveness. The effectiveness of an EAP depends on a correct initial implementation in an organisation. Globally, EAPs are perceived as very effective.[10] Leonard and Terblanche[11] believes that EAPs must be evaluated to substantiate their need and determine whether they achieve their intended goals. The monitoring and evaluation processes carried out during the need assessment of the EAP should be planned already to be incorporated in the programme implementation phase.[80] Csiernik et al.[78] indicate that even though there is sufficient literature on EAP evaluations, EAP vendors in Canada were found to have low rates of quality of EAP service offered and thus lowered the programme's effectiveness.

More than 75% of the USA's large organisations are believed to offer EAPs; however, an evaluation of such programmes is not always conducted as it should be, thus making it difficult to measure the programme's effectiveness.[12] Evaluation of the programme can be done in two different methods, namely: direct practice and programme evaluation.[80] Direct evaluation looks at whether the set goals were achieved. This kind of evaluation can be conducted efficiently as it does not require sophisticated methodologies. However, a programme evaluation of an EAP

follows rigid research processes as the effort is geared toward evaluating the success and efficiency of the programme.[80] Joseph et al.,[8(pg65)] indicate the following numerous evaluative studies that can be conducted on an EAP: service needs, compliance, programme adequacy, external resources, programme effort, programme effectiveness, programme benefit equity, client satisfaction, cost and benefits, programme constraints benefits, and programme utilisation. High usage of the EAP programme is typically used as a proxy for the successful implementation of the programme.[2]

In Australia, EAPs for midwives are provided as midwives are at the forefront of traumatic clinical situations and deal with the woman's physical and emotional well-being while supporting her partner and family.[21] EAP programmes are viewed as employment benefits to employers; however, current legal frameworks make it mandatory for EAPs in organisations[1]. According to Sheen et al. [86], there can be a short term provision of EAPs such as therapy among troubled workers who would have experienced stressful events to improve their productivity, thus saving costs to the organisation. Short term therapy sessions in the EAP last, not more than eight sessions or not more than six months.[84,10]

Csiernik et al.[85] indicate that short term therapy aims to stimulate, guide and improve the employees' problem-solving skills. Short term therapy is employee centred, and success requires the full cooperation and commitment of the individual employee. Specific roles and responsibilities are then set for the employee to solve the problem as soon as possible. The advantages of short term therapy include reduction in anxiety, significant fast progress and cost-effectiveness.[12] This kind of therapy is therefore aimed at finding the solution and not resolving the problem.

A systematic review of evaluating the effectiveness of EAPs in North America found an increase in employees' outcomes, explicitly improving levels of presenteeism and functioning.[8] Even though absenteeism was the primary variable that was investigated, the results revealed that presenteeism is a better variable to measure the effectiveness of EAPs.[8] The same study found that the majority of EAP vendors who offered services were external. In Addition, evidence showed that after implementing an EAP in their organisation, Compton et al. [87] found a decrease in absenteeism, improvement in presenteeism, and a rise in both compensation claims and

productivity post-EAP. At the same time, Grow, and Ots[88] report improved work-life, motivation and work relationships after EAP utilisation.

Another study conducted by Li et al.[89] found a significant positive difference in absenteeism whereby employees missed fewer day's post-EAP. In contrast, Sharar et al.[90] found a 43.6% reduction in absentee hours after EAP implementation. On the contrary, a study by Compton et al.[87] on EAP evaluation only saw 8% of respondents who consider EAPs significant in managing an organisation's absenteeism rates. Similarly, in the studies that looked at the evaluation of EAPs, Sharar et al.[90,89] reported a decrease in presenteeism from pre-to post-EAP and a reduction in workplace distress after an EAP intervention. However, a study conducted by Joseph et al.,[8] in the USA about the effectiveness of EAPs did not find any change in absenteeism. Richmond et al.[5] established in their study that employees who screened positive for depression before the EAP intervention revealed a better improvement in presenteeism post-EAP than those who screened negative for depression pre-EAP.

On the level of functioning, Joseph et al.[8] found a positive outcome of EAPs on employee levels of functioning both at work and in their personal lives and noteworthy improvement in emotional health. A study by Kavanagh[83] noted a clinical distress reduction post-EAP. Furthermore, the EAP counsellors assessed the performance of participants in the programme, and a positive impact on performance was recorded.[8] Compton[87,78] further found that EAPs effectively improve job retention, quality of life and reduce disciplinary cases and a high (95%) level of client satisfaction on counselling.

## 2.9 THEORIES AND MODELS THAT GUIDED THE STUDY

Chinn and Kramer[123 (pg184)] describe theories as systematic ways of looking at the world and describing events. On the contrary, models consist of the main concepts in a research framework.[124] This study was guided by four theories and models and these are the Horowitz (1986)[52] Stress Response Theory and Lazarus and Folkman’s (1984)[53], Transactional Model of Stress and Coping that guided the situational analysis of the study, and Dickoff, James and

Wiedenbach'd (1968)[54] The Practice Theory, Lokanadha and Mohana's (2010)[56] QWL model and Howe's (2011) C@PS Theory .[57]

### 2.9.1 Horowitz's (1986) Stress Response Theory

This theory is about a person's response to stressful events.[52] It was developed by Horowitz in 1986 and explained how an individual respond to trauma. A person exposed to a traumatic event goes through two major phases. The first phase involves experiencing a disturbing repetition of traumatic events and efforts to suppress traumatic or intrusive thoughts that result from trauma. The second phase is about adjustments to the trauma effects. Adjustment comprises five categories: outcry or realisation that an event has occurred, denial and numbness, intrusive repetition, working through and completion.[52] However, a pathological phase can also happen immediately after the trauma, called a stress syndrome response syndrome.[52] The detailed process of the Horowitz Stress Response Theory is discussed in figure 2.1 below.

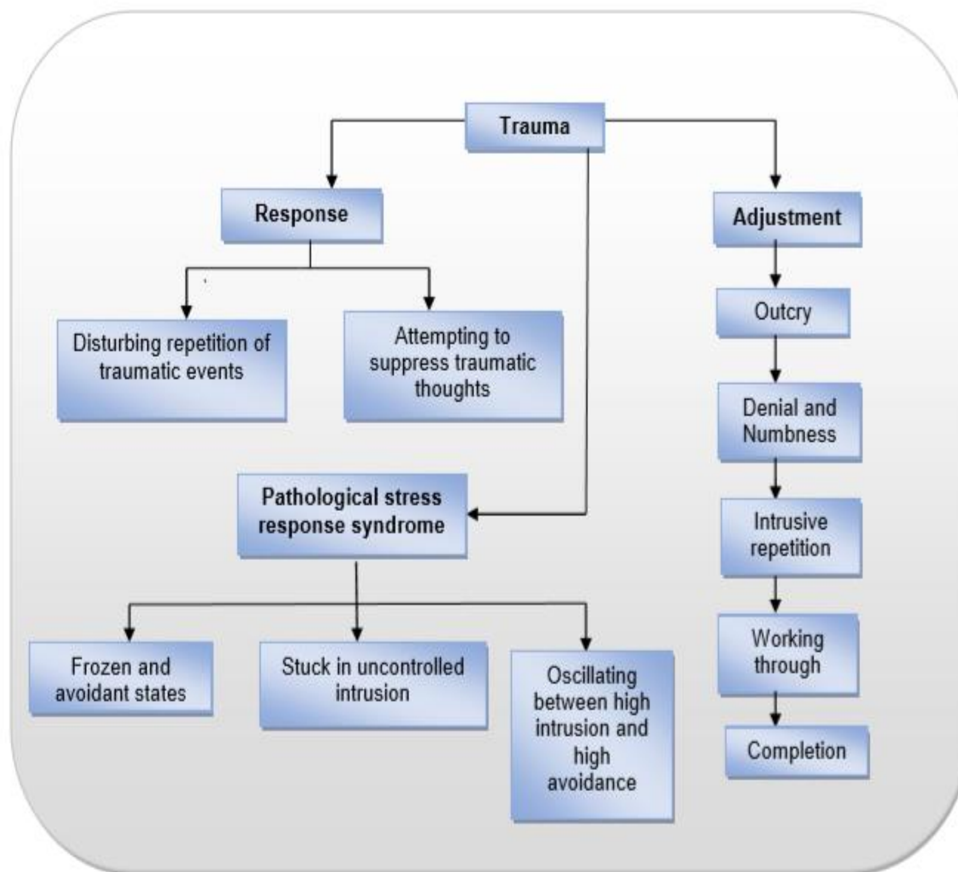



**Figure 2.1 Horowitz's *Stress Response Theory***

(Source: Horowitz 1986:95)

Figure 2.1: Horowitz Stress Response Theory

2.9.1.1 Trauma in the Horowitz Theory

Trauma is the central concept that is involved in the Horowitz Stress Response Theory. A person needs to be first exposed to a traumatic event for the response process to start. Barlow et al.[112] describe trauma as a result of an event that is mostly abrupt, affects the emotions of a person and results in pain and distress, as well as cause a reduction in the inability to cope with the event that leaves an individual helpless. Wahlberg et al.[96] indicate that distress caused by a traumatic event can worsen if an individual does not receive any support and becomes pathological, leading to disorders such as PTSD.

#### 2.9.1.2 Response in the Horowitz Theory

If the trauma appears often, an individual may experience intrusive thoughts and repeatedly suppress such thoughts.[52] Intrusive, repetitive thoughts include imaginary thoughts and emotions or behaviour[52]. Intrusion repetition is defined as recollections of a traumatic event that occurred unexpectedly in an individual's mind.[52] This can happen when an individual is awake or appears as a dream during sleep. This, therefore, causes visual images, tastes and sometimes a feeling of painful touch in an individual.[96] In some occasions, intrusion may cause a rise in both the heart rate and breathing rate. An individual will therefore try various methods to resolve the problem at hand. If the problem is not resolved, the person can continue to experience traumatic experiences, and this may come in multiple negative forms that may suppress an individual's thoughts.

Moreover, if a person responds positively after a traumatic event, they may experience the psychological adaptation process.[52] This includes modifications of automatic associations and substitution of new ways of thinking, revision of relevant schemas to consider the information contained in the trauma, resolution of conflicting interpretations of the trauma, and generation of new solutions that address problems posed by changed circumstances.[52] Horowitz[52] argues that adaptive patterns of cognitive processing are s occasionally a standard sequence of processing that is interrupted and is not accomplished. Horowitz[52] regarded attempting to suppress or avoid traumatic thoughts as a coping mechanism.

#### 2.9.1.3 Adjustment in Horowitz Theory

The adjustment process in Horowitz Theory is divided into five phases: outcry or astounded reaction, intrusive repetition, avoidance or denial, numbness, working through, and completion.[52] During the outcry or astounded reaction process, there is information overload whereby an individual cannot understand their thoughts, memories and images of the trauma.[52] The person will experience symptoms such as shock, anger, grief, fear and panic.[52] A person, therefore, develops avoidance or denial and numbness while avoiding thoughts on what would have happened.[36] If the avoidance response is used for a prolonged period, a person will develop intrusive repetition accompanied by unpleasant thoughts, images or distress.[52] The working through phase encompasses a continued alternation of denial and intrusion, with gradual reductions in the

intensity of responding. During the same phase, an individual reflects on what would have happened and understands the event's intensity. This is followed by the completion process whereby the person internalises the event and initiates positive coping strategies. However, the later events may evoke the thoughts of original traumas that may lead to the cycle of phases to be repeated. Horowitz[52(pg95)] believes that individuals may skip certain phases as the sequence of phases is not presumed to be universal. An individual can demonstrate alternative sequences of response phases depending on how unique people respond to the problem.

2.9.1.4 Pathological Stress Response Syndrome

The Pathological Stress Response Syndrome usually results from greater responses requiring external assistance or responses that do not evolve towards adaptive completion over a prolonged period. Three phases of pathological stress responses have been identified according to Zilberg et al.[125, 52], and these are the "frozen and avoidant states," "stuck in under controlled intrusion," and "oscillating between states of high intrusion and high avoidance."

Horowitz[52] states that individuals who are stuck under controlled intrusion cannot control and organise the flow of distressing information about the trauma, resulting in survivors succumbing to stress. The controls for people who are frozen and in an avoidant state are extreme and block effective responding, behavioural inhibition and awareness of emotional numbness, thus obstructing the working through the process.[125] People oscillating between high intrusion and high avoidance avoid traumatic information from being processed, increasing the intensity of each phase. [126]

Barlow et al.[112] indicate that if an individual is exposed to prolonged traumatic events, the effects can be reflected in the psychological state of such a person as they are likely to have changes in behaviour. In addition, Horowitz's Stress Responses Theory offers a theoretically detailed and broad description of thought processes involved in adaptation to trauma and how these processes can be enabled or mired.[52] This theory can account for intrusive thoughts and images such as nightmares and the phenomena following stressful events and changes in the intensity of these symptoms over time.[125] Recovery from trauma is explained as the cognitive adaptation of the

traumatic memory to accommodate the new information. Lazarus and Folkman[53] point out that the manifestation of late forms of PTSD can be explained in detail in terms of a drive from the numbing to the intrusive phase of the stress response, deterioration in the efficiency of control processes over time, or an adjustment in life situations that revived the emotional meaning of the trauma.

2.9.1.5 Strength and weakness of the Stress Response Theory

Horowitz's theory describes the thought process of an individual and how PTSD occurs. However, the theory does not explain why some individuals develop PTSD, yet most do not exhibit the same symptoms.[126] The same model reckons the determinants of effective adjustment to trauma. In addition, this theory does not elaborate on why particular features of a given situation are likely to reignite traumatic recollections.[127] Horowitz's Theory of Stress Responses "provides a conceptually rich and comprehensive account of cognitive processes involved in adaptation to trauma and how these processes can be facilitated or hindered".[128(pg10)] The theory can explain the occurrence of intrusive thoughts and unpleasant images such as nightmares and the phenomena following stressful events and variations in the strength of these symptoms over time.[129] Nonetheless, Horowitz's Theory does not provide enough explanation on factors such as how social support might operate. There is a minimal acknowledgement of individuals' attributions and interpretations of the traumatic experience.[17] Finally, Horowitz does not elaborate on which specific features of a particular situation are likely to resume traumatic recollections.[128]

Meta-analyses by Roberts et al.[129,130] notes that: Horowitz's Theory is an influential social-cognitive theory of PTSD since responses to traumatic, stressful events are not reliant on individual characteristics, but on environmental stressors, a wide range of beliefs and reactions can be used to explicate Horowitz's Stress Response Theory that occurs as a result of trauma, Horowitz Stress Response Theory recognises intrusive repetition thoughts and avoidance responses which are arousal symptoms of PTSD diagnosis, and that a link was created by this theory that enabled the creation of a spontaneous linkage of remembering of traumatic recollections to processing of traumatic material that laid the foundation for developing PTSD theories.[52] Hence, Horowitz's Stress Response 1986 Theory is vital in enlightening complicated grief resulting from failure to

adjust to intrusion or avoidance stress responses.[52] Conversely, the theory does not explain why some individuals develop PTSD where most do not exhibit the same symptoms.[102,129]

### 2.9.2 Lazarus and Folkman's (1984) Transactional Model of Stress and Coping

The Transactional Model of Stress and Coping considers the interactions between the person and environment. Lazarus and Folkman invented the model in 1984. Its purpose is to explain how an individual copes after exposure to a stressful event.[53] The stress results typically from the imbalance that results from the demands or pressure and the available resources of coping; thus, we become stressed and exceed our ability to cope.[53] Coping arises when an appraisal is made between the demands of the event and surpasses personal resources, and is driven by the emotional response to harm and threat.[130] The model postulates that a primary appraisal should follow an occurrence of a stressful event to determine whether the person has a stake in the event and further evaluate the implication of the encounter. The results of the encounter can be irrelevant and have no threat to the person.[56] However, when the appraisal of the event is stressful, the outcome can involve signs such as injury, distress, anger, disgust, self-blame and, which demands further appraisals that come in three forms, harm loss (assessment of what is lost already), threat (assessment of potential harm) and challenge (assessment of potential growth from the situation).[52]

After primary appraisal of a threat situation, the individual will engage in a secondary appraisal to determine how to improve the situation. This can be done by assessing internal (personal internal strength and determination) and external coping mechanisms such as peers or colleagues and family support. Furthermore, Lazarus and Folkman[53] indicate that a reappraisal can determine the additional resources needed to cope with the situation.

#### 2.9.2.1 Coping in Lazarus and Folkman (1984) Theory

The model further focuses on the idea of coping when one cannot escape the stressful situation.[52] Lazarus and Folkman[53 (pg141)] defined coping as a "constantly changing cognitive and behavioural efforts to manage specific internal or external demands that are appraised as exceeding the resources of the person". Coping can also be explained as realistic and flexible thoughts and acts

that solve problems and reduce stress.[52] Lazarus and Folkman[53] further explain coping as a relationship between a person and the environment. The coping response is initiated by the person's reaction to a situation regarded as a threat. Coping, therefore, results from an emotional environment to a harmful event or threat to eliminate or minimise such a threat.[53]

Folkman and Lazarus[131] (1988) classified coping into eight methods: confrontive coping, distancing, self-controlling, seeking social support, accepting responsibility, escape-avoidance, planful problem solving and positive reappraisal. These methods are explained by Folkman and Lazarus[131] as follows:

- Confrontive coping describes damaging efforts to change the situation and suggest some degree of aggression and risk-taking.
- Distancing encompasses an individual effort to uncouple one self and to minimise the importance of the event.
- Self-controlling involves regulating one's feelings and actions.
- Seeking social support involves seeking help from other people, such as friends, colleagues and family, who can support one with information and physical or emotional support.
- Accepting responsibility; this involves accepting one’s role in the problem and trying to get a suitable solution.
- Escape-avoidance; involves using behavioural efforts to escape or avoid the problem.

The problem-focused coping method is used when the individual has control over and can manage the situation. Here, the individual focuses on what is causing the problem. This method aims at attempting to change the negative stress to be positive or neutral. Various strategies, such as defining the problem, generating and evaluating the solutions, learning new skills in dealing with the stressor and reappraising when necessary, can be used during this method.[131]

The emotional-focused coping method is used when a person has little or no control over the situation or event. In this method, there will be no change in managing the cause of the problem but in the emotion, for example, the way you feel or one's perceptions about the stressful event. It involves strategies or techniques for regulating emotional distress, such as thought suppression,

humour, avoidance, distancing, withdrawal, seeking emotional and social support, selective attention, blaming, minimising, wishful thinking, venting emotions, meditating, and distraction turning to drugs and alcohol. [53,113]

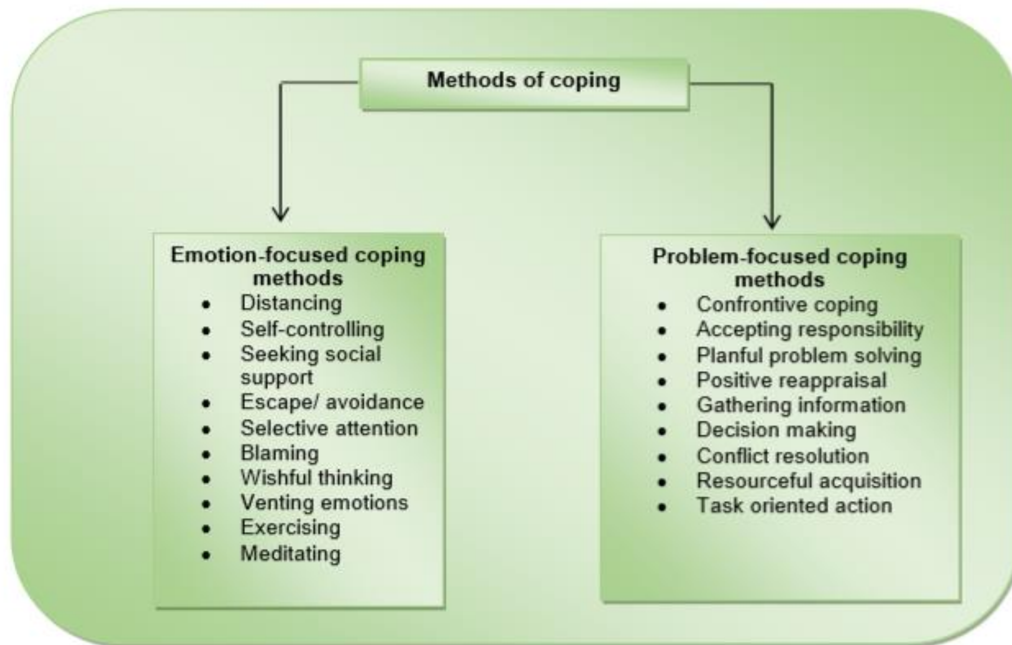



Figure 2.2: Methods of coping (Folkman and Lazarus (1984)[53]; Folkman & Moskowitz (2004)[113]

2.9.2.2 Strengths and weaknesses of Lazarus and Folkman's (1984) Transactional Model of Stress and Coping

The model has various strengths. These include the model's inclusion of the cognitive approaches instead of flight and fight responses of the central nervous system. It is also a dynamic model that acknowledges that an individual can change, reappraises the stressor and manages the coping options, and caters for individual differences as to how we appraise and cope with stressors varies immensely.[130] It identifies alternative methods for managing psychological responses to stressors.[53]

There are some weaknesses associated with this model that have been identified. They include lack of sufficient attention to the significance of social support on coping and adjustment, lack of empirical evidence, overlapping of primary and secondary appraisal as they are inter-reliant, and

it becomes challenging to label factors that determine stress.[132] However, this model can still be applied to midwives.

#### 2.9.2.3 Applicability of Horowitz's Stress Response Theory and Lazarus and Folkman's Transactional Model of Stress and Coping to this study

The two theories are relevant in this study as they aided in defining the variables that assisted in consolidating the literature review, presentation of research findings and overall achievement of particular objectives of the study, namely, objectives in the situational analysis phase. In the current study, midwives were exposed to traumatic death events that generated stress and trauma, explained in Horowitz's Stress Response Theory. Toohill et al.[91] indicate that stress caused by trauma due to exposure to MD and FSBs may cause adverse physical, emotional, physiological and psychological effects. Horowitz's theory states that there is usually a primary realisation that an event, such as panic, fear, anxiety, and sadness, would have occurred when trauma occurs.[52(pg95)]. However, if no interventions are done and the outcry becomes worse, stress can become pathological. Midwives can develop psychological effects such as PTSD, Generalised Anxiety Disorder (GAD) and emotional effects such as anxiety and depression.[112,52(pg95)] In this study, the death distress scale was used to measure the anxiety and distress that could occur due to occupational exposure of MD and FSB.

After traumatic exposure, individuals, and in this study, midwives, may adapt by using avoidance, denial and numbness, which minimise distress caused by intrusions but can cause maladaptation behaviour according to Horowitz's theory.[52(pg95)] The Brief COPE Scale that measures coping is comparable to avoidance discussed in Lazarus and Folkman's[53]' Transactional Model of Stress and Coping. Moreover, Horowitz' theory enlightens that overuse of adjustment categories, such as avoidance, denial or numbness, can lead one to experience intrusive repetition of the trauma event, which could relate to the death obsession found in the death distress scale. Both the Transactional Model of Stress and Coping underscores that the purpose of coping is determined by the effect of the cognitive appraisal process to reduce any adverse effect caused by trauma. Coping is therefore essential in dealing with any after effect of a traumatic event, hence using emotional-focused coping such as denial, avoidance, blaming and venting (Folkman & Moskowitz 2004). Horowitz's

Stress Response theory uses healthy coping methods during the adjustment process to adapt to trauma. The coping methods in Abdel-Khalek[59] Brief COPE Scale may relate to Horowitz's theory in that seeking emotional and instrumental support for coping might relate to the outcry phase of Horowitz's theory. In contrast, planning and positive reframing coping can relate to working through phases and lastly, acceptance could relate to the completion phase of Horowitz's theory. In Lazarus and Folkman's transactional model of Stress and Coping, the aforementioned coping methods are discussed under problem-focused coping methods.

### 2.9.3 Dickoff, James and Wiedenbach's (1968) Practice Theory

The Practice Theory by Dickoff et al. [54] was adopted to conceptualise the findings of the study. It consists of the following three components: the aim that specifies the purpose of activities in any given study, the narrative of accomplishing such six-fold activities to achieve the overall goal, and finally, the survey list ingredient. The survey list entails six questions that describe the activities: who performs the activity, i.e. the agent? Who is the recipient of the activity, in what context is the activity performed, what are the dynamics? These are the challenges that may hinder the activity from realising the endpoint. What are the activity's procedures, and what is the terminus or endpoint of the activity?

The survey list elements include the context, agent, recipients, dynamics, procedure and terminus.[54] The context looks at where the activity is conducted, and it should consist of physical, social and psychological environment.[54] In addition, the agent includes the person who will facilitate change or the activities to be done. This can consist of more than one person. The recipient is the person who will benefit from the activities or the change. The dynamics are an energy source for the dynamics, while the procedure is the detailed processes used to guide how the activities can be achieved.[54] Finally, the terminus describes the end product of the activity. This theory and its application to the study are described in detail in Chapter 6 of this study.

2.9.4 Lokanadha and Mohan's (2010): Quality of Work Life model

Quality of Work Life concerns itself with how constructive and poor the employee's working environment would be and if an employee is gratified with the work. [56,133] QWL consists of opportunities for active involvement in group working arrangements or problem solving that are of mutual benefit to employees.[55]

QWL looks at the relationship between the employees and their work environment, and it affects the institution's proficiency and productivity and employee satisfaction with low order needs and high order needs.[55] Various elements are vital in a specific employee's quality of life. These include the physical work environment, social environment, organisational system and the relationship between work and non-work life. These elements help to maintain and promote the health of employees in the workplace. The model has five dimensions of QWL, and these are health and well-being, job security, job satisfaction and competence development, as briefly explained below.

- Health and well-being

This component looks at the physical and psychological aspects of employees in their working environment.[56] A safe working environment can promote employees' good health and promote job performance.

- Job security

The provision of job security in the working environment is vital to every employee. However, employees can still develop a sense of job insecurity if there are stressors in the working environment.

- Job Satisfaction

Job satisfaction varies amongst employees; some may consider it the level to which their employers appreciate their jobs while t others might regard it as a progressive way on how an individual employee views their jobs.[134] An individual employee may regard their job as "interesting, stimulating or otherwise" .[56 (pg5)] The same authors' further state that employees' interpretations of job satisfaction differ as some may consider remuneration and fringe benefits

package while others may look at the safety of the working environment, challenging opportunities and exposure in their work. It is believed that job satisfaction affects other domains of life and vice versa.[56] In this study's context, midwives have expressed concerns about job dissatisfaction due to poor working environments or poor support at work. This, therefore, changes the cognitive, attitude and social behaviour of the employees toward their work.

- Competency Development

Lokanadha et al.[56] describe competency development as the growth in skills and knowledge while at the same time noting that it is an essential aspect of this dimension. Career development is perceived as a vital opportunity for employees in any work environment as it motivates growth. Therefore, an organisation should offer opportunities to their employees to develop skills and knowledge to be productive at work.[56] Lokanadha et al.[56] opine that learning opportunities have beneficial knock-on effects on job satisfaction and reduce job stress which consequently yields better QWL. Building on that premise, midwives in this study were found to lack knowledge of handling death events. Therefore, developing a programme geared to address a problem of this nature is guaranteed to promote the acquisition of new skills and bridge the gap on other challenges among the midwives.

- Work and Non-work life balance

This is a principal component of the QWL model as it is vital for both employees and employers. In this context, work and non-work life balance look at the balance between an individual employee's work and home life.[134] According to the ILO, employers need to assist their employees in balancing their work and non-work life.[9] Lokanadha et al.[56] indicate that creating a balance in the two environments is essential. This reduces the level of spillover of the perceived stress among employees in an organization. The creation of a balance in work and non-work environment is considered as one of the measures of QWL among human resources in an organisation.[56]

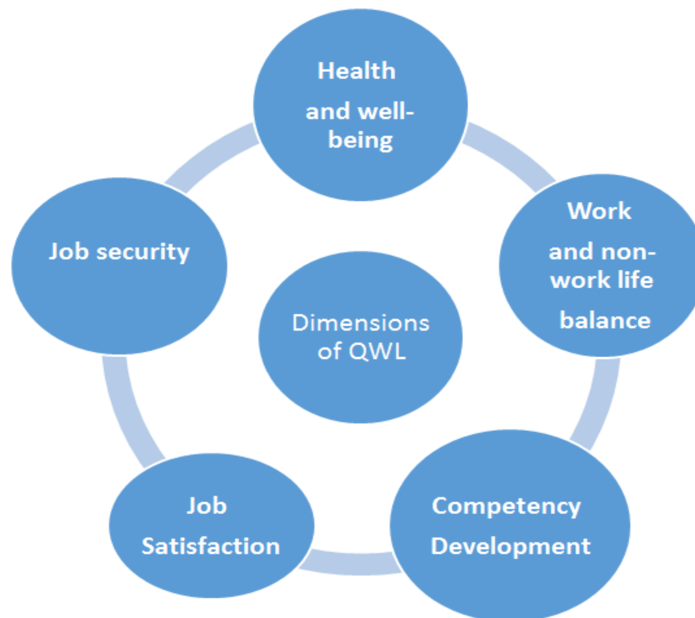



Figure 2.3: Dimensions of Quality of Work Life

In this model, QWL includes eight practices such as; safe and healthy working conditions, immediate e opportunity of use and develop human capacities, the future opportunity for continued growth and security, constitutionalism in the workplace and total life space, the social relevance of work-life, and social integration in the work organization .[56] These practices were developed to enhance employees' productivity that promotes QWL in an organisation. Lokanadha et al.[56] further state that an organisation's management must play a substantial part in the balance of work and non-work life of employees to improve their QWL. This can be done by addressing the challenges experienced by the employees and providing continuous support, utilisation of employee’s flexibilities and developing a programme.[56] The application of this theory to this study is described in detail in Chapter 7.

2.9.5 Howe’s (2011) Compass Aligned Performance System model

This is a business strategy management tool used to plan, implement and achieve the strategies that an organisation designs. It was adopted in the development of implementation strategies for the EAP. The Compass Aligned Performance System (C@PS) model has four pillars: simplicity,

ownership, flexibility, and accountability.[57] The model is further composed of six functional components: vision, values, critical success factors, key performance indicators, and strategic objectives.[57] These components and their applications are clarified in detail in chapter 7 of this study.

## 2.10 SUMMARY

The literature review above presented the critical attributes of the EAP. The roles of EAPs have significantly changed since their initiation and continue to change as we go. Literature has shown that EAPs have grown beyond its popularity in the global north countries such as the USA. In the health fraternity, the midwifery profession is one of the professions that require EAPs since midwives are faced with stressful events such as death in their daily practice. EAPs offer new insights into the trends of the EAP arena and are primarily supported by the evidence that EAPs effectively improve individual employees and organisational outcomes. A substantial reduction in stress levels, turnover, increase in self-esteem, improved interpersonal relationships in the organisation, improves productivity among troubled employees by reducing absenteeism and increasing presenteeism, which are attributes and assist organisations in achieving their goals. Various studies found external and blended EAPs to be highly preferred than internal EAP. Literature has shown that EAPs have grown beyond their popularity in the global north countries such as the USA. In the health fraternity, the midwifery profession requires EAPs since midwives are faced with stressful events such as a death in their daily practice. The reviewed literature reveals numerous coping strategies, such as problem-focused coping, are used by midwives to deal with death events. The link between trauma and coping methods used in the brief Cope Scale and Horowitz's Stress Response Theory, and Lazarus and Folkman's Transactional Model of stress and coping is created in this chapter to indicate the relevance of the theories to the study. A brief discussion of Dickoff et al.[56] The Practice Theory, Lokanadha and Mohan’s[58] Quality of Work Life model and Howe[59] is done. The Compass Aligned Performance System Model Even though there is little evidence on the use of EAP in the health sector in the African continent, health organisations should not overlook the effectiveness of EAPs as a vital tool/measure to maintain a healthy working relationship between employers and employees and improve the quality of life of employees in the workplace. Gaps in literature were identified. No known study has been

conducted to determine the stress levels of midwives and coping mechanisms after MDs and FSBs in SADC. Although many studies on MDs and SBs' effects on midwives have been done, no known research combined the two.

Furthermore, there is no known study done that utilised mixed methods. These are thus the gaps that this study tried to address. The next chapter presents the methods and research design used in this study. The literature review topics are shown in table 2.1 below.

Table 2.1: Semantic presentation of literature review

| Content | Rational |
| --- | --- |
| Background of maternal death and stillbirth<br>• MDs and SBs Worldwide<br>• MDs and SBs in Africa<br>• MDs and SBs in Namibia | To give the background of EAP in order to inform the instrument. |
| Experience of midwives and challenge after maternal deaths and stillbirths | To inform phase 1 (objective 1) of the study. |
| Occupational exposure to maternal deaths and stillbirths and self-reported level of stress among midwives | To inform the research instrument (objective 2 and 3). |
| Coping strategies used by midwives<br>• Emotion-focused coping<br>• Problem-focused coping | To inform the research instrument (objective 4). |
| Overview of EAP<br>• Background of the EAP<br>• The EAP globally<br>• EAP Africa | To give the background of MDs and SBs in order to inform the instrument. |
| Good practices and models of the EAP | To inform the instrument. |
| Effectiveness of the EAP | To inform the instrument. |
| Theoretical framework<br>• Horowitz (1986) Stress Response Theory<br>• Lazarus and Folkman's (1984): Transactional Model of Stress and Coping | • Inform phase 1 of the study and informed the research instrument (objective 1, 2, 3 and 4) |
| Dickoff, James and Wiedenbach (1968):The Practice Theory | • Inform the conceptualisation phase (2) of the study (objective 5). |
| Lokanadha & Mohan's (2010): Quality of Work Life model<br><br>Howe' (2011): Compass Aligned Performance System model | • Inform the developmental phase (3) of the study (objective 6 and 7). |

# CHAPTER THREE

# APPROACH AND METHODOLOGY

## 3.1 INTRODUCTION OF THE CHAPTER

The previous chapter reviewed literature related to this study. This chapter presents the methodology used in this study. The chapter outlines the approaches used in the study and the situational analysis in phase 1. It also describes the study population, design, sampling, data collection process analysis, trustworthiness and validity and reliability applied to this research. In addition, the ethical considerations applicable to the current study are discussed. Finally, the methodology for phase 2 and phase 3 of the study is also discussed in detail.

## 3.2 REASONING STRATEGIES

According to Gray et al.[135], reasoning strategies enable the researcher to describe the phenomena by identifying concepts and understanding the assumptions and variables. It is through these strategies that researchers make logical thinking and conclude a specific issue. Thus, five reasoning strategies, namely: inductive reasoning, deductive reasoning, inference, reflectivity and bracketing, were used in the execution of this study. These are outlined below.

### 3.2.1 Inductive reasoning

Inductive reasoning is a process in which the researcher makes an argument from a specific stance to the general one.[135, 50] This study used inductive reasoning in phase 1 during individual interviews, FGDs, and the development of themes and sub-themes. It was also used in phase 3, when the strategies for implementation of EAP were developed. Creswell et al.[47]further note that inductive reasoning is used in qualitative research when researchers develop themes and sub-themes. Finally, inductive codes were derived directly from the data as the researcher noted the issues raised by the participants.[135]

### 3.2.2 Deductive reasoning

Deductive reasoning, the opposite of inductive reasoning, witnesses the researcher start the argument from a general to a specific stance.[43] Gray et al.[135] also refers to deductive reasoning as an up-down approach. This approach was used in this study's phase 1 during quantitative data collection from the midwives' evaluation of self-report stress and the coping mechanisms used. The investigation started with general ideas and theories, which assisted in developing the EAP for the midwives in phase 3. The quality of work life model was used in the development of the EAP. Deductive reasoning was also used to obtain deductive codes from the literature before obtaining inductive codes during data analysis.[136] Deductive reasoning was also used in the conceptualisation phase in Chapter 6.

### 3.2.3 Inference

Chinn et al.[123] explain inference as the process in which evidence is first established and then a conclusion drawn from such evidence. In this study, qualitative and quantitative evidence was obtained during the situational analysis in phase 1. The researcher drew some inferences by collecting data from midwives through FGDs, interviews and questionnaires and interpreted the findings. Conclusions were made from the evidence generated to develop an EAP and implementation strategies. In addition, the inference was used during the conceptualisation process in Chapter 5 and the literature review.

### 3.2.4 Synthesis

Walker et al.[137] describe synthesis as the process of grouping concepts (ideas) as a basis for conceptual framework development. In this study, the challenges (dynamic), as a basis for EAP development, were synthesised from objectives 1, 2 and 3 (see table of merging in Chapter 5). The identified concepts were used in the development of the conceptual framework, EAP and implementation strategies.

### 3.2.5 Bracketing

Bracketing is a process used mainly in qualitative research to lessen the possible harmful effect that can have personal prejudice or preconception views with the potential to create bias in the study.[43] The application of bracketing in the study involved keeping personal prejudice, avoidance of personal judgment, own beliefs, and remaining neutral during data collection, analysis, and conceptualisation. All the techniques mentioned above were applied during the study period. The researcher removed her feelings during the study, and self-reflection was maintained throughout the study. Bracketing was used during interviews, FGDs with midwives and senior midwives and structured questions were not used, but only probes were used. The scientific process of research that was followed also ensured bracketing. During report writing, bracketing was maintained in that the researcher remained neutral, avoided personal beliefs and maintained the participant's voices. This prevented bias in the reporting of the findings.

## 3.3 APPROACHES AND METHODOLOGIES

A research approach is defined as a plan to conduct research.[47] It can be qualitative, quantitative or a mixed method. A qualitative enquiry deals with narratives, while the quantitative one deals with numbers. In addition, the mixed method approach is in between and uses both qualitative and quantitative approaches.

### 3.3.1 The mixed method approach

A mixed method using convergent parallel design was used in this study. There are various definitions of mixed methods in the literature. Creswell et al.[47] define the mixed method design as research combining qualitative and quantitative data and integrating both data sets. Mixed methods research goes further than simply collecting qualitative data from interviews, multiple forms of qualitative evidence or multiple types of quantitative evidence. It encompasses the intentional collection of both quantitative and qualitative data and the combination of the strengths of each to answer research questions.[46 (p109)]. The mixed method also involves the use of different philosophical assumptions and theoretical frameworks. Creswell et al.[47] point out that the integration of quantitative and qualitative approaches in mixed methods yields supplementary

information beyond the information provided when the quantitative or qualitative method is used on its own in the study.

The advantages of employing the mixed method design include connecting strength that balances the weakness of both the quantitative and qualitative methods.[47] The mixed method also provides more evidence to a problem than a single method as researchers can use different data collection methods and gain new knowledge than just summing up the results of the two. The use of the mixed method can answer different research questions than using quantitative or qualitative design alone.[138] Finally, mixed methods encourage the use of several world views rather than single views associated with either quantitative or qualitative methods.

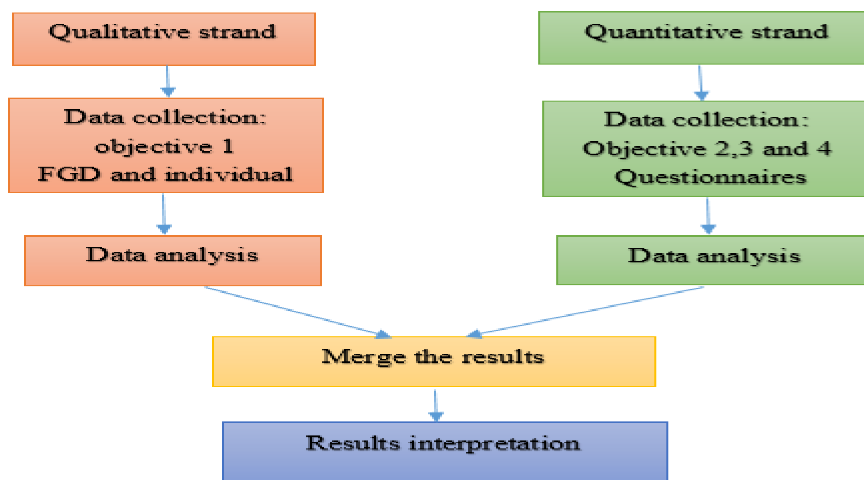



Figure 3.1: Diagrammatic presentation of the convergent design according to Creswell (2014)[138].

There could also be practical reasons that make the mixing of quantitative and qualitative methodologies problematic. These include lack of competence within the research group in both methods, only one kind of information is requested, or funding constraints. In this study, the mixed method was not challenging to the researcher as I am experienced in both qualitative and quantitative methods. In addition, the research was carried out with the guidance of supervisors who are experienced in the mixed method. The study was conducted in phases: situational analysis, conceptualisation, development of an EAP, and implementation strategies.

This study used a convergent mixed method design whereby qualitative and quantitative designs were used concurrently, analysed separately, merged and then interpreted. Convergent design is the concurrent approach that h involves collecting qualitative and quantitative data together, followed by a combination and comparison of data from numerous sources.[47] With this design, equal priority is given to qualitative and quantitative strands, but data collection and analysis are done separately and only brought together during interpretation.[43] Convergent design includes that both research methods corroborate the study findings, and collecting the data-parallel shortens the research process compared to other designs like sequential designs. However, this design has limitations such as expertise in qualitative and quantitative methods, challenges to compare and interpret results and difficulty in addressing discrepancies in the results.

### 3.3.2 Phase 1: Situational analysis

A situational analysis is the planning process that allows a clear standard before any new interventions are considered or existing ones are modified.[60, 49] This phase covers the first four objectives of the study as illustrated in table 1.1 and starts with the qualitative part of the study.

#### 3.3.2.1 Sub – Objective 1

The qualitative part of the study considered one objective, which explored the experience of midwives regarding MDs and SBs.

Qualitative approach:

- Explore and describe the experience of midwives regarding maternal deaths and stillbirths

A qualitative approach includes collecting data in the natural setting with the researcher visiting the place where the participants experience the problems.[47] This approach allows a researcher to examine people's experiences in detail in a natural setting while using a specific set of research methods.[49] It includes face to face interaction with the participants or prolonged observation of the participants in their setting, visual methods, biographies or examining documents. Moreover, qualitative research tends to use multiple sources of data collection such as interviews,

observations, focus groups or audio visuals instead of relying on a single data collection method. Researchers then make sense out of the data and conclusions.

With qualitative research, researchers use inductive and deductive reasoning, build patterns and develop themes during the analysis. Inductive reasoning involves working back and forth between themes until the final themes are developed.[48] In addition, deductive reasoning encompasses re-examining the data and the themes to determine whether more data can support each other or more information is needed.[47] Finally, it should be noted that qualitative research is an emergent process as the research plan keeps changing once the researcher starts with data collection.[48]

Design:
Polit et al.[43] define a study design as the overall plan for addressing a research question. A research design stipulates how the researcher will undertake the research and indicates how the researcher hopes to achieve the research goal.[138] The research selected design enables the researcher to accomplish the purpose and objectives of the study. This study's objective was achieved using qualitative, descriptive, exploratory, and contextual designs described by Creswell.[47] Each design is outlined below as follows:

- Exploratory design

Polit et al.[43] describe the descriptive design as a type of study that mainly seeks to portray the characteristics of a situation or a person. A descriptive design enables the researcher to assemble new information about a phenomenon, and as a result, greater openness from participants will be encouraged. The descriptive design aims to observe, describe and record the particulars of a person or situation as it appears in the natural setting.[43] This design was deemed suitable for use in this study in that it aids the researcher to gather and describing factual information from the participants. In this study, the researcher used a descriptive design to describe the Khomas Region midwives' experiences of MDs and FSBs and how they coped with such incidents.

- Descriptive design

Polit et al.[43 (pg58)] describe the exploratory design as "a study that explores the dimensions of a phenomenon or that develops relationships between phenomena". This design assists the

researcher to gain meaningful information and insight into the subject under investigation. It is therefore vitally used when little information is known about the problem under study.

This study is exploratory as it attempted to explore data on the experience of midwives regarding MDs and FSBs. In this study, interviews were conducted with midwives to gather further details on the issues regarding the effects of MDs and FSBs and the coping mechanisms used. Using exploratory design helps identify the problems and needs of the participants through their viewpoints.[125] This design is applicable as no known study of this nature has been conducted in the region. An EAP resulted from the application of this study design in conjunction with a descriptive design.

- Contextual design

Polit et al.[43] explain that contextual design examines behaviours, organisational culture and perceptions of the phenomenon under investigation. Moreover, contextual design analyses the environment where a particular phenomenon is taking place, and in this study, it was the midwives work environment (the health facilities where they work). This enables the participants to be relaxed and comfortable in their natural environment during the study.[125] The study findings are therefore understood in the context of the Khomas Region's midwives who have experienced MDs and FSBs. A contextual design avoids the interference of the data collected by external factors and hence the collection of factual, valid and accurate information.[43]

Population:

A population is defined as a group of people that have common characteristics that interest the researcher.[50] The population for this objective consisted of midwives in the Khomas Region. The study was conducted at two referral hospitals: Windhoek Central Hospital (WCH) and Intermediate Hospital Katutura (IHK). The total population consisted of 169 midwives and eight senior registered midwives.

Sampling and sample size:

Polit et al.[43] define sampling as the process of selecting cases to represent a population to make extrapolations about the population. Sampling consists of probability and non-probability

sampling. In this study, non-probability purposive sampling was used until saturation was reached. In addition, the sample size is defined as a representative/sub-set of the population taken from the entire population.[50] A total of 29 midwives were included in the study. Four FGDs (two from each hospital) with midwives working in different maternity wards were conducted for the qualitative method. Focus groups consisted of participants between six and seven (n=6-7). Only four individual interviews were conducted since there were only four senior midwives available during the study. The IHK had one senior registered midwife, while the WCH had three.

The population sampling was done according to the set inclusion criteria: a participant should be a midwife working for at least one uninterrupted year in the maternity department and has experienced an MD or FSB.

Data collection instrument:

A data collection instrument is a tool that can be used to gather research information.[47] In this study, qualitative data was collected using FGDs, interviews, field notes and an audio recorder.

- Focus Group Discussions

Bless et al.[51] define a Focus Group Discussion as a semi-structured group interview conducted by a researcher or experienced facilitators. It should consist of 4 to 7 participants. This study conducted four FGDs (2 from each hospital) with midwives from different wards. The FGD consisted of a mixture of midwives from various maternity wards because it was impossible to have midwives from one ward simultaneously due to human resource implications. However, this did not have any negative repercussions because the group was homogeneous, and all midwives were familiar with all the wards as they were rotated every three months. It was essential to separate ward level midwives from senior midwives to avoid possible intimidation from senior midwives due to their seniority or rank and allow ward level midwives to express their views without fearing consequences after the participation. Appointments were made with midwives to participate in the study during both the day and night due to the nature of their work. The FGDs consisted of 6-7 members, and written consent was obtained from participants before the discussions. Midwives were approached during their shift breaks or when they were not involved in active patient care on day and evening shifts and during their off days. The discussions were

audiotaped and lasted for 35-60 minutes. A discussion guide was used during the FGDs. Two main questions were asked: What are your experience with maternal death and stillbirth? How did you cope after experiencing a maternal or a fresh stillbirth? Probes were used as follow up questions during the discussion (see details in Annexure H), and saturation was reached when no new information could be yielded from the participants.

- Individual interview

Four individual face-to-face interviews with the senior midwives were conducted after a scheduled appointment for in-depth interviews. Individual interviews were conducted to allow participants to talk freely and are best suited for an exploratory design used in this study.[125] Interviews were conducted with senior midwives during their lunch hour or just shortly after official hours. Written consents were obtained from the participants prior to participation in the study. An interview guide was used during data collection.

- Field notes

Polit et al.[43] describe field notes as the summarised records of unstructured observations taken by the researcher while in the field. This was necessary as the researcher was in the natural setting of the participant. Field notes were taken to note the observed non-structured nonverbal communication that an audio recorder could not record during the interviews and FGDs. The field notes provide valuable data interpreted and recorded as part of the main collected data set. Field notes helped the researcher reflect on their feelings, reactions and describe observations during data collection. Nonverbal communications such as gestures, facial expressions, grief, fear, crying, regret, uncertainty and avoidance of the subject were noted. Therefore, field notes acted as a way of enhancing the data collection method.

- Audio recorder

All interviews and FGDs were recorded with an audio recorder as a data collection instrument. Prior to the FGDs and interviews, participants were briefed on recording the discussion, and written consents were then sought from all the participants. The recording safeguarded the captured discussion data and ensured that there was no data loss during the verbatim transcription of data from all the participants. Audio recording is also a vital method in qualitative discussions as it promotes the researcher's engagement with the participants without fear of losing data as data

is recorded as said.[47] Furthermore, recording acts provide a backup method of data and field notes in obtaining actual views from participants. It prevents distractions in the flow of the discussions.

Procedure for data collection:

Maree[139] outlines data collection as the means to answer the research questions or objectives. This process relates to how the evidence is gathered, arrived at and the rationale for the selected approach. After getting an approval letter from the regional director and medical superintended and the control registered nurse/midwife of the two hospitals where the study was conducted, the researcher visited the supervisors in charge of maternity wards. A familiarisation visit was conducted at both health facilities' maternity departments with senior midwives in charge of specific wards. The researcher was invited to introduce themselves to the midwives during staff meetings in different wards and explain the study's aim and importance to midwives. A suitable room that met the characteristics for holding FGDs and individual interviews was identified, prepared and made known to all staff members within the maternity wards. Data was collected in the staff boardroom, and bookings to use the room were made with the maternity ward supervisor as the boardroom is also used for meetings and training by other health personnel.

Data analysis:

Data analysis is described as the "techniques used to display data and aim to answer the research questions or objectives.[50 (pg165)]. This process consists of "categorizing, organizing, manipulating, summarizing and describing the data.[50] A qualitative data analysis was done concurrently with data analysis. This assisted the researcher in picking up data saturation. Data was transcribed verbatim by the researcher before the analysis process. The data analysis followed an interpretive analysis of qualitative data, which according to Creswell[138]and as indicated in Figure 3.2 below, involves reading through, coding, themes development, interrelating themes and interpreting themes.

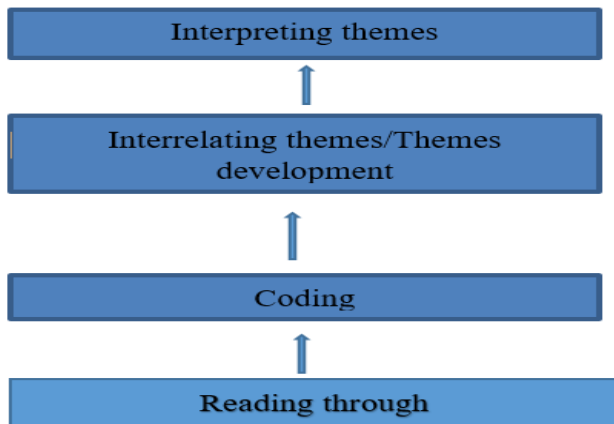



Figure 3.2: Qualitative analysis according to Creswell[137]

- The first step includes reading the transcribed data to get the general sense and meaning and to understand what participants would have stated. According to Creswell[138], it is important to write observational notes at the margin of the transcripts or the general thoughts from the reading.
- Coding is the second step in this process, and it involves organising data through bracketing at the end of the margin of the page. Coding aims at extracting categories and subcategories. This process was done following Creswell's[138] eight Tesch's descriptive data analysis steps, as shown in Table 3. 1 below.
- The post-coding step is about the researcher's development of themes and sub-themes from the identified codes. Five themes and seventeen subthemes were identified from the study, and they became the study's significant findings as presented in table 4.2 (pg. 98) in the next chapter.
- The last stage was the interpretation of the themes. Here, meaning is given to the developed themes, which was done narratively.

Table 3.1: Tesch's steps of data analysis and its application to the study according to Creswell, 2014

| Tesch's steps | Application in the study |
| --- | --- |
| 1. Read through the transcription to get a sense of the data and jot down the ideas that come to mind. | The researcher read through the data transcribed from FGDs and individual interviews one by one over and over. Notes of important ideas that came out were made. This was done in comparison with the field notes. |
| 2. Read the short transcription and jot down the interesting ideas at the end of the margin of the page. | The researcher re-read the transcripts and made notes on the interesting ideas that emerged on the right margin of the pages as she was reading. |
| 3. Make a list of the topic, cluster similar topics together and put them into columns of central topics, distinctive topics and leftover topics. | Similar ideas were then clustered together and separated into the appropriate columns. The main ideas were put together and became themes and others as sub-themes. |
| 4. Condense topics as codes and write the topics next to the corresponding sections. Continue this process to see if a new topic arises. | The topics condensed as codes were arranged in corresponding sections. The researcher then went back to the data to identify if any new topics were coded. This process ensured credibility in qualitative research. |
| 5. Turn the descriptive codes into categories. Group similar topics together to reduce the number of identified categories. | After coding of data, the researcher turned similar codes into themes and subthemes. |
| 6. Decide to shorten the categories and allocate alphabets to the codes. | A column was created, and finally, the themes and subthemes were inserted. |
| 7. Put the similar categories together and conduct an initial analysis. This is aimed at data reduction. | An initial analysis was conducted whereby similar themes were placed together to reduce data. |

| | |
|---|---|
| 8. Read through the data over and over and recode your data if necessary. | Finally, the researcher re-read the data and recoded it as required. |

**Measures to ensure trustworthiness:**

Rigour is of utmost importance in qualitative research to ensure that results are reliable and valid. Bryman's [60,130,141,47] criteria of trustworthiness, which consists of credibility, transferability, dependability and conformability, were applied to achieve qualitative sub-objective 1. The tenets of the trustworthiness criteria are outlined below.

**Credibility:**

Credibility aims to ensure that the researcher establishes truth during the study. Bless et al.[51,140,48] indicate that credibility can be ensured by an elongated engagement with participants in the field, member checking, peer debriefing and triangulation using various data collection methods. The following methods were used to ensure credibility in this study:

- Voluntary participation was safeguarded throughout the data collection process to ensure that participants gave factual information;
- Source triangulation of data was used with face to face FGDs, in-depth interviews and field notes triangulated to enhance the data collection;
- Verbatim transcription of focus groups discussions and individual interviews was done immediately, and themes were developed using converging various sources (FGDs and in-depth interviews) of data from the participants;
- A literature control was also used to develop themes, and member checking was done with the participants to verify the accuracy of the collected data with the participants. This was done by taking the final report of the themes to the participants for them to check if the information was accurate;
- Approved methods of data collection and analysis, such as interviews and FGDs, were maintained;
- Field notes and reflective notes were taken during data collection as part of the researcher's reflective process;

- An audio recorder was used to record the interviews and FGDs to ensure referential adequacy, and a transcription of data verbatim followed this to ensure that no data would be lost during analysis;
- Maintaining both neutrality and maintaining ethical considerations during data collection was done throughout the research process;
- Peer debriefing was done to ensure the accuracy of the account data.[47] This was done through constant consultation with the supervisors as experts and colleagues during the seminar presentation of the proposal;
- Verification of the EAP and implementation was done with experts and the officials from the MoHSS.

**Transferability:**

According to Brink et al.[50], transferability is an alternative to external validity or generalisability. The following methods were used to ensure and maintain transferability:

- The correct sample was maintained (midwives and senior midwives at the study sites), and only participants who met the inclusion criteria were selected;
- Different data collection methods, such as FGDs, interviews and field notes, were used to enrich data collection;
- Transferability was also ensured by providing a thick description to convey the findings;
- Purposive sampling was maintained, and participants were selected until data saturation.

**Dependability:**

Dependability is the alternative to reliability and is about whether the study can be replicated to another setting using similar participants and maintain consistency.[50,43] An inquiry audit was maintained during data collection with interviews and FGD transcripts sent to the supervisors for quality control. The researcher also presented the coding to her supervisor for verification, and a thick description of data from the field was maintained during the study. An interrater method of data analysis was used during the study. Here, the researcher maintained the code recode process by coding and recoding the data and recoding it again after a week to determine if the yielded results were similar or dissimilar.

**Confirmability:**

Confirmability deals with the objectivity of a given study.[50] It helps to avoid the researcher's bias during the study.[43] To ensure confirmability, the participants were given a summary after each interview to evaluate the researcher's understanding of the interview to check and confirm the information. A literature control was also done during the research process to confirm the data during interpretations. Furthermore, different data collection methods, such as FGDs, individual interviews and field notes, were used to triangulate the data. Transcripts, coded data, developed themes and sub-themes, and interpretations of data was sent to the supervisors for evaluation.

**Authenticity:**

Polit et al.[43] refer to authenticity as the means used by the researcher to show honesty and faithfulness during research. The participants' findings are illustrated in direct quotes during the write up of the report. This ensures that the meanings of the participants' stories are not distorted.

3.3.2.2 Sub - Objectives 2, 3 and 4

Three objectives were covered during the quantitative part of the study. These objectives covered the midwives level of occupational exposure to MDs and SBs, self-reported level of stress among midwives and coping mechanisms used by midwives after MDs and SBs. The methodology for these three objectives is described together since the population, design, data collection, analysis amongst others are the same.

Quantitative approach: Objectives 2, 3 and 4

- Determine the midwives' level occupational exposure to maternal death and stillbirth,
- Evaluate the self-reported level of stress among midwives due to exposure to maternal death and stillbirth,
- Determine the coping mechanisms used by midwives to cope with the effects of maternal deaths and stillbirths in the absence of EAP

Phase 1-part B of this study covers the quantitative part of the study. Quantitative research deals with quantifying the data collection, analysis of data and use of statistical language.[49] This approach uses measurements to compare and analyse different variables and tends to be structured and controlled.[51] This includes surveys and experiments with the researcher using hypotheses,

research questions and objectives to achieve the purpose of the study.[45,47] Moreover, quantitative research consists of dependent, independent and intervening or mediating variables. Quantitative research is easy to conduct and analyse, and it can be generalised. However, this approach is prone to data collection bias and contributes to the difficulties in understanding the context of the study.[47] The detailed application of the quantitative approach in this study is described below.

**Design:**
A research design is described as a logical roadmap that shows how the study will be conducted.[149] It is considered a blueprint of given research that enables the researcher to answer the research questions or achieve the research objectives. Research designs can be descriptive, exploratory, and correlational or explanatory.[51] A descriptive cross-sectional design was used during the quantitative strand to achieve these objectives during the study. The respondents for this descriptive cross-sectional design were chosen according to the inclusion and exclusion criteria are set for the study.[141]

- Descriptive Cross-sectional design:

Cross-sectional design involves collecting data from more than one case and at a single point in time to gather measurable data with two or more variables.[60] In this study, a single cross-sectional design was used as the study was conducted in the present time during one round of data collection to examine what existed at that time. This design was chosen because the researcher only wanted to describe the variables related to MD and FSB's effects on midwives to develop an EAP and its implementation strategies.

The cross-sectional design is affordable and quick to conduct. It collects data on all variables simultaneously, captures a short snap period and is easy to replicate, with data applicable for use for different types of research. The findings can be used to generate theories and can be used to approve and disapprove assumptions. [60,141]

The disadvantages of this design are that it is not suitable to evaluate the behaviour of people over time, it is prone to bias, the design makes it difficult to determine cause and effect relationship, and the outcome can be twisted if there are conflicts of interest with researchers or sponsors. [60,142]

**Population:**
The population for phase 1-part B objective consisted of midwives in the Khomas Region. The study was conducted at two referral hospitals, the Windhoek Central Hospital (WCH) and Intermediate Hospital Katutura (IHK), the only public hospitals in the region that offer maternity care. The total population at the two hospitals was 169 midwives.

**Sampling and sample size:**
Sampling is an essential component in research as it is generally difficult to study the whole population.[143] Botma et al.[143] describes sampling as the process of selecting the subset of the available population. Mertens et al.[45, 47] are of the opinion that researchers need to make use of various sampling techniques and then sample the population. However, due to a small population found at the study sites, total population sampling was done. This is a type of purposive sampling where the whole population is taken. The entire population of 140 was therefore included in the study.

The population's inclusion criteria should be considered. This is described as the people who should be included in the population.[50] In this study, the criteria for inclusion of the study population were that respondents should be registered and enrolled midwives working at maternity departments in Khomas Region who have experienced MDs and FSBs; and senior midwives working at maternity departments.

The exclusion criteria were midwives who have not experienced a MD or FSB; midwives not working at maternity department.

**Data collection instrument:**
A self-administered questionnaire was used to collect quantitative data. The questionnaire consisted of close-ended questions, and it was divided into four parts. Section A covered the demographic information of the participant, while section B of the questionnaire covered the information on occupational exposure to MD and FSB that measure objective 2 of the study. The questions in section (B) drew on the two theories, namely, Horowitz (1986) Stress Response Theory and Lazarus and Folkman's (1984) Transactional Model of Stress and Coping. The section

measured various variables such as the number of deaths witnessed, number of deaths in charge of, reasons for the MD or FSB, obligations after death event, support after the death event, the frequency of FSBs in current practice, the last time the MD and FSB cases were observed, the likelihood of accessing EAP and professional preparedness on death events.

Section C measured objective 3 of the study that gathered data on the self-reported stress level among midwives due to exposure to MD and FSB. This part consisted of the five-point Likert scale questionnaire that adopted a standardised scale (Death Distress Scale) according to Carver (1997) to measure the self-reported level of stress due to MDs and FSBs. This scale consists of 3 subscales as death anxiety, death obsession and death depression, and each subscale has eight items (see Annexure G). Permission to use the above mentioned scales was sought and granted from the author before the study (see annexure P).

Section D collected data that determine the coping mechanism used by midwives to deal with the after-effects of MDs and FSBs in the absence of ad EAP (see Annexure G). This section, therefore, measured objective 4 of the study. A Self-administered four-point Likert scale questionnaire was used adopting a standardised scale (Brief COPE Scale) according to Abdel-Khalek, 2011 to measure coping strategies used by midwives in coping with MD and FSB. This scale measured how midwives coped with MDs and FSBs. It consisted of 13 constructs that have two items: self-destruction, active coping, denial, substance abuse, emotional support, instrumental support, behavioural disengagement, venting, planning, acceptance, religion, self-blame and positive reframing (see Annexure G). Permission to use the above mentioned scales was sought and granted from the author before the study (see annexure P).

**Procedure for data collection:**

A self-administered questionnaire was handed to the respondents and collected thereof by the researcher. Midwives were approached to participate in the study during their shift breaks or when they were not involved in active patient care on day and evening shifts and during their days off. Data was collected over one month. Focus groups and individual interviews were conducted first, with the participants completing a questionnaire afterwards. The procedure sought to prevent the respondents from neutral answers that will impact the qualitative data analysis.

**Data processing and analysis:**

The study's quantitative data analysis was conducted in three stages: a descriptive statistic, inferential and multivariate and factor analysis as illustrated in table 1.2.

- Stage 1

Stage 1 included a descriptive analysis of data on the characteristics of the study respondents. The descriptive analysis checked for the violation of the data assumptions. Quantitative data was analysed using the Statistical Package for Social Science (SPSS Version 27). Normality is a central assumption in multivariate analysis, and it is crucial for the data to be distributed normally and similar to each other.[143] Nonetheless, a descriptive statistics analysis was performed as follows:

The calculation of frequencies and percentages were expressed as tables. Arithmetic means measuring the central tendency. A standard deviation (SD) was done, and a calculation of skewness and kurtosis to provide evidence on the symmetry and distribution of data. To accept the data distribution as normal, skewness and kurtosis critical values should be within the 'range of ± 2.58.[144(pg73)] Likert scale scoring was done on self-reported stress levels on the death distress scale. The scoring was as follows: No=1; Little =2; Moderate=3; Much=4; Very much=5. Abdel-Khalek[59] indicates that if respondents score high in a particular component or domain, that determines the high level of that particular domain.

Before analysis of data, four negatively stated questions in the death anxiety scale were reverse-scored (No=5 to Very much=1) to ensure that all the questions (negative and positive) would be consistent with each other. The four negatively stated questions under the "Death anxiety scale" that were reversed scored included:

- It does not make me nervous when people talk about death.
- I am not afraid at all to die.
- I am not particularly afraid to die during childbirth or to have a stillbirth.
- The thought of death never bothers me.

During analysis, "Little and Moderate" were combined and converted to 3 scores, and the "Much and Very much" scores were combined and converted to 5 scores. The eight subscale items for each of the three subscales were combined into one category using the SPSS variable transform function. The subscale totals were then recoded from continuous data to ordinal data, as follows:

- 8- 18=Mild distress
- 19- 29= Moderate distress
- 30-40= High distress

The scoring on the coping mechanism was done on a four-point Likert scale as follows: I haven't been doing this at Not=1, A Little bit=2, Moderately=3 and a Lot=4. Each construct consisted of 2 activities, and as a result, the points per construct were summed up to give a total of 8 points. The 8-point scale was then recoded to a 4-point, where (1 and 2 = 1), (3 and 4 =2), (5 and 6=3), and (7 and 8=4). The descriptive statistics findings are presented in frequency tables.

- Stage 2

Stage 2 included the inferential and multivariate statistical analyses. Both types of statistics describe the use of samples to deduce something about the population. A non-parametric analysis of the variable was conducted in this study to test for the significance of mean differences. The study used Spearman's rank correlation analysis to measure the strength of a monotonic relationship between the variables of interest, which required the data to be interval or ratio level or ordinal and monotonically related. The study preferred the non-parametric Spearman's correlation instead of Pearson's correlation, as there is no normality requirement. These inferential statistics assisted the researcher in making inferences. In addition, Cronbach's alpha test for reliability was used to test for internal consistency of the selected variables. Hair et al.[145] argue that Cronbach's alpha coefficients values above .700 indicate acceptable, good or excellent reliability. As such, the study relied on Cronbach's alpha test to remove variables that reduced the overall reliability of the latent construct. The results of this analysis are presented in bar graphs and tables.

- Stage 3

The third stage included using a Structural Equation Modelling (SEM) to modify variables for inferences and multivariate analyses. The study adopted the Confirmatory Factor Analysis (CFA) to test the measurement model to propose statistically valid causal linkages using the software SPSS AMOS version 23. The CFA approach involved using stepwise iterative modelling that relies on a model-fitting plugin in SPSS.[146] The factor analysis includes statistical analyses that explored underlying relationships between the variables, such as self-reported stress levels among midwives due to exposure to MD and FSB. Testing the coping mechanism/ propositions and hypothesis relating to the linkages between the current coping mechanisms used by midwives in the aftermath of MDs and FSBs was also done. Hu and Bentler's[147] statistical cut off criteria, such as Degrees of freedom (df); p of Close (PClose), Comparative Fit Index (CFI), Standardised Root Mean Square Residual (SRMR), and Root Mean Square Error of Approximation (RMSEA), were used as follows for the model to be fit:

- p of Close (PClose) should be >0.5
- Comparative Fit Index (CFI) should be between <0.95
- Standardised Root Mean Square Residual (SRMR) should be 0.08
- Root Mean Square Error of Approximation (RMSEA) should be < .05

In this study, these inferential statistics assisted the researcher in making inferences.

**Validity:**

Validity is defined as a measure used to check "whether one can draw meaningful and useful inference from scores on a particular instrument".[47(pg251)]. Creswell and Cresswell[47] explain the routinely used forms of validity that need to be ensured in a quantitative study. They include content validity, internal validity, external validity, concurrent validity, construct validity, and face validity.[49]

- Content and construct validity:

Content validity considers whether the items in the instrument measure the content that they were intended to measure. Bless et al.[51] indicate that content validity looks at the representativeness of the content of the instrument. As a result, a content validity analysis was done to ensure that the

questionnaire's content achieved all the objectives of the study. Moreover, the data collection tool was controlled by the supervisors and validated by the statistician. Content validity was further ensured through a literature control while developing the questionnaire. An expert in EAP also evaluated the questionnaire for validation, and the questionnaire was piloted before use during the data gathering process. Construct validity, on the other hand, determines whether the scores measure the concepts. Construct validity happens when the researcher uses sufficient meanings and measures of variables.[47] In this study, construct validity was carried out by sending the questionnaire to the statistician for review and piloting the data collection tool.

- **Internal and external validity:**

Internal validity is the level to which changes in the dependent variable can be ascribed to the independent variable.[50] The study's internal validity was ensured by randomly assigning the respondents to the different levels of the independent variable and cross-checking the collected information to whether data was missing, unreliable or duplicated.[47] External validity is concerned with the extent to which the study findings can be generalised beyond the sample used in the study.[51] Therefore, the study sample size met the criteria of 95% confidence intervals or a confidence limit of 5%. The sampling technique was another way of determining external validity were the total population sampling was used to ensure generalisability.

- **Face validity:**

Face validity describes the way respondents perceived the data collection tool.[51] To ensure face validity, the supervisors checked if the instrument appeared to measure what it is supposed to measure to maintain quality. In addition, the data collection tool was submitted to an expert for verification. A pilot study was also carried out to ensure face validity. Inputs from the supervisor, expert and after the pilot study were incorporated in the data collection tool, and then the questionnaire was finalised.

**Reliability:**

Neuman[49] defines reliability as the repeatability of a developed research instrument. This means that the research is likely to yield the same measurements when repeated in a different setting under similar conditions. The reliability of this study tool was ensured by using standardised instruments, piloting and running a Cronbach alpha test (a) for each category of items in the two

standardised scales in the tool to ensure internal consistency.[47] A re-running of the Cronbach alpha evaluates if the data collection instrument is reasonably stable over time.[47] A Cronbach coefficient of 0.7 and above were considered. The questionnaires were checked for completeness, consistency and accuracy. After running a Cronbach alpha, the coefficient of 0.781 was recorded when the two scales (death distress and Brief cope scales) were tested together (see annexure Q). However, the Cronbach alpha coefficient for the two scales was reported at 0.725 (Death distress scale) and 0.796 (Brief cope scale) after running the aforementioned scales separately (see annexure Q). These values are still within the optimal values, which means that the Cronbach coefficient alpha was high and thus, indicating high reliability and consistency of the tool. Reliability in the study was further ensured by restricting data collection to one researcher to minimise sources of measurement errors such as collector bias. Pilot testing of the tool was also done to evaluate whether the data collection tool yields reliable results.

**Pilot study:**

A pilot study can be seen as the dress rehearsal of the actual research and involves carrying out all the steps indicated in the proposal on a micro scale[49]. According to Cresswell[55, 148], a pilot study is an excellent way to determine the feasibility of the intended study. The significant advantage of conducting a pilot study is that it helps the researcher detect flaws in the interviews and FGDs.

- The procedure of piloting:

The researcher undertook the pilot study to test both the data collection instruments and the feasibility of the study. Pilot testing was conducted at the Intermediate Hospital Oshakati (IHO) since it has similar attributes to the main study facilities. The study population was midwives who were chosen according to the non-probability purposive and probability simple random sampling. One FGD and two in-depth interviews were conducted during the pilot study at the selected study site (IHO), and field notes were taken. Simple random sampling was used for the quantitative approach, and 10% of the population was included in the pilot testing. A total of 20 midwives participated in the quantitative part of the pilot study. The data obtained from the inputs of the pilot study were analysed, and the researcher refined and made appropriate amendments to the research instruments. The pilot testing results were not included in the main study. Their inputs were purely used to assess the adequacy and appropriateness of the study methodology, sampling, instrument and analysis methods.

- Findings of the pilot:

The following outcomes were noted from the pilot study:

Qualitative data was transcribed verbatim and analysed using content analysis. Quantitative analysis was also carried out using the SPSS version 26. The results for the qualitative part indicated that midwives experience personal effects such as psychological, physical, social and work-related and professional effects; and use negative coping strategies after experiencing MDs and FSBs. Quantitative findings indicated that most of the participants, 72% (n=), had witnessed more than 1 MD in the previous 4-6 months and 80% (n=) about 4-5 FSBs in their professional life. The findings also showed that at least 20% (n= 19) of the midwives had witnessed eight or more deaths in their professional lives, and at least 60% of them were in charge of the death events. The results also indicated that the majority of the midwives were more likely (68.6%, n=96) or likely (23.6%, n= 33) to use the EAP if it was available.

Moreover, most of the respondents, 48.6% (n= 68), believed that they were not professionally prepared to handle deaths in their workplace. The other findings were: high exposure to FSBs than MDs, inadequate professional support systems at work, and inadequate preparation on how to deal professionally with MD and FSB events in the workplace 48.6%, high levels of distress related to death anxiety among midwives 26.4%, an increase in death depression among midwives due to exposure to MD, and that fewer midwives' (20%) used problem-focused coping strategies while the majority (80%) uses emotional focused coping mechanisms. Therefore, the findings from the pilot study were quite similar to that of the main study. This indicated that midwives in the northern part of the country had similar experiences after experiencing MDs and FSBs.

- Challenges addressed

FGD and interviews: due to the nature of the study, the researcher underestimated the time for both interviews and FGD. The FGD and interviews took longer than expected. The discussion had to stop for a while when some participants became very emotional and started crying while sharing their experiences. The researcher was caught off-guard as she did not anticipate such moments to happen. An arrangement was then made with the social worker to be on standby to provide counselling to such participants. Moreover, the researcher realised that some participants dominated the discussion when she listened to the audiotapes during the transcription stage. This

improved the listening and interviewing skills of the researcher and prepared her for the main study.

On the questionnaire, all questions were clear, but the flow of the questions in section B of the questionnaire was not good as some questions focused on the same point and was not following one another, e.g. Question 9 and 10 and 20 and 22. The time to complete the questionnaire was also underestimated as respondents needed more time than the 15 minutes allocated to complete the questionnaire as they had to recall the information that had happened in the past. The questions were corrected in the final version of the questionnaire, and enough time (25 minutes) was allocated to complete the questionnaire.

**Procedure for triangulating findings of sub-objective 1, 2, 3 and 4**

The findings from the quantitative and qualitative were triangulated after separate data analysis. A side-by-side comparison approach or parallel database variant was used.[47] The qualitative findings and quantitative results were then merged and interpreted. The qualitative findings were reported first and followed by quantitative results that either confirmed or refuted the findings. The conceptualisation, programme development and implementation strategies, which were developed after, were therefore based on the merged results of the study. The merging process is illustrated in table 5.13.

## 3.4 PHASE 2: DEVELOPMENT OF THE CONCEPTUAL FRAMEWORK

Dickoff et al.[54] stipulate that a conceptual framework originates from the theoretical framework while the theoretical framework includes all the theories or issues in which the study is embedded. The findings from the situational analysis (phase 1) were used to guide the conceptualisation process using ideas by Dickoff et al. (1968). The Practice Theory was adopted to attain the study's fifth objective, which was to develop a conceptual framework that guided this study. This was done as follows: agent (the researcher, counsellor and management), recipient (midwives), context (hospitals in the Khomas Region), dynamics (challenges hampering the successful development of an EAP), procedures (EAP and implementation strategies developed) and terminus (the ability of midwives to cope with MDs and FSBs) as illustrated in table 1.2. and figure.6.1.

## 3.5 PHASE 3: DEVELOPMENT OF THE EAP AND IMPLEMENTATION OF STRATEGIES

The findings from phase 1 of the study (situational analysis) were used to develop the EAP in phase (3) of the study. This was done in accordance with stipulations in the Lokanadha et al.[56] quality of work life model. This model has five dimensions: Health and wellness being; Job security; Job satisfaction; Competency development, and Work and non-work life balance.

Strategies are defined as a detailed plan for achieving success in business, industry, politics, or the skills of planning for such a situation.[149] Strategies are also defined as the plans of action that are designed to achieve long-term objectives (Howe, 2011). The strategies for implementing the EAP to support midwives were developed in line with the C@PS model of Howe[57]. Four strategies were developed, and these includes, the provision of support services to midwives through an EAP at the workplace, training of midwives on how to deal with MDs and FSBs, motivation of midwives through a visible support system from management, and training of supervisors on the EAP and how to make referrals. The development of strategies generally occurs in a series of activities that address various challenges that would have been identified within a given organisation.[150] They are also viewed as a problem-solving mechanism. The Howe C@PS model comprises of key performance indicators (objectives, targets and outputs), strategic objective (initiatives, performance indicators and actors), critical success factors (skills, knowledge and abilities), value (create customer value) and a vision that enables the summarisation of the strategies (future product).[57] The developed strategies were discussed in chapter 7 under the Howe C@PS guiding principles components specified above. The developed programme and implementation strategies were presented to various stakeholders for validation.

## 3.6 ETHICAL ASPECTS

Creswell[47] defines ethics as the principles that oversee the research process. These ethical principles are the social norm and standards of behaviours that direct the researcher to conduct ethically sound research, protect participants from harm, and minimise risk from participation in the study. The researcher adhered to the ethical principles of research to ensure that the rights of the participants were protected and that the institutional rights and values were not contravened during the study.[137,51] Before the interviews, the research objectives and purpose of the study were

articulated in writing on the participants' information sheets explaining the purpose of the research. Creswell et al.[47] indicate that the informed consent of the participants needs to be respected. Written consents were obtained from all participants after they had agreed to participate. The participants were informed of all the data collection devices, such as a voice recorder, before starting interviews. To ensure anonymity, no names were used as participants were assigned identity numbers referred to during data collection. Moreover, the researcher used codes during verbatim transcription of data. This process ensured that no information would be tracked back to the specific participants.

### 3.6.1 Approval of the study

Written ethical approvals for the study were obtained from the University of Namibia's Human Research Ethics Committee (HREC) and the Ministry of Health and Social Services before data collection (see Annex A, B and C). In addition, various approvals for data collection at facility levels were sought and granted by the regional directors of the Khomas Region, medical superintendents, and control registered nurse midwives before data collection (see Annex D, E and F). The basic principles of human research ethics were safeguarded by the researcher as follows:

### 3.6.2 Principle of autonomy

Autonomy is defined as the freedom of a research participant to make choices on whether to partake in the study voluntarily and without any coercion or not.[51] According to Hennink et [al. 136], autonomy can only be ensured if the participants can make their own decisions and act independently. The principle of autonomy further indicates that if the participant wants to participate in research, no person should be forced to participate.[51] In this study, participants were all above 18 years old with information sheets that explained the benefits, risks, expected outcome and alternatives provided to participants and written informed consents were obtained. Participation was voluntary, and participants were never coerced to partake in the study, while adequate information was provided to the participants before the study.

### 3.6.3 Principle of respect

According to Neuman[49], this principle comprises of two components, and these are privacy and confidentiality. The participants' privacy and confidentiality were maintained throughout the research process, and participants were treated with respect and dignity. Thus, the FGDs and individual interviews used for data collection were held privately in a boardroom away from other staff members to ensure the privacy and dignity of the participants. The participants were notified that participation in the study was voluntary and that they had the right to participate without fear and withdraw at any time during the study. The hard copies of the completed questionnaires were also kept in a locked cupboard after data collection. The voice recordings and transcriptions of the data set were passwords protected, and only the researcher and supervisors had access to the password.

### 3.6.4 Principle of beneficence

Bless et al.[51] describe beneficence as a principle that contributes to the enhancement of people's lives. There were no personal benefits from the study to participants. However, the findings from this study were used as a basis for an EAP development for the MoHSS, which may give immediate support to affected midwives at a later stage should the programme be effectively implemented.

### 3.6.5 Principle of non – maleficence

Non-maleficence is defined as avoiding harm to research participants.[51] In this study, non-maleficence was ensured by assuring participants that there were no physical risks, although psychological risks were not ruled out. Benefits and potential risks from the study were explained to the participants before participation. Neuman[49, 136] states that measures need to be in place to minimise the risks encountered. During the study, various measures were put in place to abate psychological discomfort (harm) should it happen. Thus, arrangements were made with the social workers at the two hospitals for referrals of the participants should emotional discomfort occurs during the study, the participants were given time to cry or express significant emotions, debriefing sessions after the interview to such participants were also done, and participants were informed that they had the right not to answer some questions that they were not l comfortable with during

data collection. Finally, potential physical harm and discomfort were prevented during the study as the data was collected in a comforting environment.

### 3.6.6 Principle of justice

Justice includes fair and equal treatment of research participants.[136] This was ensured by treating all participants with fairness during all stages of the research process. Participants were selected according to the selection criteria set for the study.

## 3.7 SUMMARY

This chapter discussed the methodology and focused on the study designs, population and sampling and sample size. Furthermore, the methods of data collection, data collection procedure, data collection tools and data analysis were also deliberated on. Finally, the chapter concluded with a discussion on trustworthiness, validity and reliability, and ethical principles that were applied in this research.

The next chapter presents the qualitative findings of the study.

# CHAPTER FOUR

# QUALITATIVE FINDINGS AND DISCUSSION

## 4.1 INTRODUCTION

Qualitative data was gathered from the exploration and description of midwives experiences regarding MDs and SBs. The description of qualitative results is presented as verbatim quotes of the participants. The qualitative results were obtained from senior midwives and ward level midwives. Interviews were conducted with senior midwives and FGDs with ward level midwives. The interviews and FGDs aimed to answer Objective 1, exploring and describing midwives' experiences regarding MDs and FSBs.

Midwives were selected purposefully, and informed consent was obtained before data collection. When data saturation was reached, the collection was ended. This section is divided into two parts, whereby part one presents the demographic characteristics of the participants while part two presents the themes and sub-themes that emerged from the study.

A central question, e.g. (What are your experiences of maternal death and fresh stillbirths?) was asked during the FGDs and interviews. The following probing questions were asked: Can you explain more about your experience; how did that make you feel after witnessing such deaths? Can you elaborate more on that? Could you share specific experiences of cases that you have witnessed? Can you please elaborate more on what you mean by traumatising? How did you cope with incidents of maternal deaths? Any other coping mechanisms that you use to cope with such events? Have you ever approached anybody in coping? What would you recommend to be put in place to help you cope better?

## 4.2 OBJECTIVE NO 1: Explore and describe the experience of midwives with regards to maternal deaths and stillbirths.

### 4.2.1 DEMOGRAPHIC CHARACTERISTICS OF THE PARTICIPANTS

A total of four FGDs and four interviews were conducted. The FGDs consisted of the following number of participants:

Table 4.1: Demographic characteristics of participants

| FGDs | Age | Number of participants |
|---|---|---|
| FGD 1 | 25, 37, 59, 55, 27, 36 | 6 |
| FGD 2 | 23, 26, 28, 25, 34, 24, 40 | 7 |
| FGD 3 | 45, 52, 30, 23, 26, 33 | 6 |
| FGD 4 | 28, 26, 47, 54, 30, 27 | 6 |
| Interviews | | |
| Interview 1 | 40 | 1 |
| Interview 2 | 50 | 1 |
| Interview 3 | 48 | 1 |
| Interview 4 | 47 | 1 |

#### 4.2.1.1 Age distribution and gender of participants

As observed in Table 4.1 above, the Focus Groups consisted of 6 -7 participants. The age of the participants ranged from 23 - 55 years, and only 8 participants who participated in the FGD were above 35 years. For interviews, the youngest senior midwife was 40 years while the oldest was 50 years. All participants who participated in the qualitative part of the research were females.

As observed in the current study, the midwifery profession remains a female dominated profession as more than 2/3 of the participants were female and younger. Leinweber et al.[94] found, in concurrence with the above sentiment, similar results in their study. This could mean that young midwives dominate the midwifery profession at maternity hospitals in Khomas Region. However, this may negatively affect the midwifery profession as young midwives could potentially be inexperienced.

## 4.3 PRESENTATION OF MAIN FINDINGS

Five themes and 21 sub-themes were identified in Chapter 4 using open coding and the conceptualisation of the data. The main themes and sub-themes are presented in Table 4.2

Two main themes arose from the study: personal effects of maternal deaths and stillbirths on midwives and the coping mechanisms used by midwives to deal with the effect of MD and SB. The first main theme consisted of five related themes such as the; Psychological effect of MD and FSBs on midwives, Physical effects of MDs and FSBs on midwives, Social effects of MDs and FSBs on midwives, Effect on the career/ work performance of midwives, and Emotional and Problem-focused coping mechanisms.

Table 4.2: Themes and sub-themes that emerged from the study

| Main Themes | Themes | Sub – Themes |
|---|---|---|
| Personal effects of Maternal Deaths and Fresh Stillbirths on midwives | Psychological effects of MDs and FSBs on midwives | Traumatized/Shocked<br><br>Generalized Anxiety Disorder (GAD) related feelings<br>• Stressed<br>• Fear and distress<br>• Difficulty in forgetting event<br>• Confused<br><br>Post-Traumatic Stress Disorder related feelings<br>• Insomnia and Nightmares<br>• Recollection of the event (flashbacks)<br>• Sense of self-blame and Sense of guilt<br>• Anger<br>• Ashamed<br>• Haunted/tormented<br><br>Emotional effects on midwives<br>• Depression related feelings<br>• Saddening<br>• Sense of empathy |
| | Physical effects of MDs and FSBs on midwives | Poor physical health<br>Poor appetite |
| | Social effects of MDs and FSBs on midwives | Family impact<br>Loneliness<br>Blamed<br>• Blamed by colleagues<br>• Blamed by the public<br>• Blamed by family |
| | Effect on the career | Effects on the midwives' profession<br>• Positive effects on the midwives |

<table>
<tr><td></td><td></td><td>• A learning opportunity<br>• Perseverance<br>• Professional maturity<br><br>• Negative effects towards the profession<br>• Hate the profession<br>• Wanted to leave profession<br><br>Effects on the work performance<br>• Negative effects<br>• Job dissatisfaction<br>• Poor support system</td></tr>
<tr><td rowspan="2">Participants' coping mechanism to Maternal Deaths and Fresh Stillbirths</td><td>Emotional-focused coping mechanism</td><td>Seeking social support<br>• Family support<br>• Religious consolation<br>Meditation<br>Escape-avoidance and distancing<br>Repression/forgetting event<br>Drinking alcohol<br>Venting<br>Self-controlling<br>Perseverance</td></tr>
<tr><td>Problem-focused coping mechanism</td><td>Positive reappraisal<br>Professional counseling</td></tr>
</table>

### 4.3.1 Personal effects of maternal deaths and stillbirths on midwives

Personal effects are impacts that affect individual participants. These include psychological, physical, social and environmental effects of MDs and FSB on midwives. These effects are discussed in detail below.

#### 4.3.1.1 Psychological effects of Maternal Deaths and Fresh Stillbirths on midwives

Personal effects are impacts that affect individual participants. These include psychological, physical, social and environmental effects of MDs and FSB on midwives. These effects are discussed in detail below.

- **Traumatised/Shocked**

Participants were traumatised by deaths and expressed signs of shock during the FGDs and interviews. This was also expressed through non-verbal cues during the discussions, as illustrated in the following extracts:

*"It was quite traumatising, and I was sympathising with my colleague who was with me because she was newly qualified." [FGD 1 P#5]*

*"I was so sad and traumatising to have a patient gravida 3 and no alive baby at al1." [FGD P#4]*

*"For me it was very very traumatising, it was my first time and I was like oh my God this is not happening." [FGD 1 P#1]*

*"I was very traumatised especially when the sister of the deceased mother came, I had to be the one to inform them of the event that their sister is no more." [I #2]*

*"We sat them in and oh the whole break down, you. Me myself I was so traumatised. I couldn't think properly and I just wanted to go home." [I #2]*

*"Mmmh, what I experience with stillbirth is very traumatising."[I #4]*

The above statements indicate that participants experienced trauma and shock as a result of death events. In their studies, Wahlberg et al.[96,91] found that most participants experienced trauma after a severe event in the labour ward, and midwives who experienced high fear levels reported professional practice concerns. Muliira et al.[17,119] also affirm this study's findings when they reported that midwives in Uganda expressed the experience of some events that happened in their clinical practice as traumatic. Moreover, Toohill et al.[91] further argued that physicians and midwives viewed SBs as an unexpected tragedy, although several midwives considered SB less traumatic than MD. Nzum et al.[64] challenged the above statement when they established SB as the most traumatic experience for midwives in the Republic of Ireland. It is, therefore, necessary to realise the pain that midwives go through and give the necessary support.

- **Generalised Anxiety Disorder (GAD) related feelings**

Anxiety refers to a "state characterised by marked negative affect and bodily symptoms of tension in which a person anticipates future danger or misfortune".[112] Anxiety may comprise feelings, behaviours and physiological responses. Therefore, GAD related feelings refer to anxiety disorders that are intense, uncontrollable, unfocused, chronic and continuous, distressing, unproductive and accompanied by tension, restlessness and irritability.[112] In this study, some participants expressed

signs of GAD related such as stress, fear and distress, and confusion. These signs are described as follows:

- Stressed

Stress symptoms were displayed by many midwives who witnessed MDs and FSBs. This is illustrated in the following statements:

> *"It's very sad. You feel sad and sometimes you just want to scream maybe you will feel better." [FGD3 #P5]*
>
> *"That was my worst nightmare I am telling you. As a midwife there are some things that you never want to happen to you and that's the main thing you never want. It was really a dramatic event for me." [I#3]*
>
> *"You feel sad and sometimes you just want to scream maybe you will feel better." [FGD3 P#5]*
>
> *"I would say sometimes when we go through such incidences as midwives; you get to be kind of depressed." [FGD2 P#7]*

Midwives who participated in this study indicated that they felt sad and stressed. Stress and anxiety were found to be high in the environment where midwives felt unsupported, and health professionals in maternity units were found to report moderate secondary stress.[91, 86] In another study, 47% of midwives indicated that they visited a doctor as a result of stress and anxiety from traumatic birth death events.[16] Therefore, the observation is that MDs account for 95% of the stress suffered by midwives.[16, 151]

- Fear and distress

Some midwives indicated that they had fears of lawsuits for negligence from the patients and their family members. In addition, some midwives pointed out that they were afraid of consequences, the ruining of their reputation, losing their jobs and caring for patients that they knew, and the fear of being labelled in the community. This is evident in the participant responses below:

*"Oh my God, I was shaking; you can even ask her, it was really touching. I was scared because everybody just left me with the body apparently to prepare for mortuary." [FGD4 P#3]*

*"But now also coming on duty if you just hear a phone call your heart goes like doef doef [heart beat sound]., and when someone is calling me at the office even just for off-duties as long as you are told the office is looking for you my heart is already up. You will be thinking what they going to say about that case of last week or last night." [FGD1 P#1]*
*"Yaah, you work in fear and just waiting." [FGD1 P#2]*
*".... So it's a lot of feelings mixed up. Those incidents inflict fear in me and I was not at peace." [FGD2 P#6]*

Fear is a natural response to a threat that humans usually encounter.[112] Other studies concur with the above findings as they establish that participants experienced fear and distress due to MD.[96] Some found that midwives feared their deaths because death end dreams and ambitions of individuals.[152,15] This creates a high level of perceived distress as observed in studies carried out in the USA and the UK .[40,41] Fear of own death was not surprising as the majority of the participants were females not yet at the peak of their career and still within their reproductive years. The older participants could also be afraid of their death as they have children and grandchildren to look after.

Midwives who were pregnant during the time of the study indicated that they were afraid that MDs and FSBs would happen to them, as presented in the quotes below:

*"To make matters worse I was also pregnant and I was thinking of myself that maybe one day I will also go through those things. Yaah it was really bad."* [*FGD2 P#4]*

*"I was affected and I was always freaking out when I do not get foetal kicks after sometime. I was asking the foetal monitoring with a CTG from my colleagues and I ended up up delivering pre-maturely, 2 weeks before time but I demanded a C-section as I was really afraid of delivering vaginally." [FGD2 P#1]*

It is evident from the above statements that experiencing FSBs incites fear among expectant midwives as they do not know what would happen to them during their birth process. Anderson et al.[153] concede that pregnant women were most affected, and some were traumatised as they could not tell how their pregnancy would end. This, therefore, warrants the need for pregnant midwives to be provided with constant support after a death case to prevent pregnancy and delivery complications.

Some midwives were afraid of both lawsuits due to negligence and revocation of their practising licenses. This can be a traumatising experience for midwives, and the quote as stated below explains the degree of fear;

> *"You first think of the health profession council. Am I going to lose my job? How about my kids or all those people that I am taking care of? You think of all those questions." [FGD3 P#6]*

A similar concept on the issue of fear was validated in Ghana and Australia, where midwives' fear of litigation was observed.[15, 24] Litigation is a critical issue in the midwifery profession as the MD review committee reviews every MD, and if there are malpractices observed in the case, midwives end up at the professional inquiries where they may be found guilty and lose their jobs or get hefty a fine. Overall, MDs and FSBs lead midwives into fear and distress and could have a negative impact on the work performance of midwives.

- Difficulty in forgetting the event

Midwives find it difficult to forget the death events and end up with emotional distress. The excerpts below exemplify this explicitly:

> *"It took me years to stop seeing her face whenever I was entering the ward. I was on my own throughout this process." [FGD4 P#4]*

> *"Like for me I am just recovering. Now it's only when I feel like it's going away slowly but all these years aah ah [participant shaking her head]. No, sometimes when I think of going on duty aye [no], to that ward again but there is nothing I can do." [FGD3 P#2]*

*"It take me a week so that I can accept that the patient is gone." [I #4]*

Some midwives took longer than others to forget the event. The difficulties in forgetting the events could be attributed to the emotional attachment and bond that the midwives develop with their clients while under their care. Moreover, the poor recovery of the participants could be attributed to poor work support. Lack of social support, especially from friends, was also found to be a major contributing factor in a qualitative study in Australia.[109] This indicates that support can be a crucial factor in speeding up the recovery process of affected midwives. However, a contrary observation was made in a study by Calvert et al.[33] that shows that midwives in New Zealand still found it difficult to forget the traumatic event after they were offered support by colleagues and even after having gone through a counselling process. It can thus be concluded that midwives need to be supported to help them forget the death events.

- Confused

The data showed evidence that some midwives were confused as demonstrated in the following extracts:

*"That day my mind went blank, confused, its traumatising." [FGD 1 P#2]*

*"I was confused I didn't know what to do next, seeing her with all the intubation tubes and drips plus drains. I was speechless and everyone left me there after the failed resuscitation." [FGD 3 P#1]*

The above statements show that emotional confusion could be a result of poor support from colleagues. Dartey et al.[24] affirm that emotional confusion could endanger other patients and the midwife, as a confused midwife is susceptible to making errors such as giving wrong medication and imposing self-injury due to poor concentration. This may result in job insecurities as the chance of losing the job increases when faults are made.

- **Post-Traumatic Stress Disorder related feelings**

Post-Traumatic Stress Disorder (PTSD) is a condition that that develops when an individual is exposed to frequent distressing and helplessness due to traumatic events.[112] PTSD is further described as a clinically substantial distressing situation in an individual that reduces social

interaction, work capability, and self-destruction or violence to others.[154] After the traumatic event, the victims relive the trauma through disturbing memories and nightmares and develop a numbing of emotional responsiveness and increased arousal and alertness.[93,91] Health care professionals, especially midwives and obstetricians who witness sudden traumatic events such as MDs and perinatal deaths, are highly likely to develop PTSD.[94,86,96,95] Signs of PSTD includes difficulties in sleeping, nightmare, flashbacks, guilt, avoidance of reminders, feeling isolated from supporters, anger and helplessness.[86,95] Nevertheless, in their study, Sheen et al.[86] did not identify previous life trauma as a predictor of the post-traumatic syndrome among midwives. In this study, it was found that midwives experienced PTSD related feelings and signs such as insomnia and nightmares, recollection of event (flashbacks), sense of self-blame and sense of guilt, shame, anger and haunted/tormented as described below:

- Insomnia and Nightmares

The collected data revealed that midwives suffered from difficulties in sleeping as a result of death events, as expressed in the following statements:

> *"It touched me so bad, I couldn't sleep for days." [FGD2 P#1]*
>
> *"Since that thing happen I could not even sleep." [FGD 4 P#4]*
>
> *"I couldn't sleep; I am now living with that post-traumatic stress." [FGD1P#2]*
> *"Arriving home, I remember that night I did not sleep, not even an hour."* [*FGD 4 P#3]*
> *"I didn't sleep well also but the family was angry with us." [FGD1 P#2]*

Midwives in this study reported insomnia after experiencing an MD and FSB. A study conducted in Israel among midwives and a scoping review in Australia affirms the above findings as both reports that midwives had sleeping problems after traumatic death events.[95,15] On the contrary, burnout was found to be one of the highest contributing factors among midwives working in perinatal wards.[18,21] Dartey et al.[24] maintain that extended periods of lack of sleep among midwives can lead to poor mental states and, eventually, poor work life quality.

Furthermore, data showed that some midwives were living with nightmares as a result of MDs and FSBs, as indicated in the statements underneath:

> *"… and then there are times you are sleeping and you even start dreaming you are dreaming like you are managing [participant laughs], you are even doing it better. Like you wake up from your sleep." [FGD4 P#5]*

> *"When I went home I couldn't sleep for nights. I was getting nightmares." [FGD4 P#3]*

> *"I started getting bad dreams of her [deceased]. I couldn't sleep for weeks." [FGD 4 P#5]*

The American Psychiatric Association[154] defines a nightmare as a disturbing dream linked to undesirable feelings, such as anxiety or terror that awakens people. Nightmares are generally predominant in children; however, they can occur at any stage of a person's life. In adults, occasional nightmares are ordinarily nothing to worry about, but they become abnormal and worrisome after a traumatic event, as reported in this study. Cohen et al.[95] document nightmares amongst midwives and obstetricians who have experienced MDs.

Some midwives who were pregnant during the study had nightmares after losing their babies, as revealed in the quote below:

> *"Since I was also pregnant that time, I started having dreams of my baby dying during the birth process." [FGD2 P#4]*

Working in maternity units while pregnant was one of the stimulants that incited fear and feelings of distress.[153] This study noted that some pregnant midwives who experienced MDs and FSBs had similar views as they experienced bad dreams of their babies passing during the birth process. Overall, midwives were found to experience sleeping disorders after traumatic events. In view of

these findings, midwives need support, such as psychological counselling, to assist with the sleeping disorders that may affect their ability to concentrate and work performance.[42]

- Recollection of event (flashbacks)

A flashback or recollection of events is an involuntary, sudden reliving of a psychologically positive or negative experience of an event that is categorised as disruptive.[154] The experience can include moments of happiness, excitement, sadness or many other emotions. In this study, both senior and ward level midwives experienced intrusion repetition or a recollection of events in the form of images. Some midwives reported auditory senses where they started hearing voices of the deceased (e.g. how the dead used to speak or make jokes) in cases of MDs. This is evident from the quotes below:

> *"You know after the death they cover, so when you go in that room your mind first run to that incident and all your imagination run to that incident." [FGD 1 P#1]*
> *"I was always seeing her sitting at the entrance of the ward after she died." [FGD1P#5]*
> *"It's really a bad thing because you stay for days and months still thinking about it." [I #3]*

> *"Every time I come to work and go in that room I was getting the whole recollection of the event and the face of the mother was always in my mind." [FGD2 P#3]*

> *"Over the years a person who died even in 2012 you can recall even by name. It's a person you don't know but it is just in you. It's really difficult to to to come to terms with but you try to cope but it's not easy." [I #4]*

> *"You know, it's a memory, you carry it, you are re re re what re-living the whole experience especially for the next couple of days." [I #4]*
> *"Every time I go in that room the event come straight in my mind and I worked with fear every time I go in that room after the incident especially at night. I use to hear her voice talking to me as she liked jokes since she was a lovely person." [FGD3 P#4]*

As explained in Horowitz[52]'s theory, Intrusion repetition is defined as recollections of a traumatic event that has occurred unexpectedly in an individual's mind. It includes imaginations, behaviour or emotions and can happen when an individual is awake or asleep as a dream. Wahlberg et al.[96, 34, 94] found similar results where midwives re-experience a past event. Therefore, it is argued that trauma memories might never be 'erased' and are expected to re-emerge when a similar stressful event faces the midwife.[94]

- Sense of self-blame and Sense of guilt

Self-blame is an experience that occurs when a person feels that they did not do their level best in a particular situation.[24] In addition, guilt is the state of mind in which a person feels responsible for what has happened or not doing something.[94] Both conditions indicate midwives would feel that they did not provide the care expected of them to their clients. In this study, the participants used self-blame and guilt interchangeably to mean one thing. During the analyses of data, the majority of the midwives in the study were found to have blamed themselves after an MD and FSB. This is demonstrated in the following statements:

> *"I was like what could I have done to prevent this. I felt like I failed the mother and on top of that some of her relatives were my colleagues from general wards." [FGD1 P#1]*
>
> "*I was so bad because I was so used to the patient and I developed a good bond with her. We even use to tease her that she is the matron of the ward and she liked to orientate others. For this one I really had a blame on myself as I felt I failed to monitor the urine output of the patient even though we were sending them to the toilet we were not recording the quantity of urine output." [FGD1 P#4]*
>
> *"Ok, after maternal death I felt like I killed someone." [FGD2 P#6]*
>
> *"I was feeling that aah I am just killing people and I am supposed to be saving their lives." (FGD2 P#4)*

*"I really sit with regrets and you will be like perhaps I am the one who caused the death. This is the same feeling that you get even in cases where you have done your best." [FGD3 P#6]*

*"I really felt bad and I could not stop blaming myself." [FGD3 P#3]*

*"I kept blaming myself even though the patient was a referral she was stabilizing and she improved significantly during my care. I just felt I failed patient." [FGD3 P#3]*

*"I really sit with regrets and you will be like perhaps I am the one who caused the death." [FGD4 P#6]*

*"It make me feel I neglected the patient since there was a time that the BP was high. I was now thinking that I could have observed the patient closely and we could have done something to prevent it." [I#3]*

*"I felt I have failed the patient and her family."[I#4]*

*"I feel like it is us who took so long. If we could have observe this patient properly that patient couldn't lose her baby."[I#4]*

*"I always feel guilty because I feel like I am reporting myself." [I#3]*

Self-blame was reported highly by midwives in this study. Dartey et al.[24] concur with this study's finding in their observation that midwives blamed themselves over the deaths of their clients because the mothers were not sick but only going through the changes of pregnancy. This may cause frustration among midwives, and they can develop feelings that they have failed in their duty to render care. It could therefore contribute to social isolation, unhappiness and lower the quality of life of midwives. A survey conducted by Sheen et al.[111] concludes that traumatic events had a common theme of generating feelings of responsibility and blame among midwives in Liverpool.

Some participants further felt guilty after the incidents of deaths as reported in the statements below:

*"Eish, I feel sorry for the patient and for me I feel guilty, you feel like you have failed the mission that you suppose to do because my aim is to preserve life and not to let people die." [I#3]*

*"I had that guilt and shame." [FGD1 P#1]*

*"You feel like why do I have to blame myself if I have tried all I could but if you know a case has happened and then you think you didn't try that much there you really feel guilty even a year especially if it is a maternal death. It really affect you negatively."[FGD2 P#4]*

*"For me I was feeling guilty like maybe we could have done more to keep a close eye on her and also give her health education to call us on time."* [*FGD2 P#2]*

*"I was feeling so guilty that maybe the mother was not advised well at ANC." [FGD2 P#2]*

*"I felt like I owe the family members an explanation since I was allocated at that area." [FGD2 P#1]*

Wahlberg et al.[96] corroborate with the current study's findings that most health care professionals who experience death cases, especially maternal and perinatal deaths, feel guilty. This results in psychological difficulties among midwives, as observed in this study. Other studies assert that most of the participants expressed feelings of self-blame and guilt.[91,93] This led the midwives to question their actions wonder they could have contributed to the death event.[98] The feeling of guilt is regarded as a lasting emotion that often remains unresolved and could lead to the feeling of being incomplete. This may, however, lead to midwives initiating perfectionist behaviour that would strengthen guilt.[98,41] It is therefore worth noting that most midwives in the study acknowledged the feeling of not doing their work satisfactorily and, hence, guilt.

- Anger

Anger is a feeling of displeasure at what would have happened.[93] In the current study, it was evident that some participants felt angry after FSBs and MDs. Some participants were also angry

after the death cases because of the other circumstances regarding the deceased, as illustrated in the participants' comments that:

> *"You will get all the question of, sometimes it make you want to kill someone. You are 13 and you are pregnant and father is your family member. Look, the person who brought that patient is the one telling you she was staying with uncle blah blah blah. At time you want to be a police officer and lock someone up." [FGD2 P#6]*

> *"I was angry to the point that I want to explode." [FGD2 P#6]*

In other studies, anger was noted to be due to the peritraumatic distress in the midwives.[91,93] This feeling of rage could be attributed to the sense of failure to save the patient among midwives, as stated in the above findings. Therefore, midwives must be allowed to express themselves after a death incident to minimise their anger.

- Ashamed

Kleim et al.[100] note that being ashamed is whereby a person feels embarrassed because of their actions. One participant in the study felt ashamed after an FSB as they did not know how to face the family. This is demonstrated in the following quotes:

> *"I did not want even to look at the family because I didn't know what to tell them. I was so ashamed, and I cried so much that day that I had to be sent home by the doctor and the supervisor at that time." [I#4]*
> *"....it make me ashamed, number 1 it make me ashamed, you feel like you are not a midwife." [I#4]*

Cauldwell et al.[98,6,18] corroborate this study's findings in the observation that MD has a notable lasting impact on midwives. They are left with feelings of grief and shame that they are hesitant to verbalise. As a result, some midwives may be suffering in silence as they are ashamed of talking about their experiences of the death event. This may result in a decrease in work expectations, as observed in New Zealand and Switzerland. [99,100] Therefore, positive attitudes among midwives should be encouraged after an MD and FSB to avoid the above-explained feelings.

- Haunted/tormented

The state of being haunted is a feeling associated with mental anguish.[112] Some participants felt tormented when they went back to work after a death event. This is expressed in the following excerpt:

> *"Up until today it haunts me." [FGD2 P#5]*
> *"I felt that something was tormenting me in that room when I came back to work." [FGD3 P#3]*

Midwives who develop haunted feelings can end up experiencing lower levels of productivity as they live in fear of the unknown and the feeling that the deceased is after them. This is believed to be common after an MD and then FSB. This might be because there is normally minimal bond developed between the midwife and the baby in FSB cases, unlike the MDs where the mother may have been in the ward for some days and a relationship s developed, and the mother is an adult can communicate. Austin[18, 93] concurs with the above findings as noted in the observation that midwives in their study experienced the tormented feeling after death events. This, however, may lead to poor quality of work life for the midwives.

- **Emotional effects on midwives**

Emotional effects are defined by Barlow et al.[112] as the feelings that a person experience consciously or unconsciously after an event. In the context of this study, emotions are the physical and psychological effects that develop after an MD or FSB event. It was evident that midwives in the study experienced emotional distress in the form of depression, sadness and empathy after MDs and FSBs. The study findings show that participants suffered emotional distress. In another study, Australian midwives were found to have experienced emotional distress due to their incapability to manage the impact of MDs, and this could have consequences on their work performance.[86] The adverse effects may be because midwives develop a sense of helplessness in events of death.[117, 95] Emotionally distressed midwives are consequently unlikely to render compassionate care. Maternal deaths and stillbirths were found to have a tremendous negative emotional and grieving impact on midwives because the majority are women who have children or plan to have children in the future.[104]

- Depression-related feelings

The WHO[155] defines depression as a condition characterised by emotional dejection and withdrawal from the rest of the population, being heartbroken, diminished energy levels, guilty feelings or low self-esteem crying, and poor attentiveness. The person loses interest in daily activities and ends up feeling helpless. The feeling of depression was expressed in the insert below:

> *"To me it's depressing…" [FGD2 P#5]*
>
> *"This one was really much hurting because I developed this personal hurting relationship with the patient. I really felt very very bad*." [FGD1 P#4]
>
> *"But until now that thing is still hurting me like it just didn't happen. Sometime I felt like it was a dream and it did not happen." [FGD P#2]*
>
> *"I would say sometimes when we go through such incidences as midwives; you get to be kind of depressed." [FGD2 P#7]*

Some midwives showed signs of depression, such as crying, poor sleep and an inability to eat properly, as shown in the statements below:

> *"I could not eat very well the first few days because I got sick." [I#4]*
>
> *"I do not sleep well; I find myself waking up in the middle of the night." [FGD2 P#7]*
>
> "*My dear, that day my day was ruined that's why I can remember that incident up to today. I went in the tea room to cry."* [*FGD3 P#3]*
>
> *"Like me I think I have cried so much when it happened for the first time. People like me just cry, I am a cry baby" [FGD2 P#5]*
>
> *"To me after an incident of one patient who died on the table in theater I now and then find myself crying." [FGD2 P#6]*

This study indicates that participants suffered some form of depression-related feelings after experiencing MDs and FSBs. The degree of depression-related feelings was most likely due to variations in age, support after the incident and the nature of the personal relationship between the respondent and the deceased. Shorey et al.[110, 33] provided evidence that numerous health professionals working in maternity sections who periodically encounter maternal and perinatal deaths, endured a negative impact on their emotional wellbeing as they felt depressed and burned out. It was evident from the study that the duration of depression-related feelings varies amongst midwives and ranges from 3 weeks to longer than ten years. Dartey et al.[24] claims that depression decreases midwives' productivity and workplace morale, hence the need for a good support system.

This study noted a correlation between MDs and FSBs and crying by midwives. Almost every respondent in the study indicated that they cried a lot after a death event. A death event is naturally an emotional event, and an MD and FSB could even be more depressing to midwives as sometimes it gives a sense of failure to care. In his study, Jarvis[92] illustrates that health care practitioners, including nurses and midwives, experienced a lot of grief and displayed signs such as crying and an inability to sleep. The same sentiment is stated by Dartey et al.[101] in their observation that participants usually cried after an MD. This could be seen as another way of coping as crying after an adverse event was in a way found to comfort health professionals.[18] Ultimately, midwives in the study have experienced signs of depression that could negatively impact their health.

- Saddening

The saddening state refers to the feeling of unhappiness expressed by the midwife participants after experiencing a maternal event. After witnessing MD and FSB, numerous midwives (both in focus groups and individual interviews) felt sad and heartbroken. This is proven in the following quotes:

> *"I was very sad, I couldn't eat well that day, I felt like not coming back to work anymore and so forth. I was also affected that I stopped helping a patient that I know." [FGD1 P#1]*
>
> *"When I came there the baby was already out but no fetal heart rate. I was the one to answer for everything. It was so bad; I didn't expect the baby to die. It was really heart breaking and saddening." [FGD1 P#3]*

*"It made me so sad, it make me feel emotionally disturbed because she was also my colleague. [FGD2 P#2]*

*"So it really make me feel empty." [FGD1 P#1]*
*"Yes I was affected. I was very sad." [FGD3 P#1]*

*"It's very sad. You feel sad and sometimes you just want to scream maybe you will feel better." [FGD4 P#5]*

*"I was very sad and I was even crying. But I refused to call the hospital and her families of what happened because I didn't know where to start." [FGD P#1]*

*"Losing a mother you know or any person, it can be a child, it's a sad event, and she just delivered so the baby was left to be now raised without a mother." [I#2]*
*"It's very saddening to come and tell someone who carried for 9 months that the baby did not made it. So it's it's you know, because you are a midwife it doesn't mean you don't have emotions." [I#2]*

One of the emotional states that was prominently related to and reported in this study was the feeling of sadness among midwives. Some participants indicated that they stopped helping clients that they know because of fear of stigma in the community. Moreover, the feeling of sadness observed in the study could also be attributed to the fact that midwifery is a profession that mainly expects happiness because it involves bringing life on earth and when this is not achieved, it plunges midwives into despair, with negative energy and not knowing what to do next as observed in the other studies.[35, 34] It is thus essential to neutralise the sad feeling experienced by midwives to uplift their enthusiasm and sense of belonging.

- Sense of empathy

Empathy is the ability to relate to and share the feeling of another person.[97] The expression of empathy in this study was common. The participants kept asking themselves what could have happened if MDs were to them or their loved ones and what would happen to the baby. The sense of empathy is displayed in the following:

*"I also felt on behalf of the mother." [FGD1 P#4]*

*"You feel too bad when you think of the family that she left behind." [FGD1 P#1]*

*"Seeing the baby lying there with no mother, I could feel it as a health practitioner." [FGD2 P#5]*

Midwifery and nursing professions are some of the health professions that deal with very critical patients and eventually death cases. This requires nurses and midwives to avoid sympathy but rather exhibit empathy. Cohen et al.[95] has proven that difficulties, inability to provide empathy and challenges in communicating with patients can push midwives into becoming avoidant and distant practitioners. The feeling of empathy is thus a vital factor component of care provision among midwives.

As discussed above, psychological effects were found to affect midwives in various ways and contribute to a lack of self-confidence and make people feel helpless. It is, therefore, crucial to develop and implement programmes that will enable midwives to receive

4.3.1.2 Physical effects of maternal death and fresh stillbirth on midwives

The physical effects in this study are bodily reactions symptoms that a person develops after experiencing MDs and FSBs. Various post-attending or witnessing of an MD and FSB physical effects were observed in this study. These included sub-themes such as poor physical health and poor appetite.

- **Poor physical health**

Poor physical health is a natural feeling that someone gets after getting an infection or after a traumatic event as noted by Barlow et al.[112] However, in this study context, participants felt sick with some booked off after the death incidents. This is demonstrated in the following quotes:

*"I was booked off for two days as I couldn't cope well." [I#4]*

*"I felt sick right there." [FGD3 P#6]*

*"With my very first case I did not cope well. I was booked sick and off the whole week." [FGD2 P#5]*

In their studies, Nightingale et al.[16, 151,156] agree with the above in their sentiment that midwives fall sick and have taken sick leave after exposure to a distressing perinatal event such as death. The days off create a shortfall among the workforce at the health facility and this may lead to the straining of the remaining midwives and leave g them more vulnerable to compassion fatigue stress.[95] The duration of sick leave was found to differ among participants. Nonetheless, the deduction from the findings is that the participants that would have witnessed deaths for the first time require a longer time off to recuperate.

- **Poor appetite**

In this context, poor appetite is a desire for a reduced food consumption following an MD and FSB case. Poor appetite is usually regarded as a temporary physical effect that can be reversed after the midwife has recovered. Participants reported that they had lost their appetite after experiencing both MDs and FSBs. This is due to the fact that whenever an MD and FSB happen, midwives tend to be stressed and their sense of happiness disappears. This could result in a loss of appetite and negatively impact on their health. The excerpts from participants' statements validate this observation:

*"I couldn't eat that day." [FGD4 P2]*

*"I could not eat well for a week as I was very unhappy and not well." [FGD1 P#1]*

The results indicated that some participant reported that they could not eat properly following the death event. This is consistent with Dartey et al.[42] who, in their study in Ghana, found that midwives had a poor appetite after MDs. This may have a negative impact on the midwives as poor eating can lead to low energy levels and low general work morale. That could mean that you will have midwives that would dread their work and subsequently start to despise their work place as observed in other studies.[16] In addition, this might also lead into a high level of staff turnovers. There is clear evidence in this sub-theme that midwives suffer and this point to the loss of appetite.

All in all, it is clear from the above discussion that midwives that experience MD and FSB are prone to develop physical effects such as poor physical health and poor appetite. It is therefore vital that midwives are supported in order to reduce the time spent off work as a result of ill-health.

4.3.1.3 The Social effects of maternal death and fresh stillbirth on midwives

Social effects involve socialisation with other people, be it colleagues, friends or acquaintances or other family members, after an MD and FSB.[112] The American Psychiatric Association[154] is of the opinion that human beings need to interact with one another in order to avoid self-isolation. This study considers the social effects as the impact on family, loneliness and blame and they are described as follows:

- **Impact on family**

Exposure to MDs and FSB ends up affecting the midwives' families. Midwives indicated that their families were neglected and that they could not perform other family responsibilities such as domestic chores and looking after their children as they used to. This was confirmed by participants in the following inserts:

> *"My dear, any death becomes my personal issue and when I go home I always tell my family that I am not emotionally well because of what happened at home and in the end it affects the family indirectly. Like my children will keep asking me if I am fine.*" [I#3]
> *"I was not there for my family anymore because I was so down and my kids suffered the most. "You go with it home every time." [FGD1 P3]*
> *"Normally my family will be affected if I talk yaah but sometimes I try to keep it to myself because I know they will feel bad." [I#4]*

Some participants stated that MDs and FSBs affected their families as they went with the negative emotional feelings at home and this resulted in them not taking care of their families as they should. This is affirmed by Dartey et al.[24,17] who show that midwives suffered an imbalance of family responsibilities. It is therefore evident in the study that the effects of MDs and FSBs do not only stay with the midwives but also affect their families.

- **Loneliness**

This study identified social isolation, which it termed as loneliness. Exposure to an MD resulted in some midwives feeling lonely and wishing that they could talk to someone. This is expressed by one participant as follows:

> *"After the maternal death, especially when I went home, I wished to talk to someone but no one will understand what I mean." [FGD1 P#1]*

Loneliness, as observed in this study, can lead to fear, distress and depression as midwives ended up with no one to talk to. In-depth interviews with midwives in the UK concurred with this study's findings as they noted feelings of isolation (physically or psychologically) amongst midwives with high levels of distress and a need for support after a traumatic perinatal experience.[86, 41] Wallbank et al[41,86] therefore opine that attention should be given to the incorporation of support structures within the maternity department as it helps to curb isolation of oneself from recipients of care through depersonalisation and improved personal accomplishment.

- **Blame**

Blame is explained by Barlow et al[112] as a feeling that someone is responsible for something that has happened and in this context; midwives were the people who were alleged to be wrong. Midwives in the study reported that there were issues of blame game after an incident of MD or FSB. The blame could either be from colleagues, employers, public and family members of the deceased on the care that was rendered.

- Blamed by colleagues

While supervisors and fellow colleagues are expected to be the immediate support persons in any natural work setting, some midwives in this study indicated that they were reported on, blamed and thus not supported by their supervisors and some professional colleagues. This is exhibited in the following quotes:

> "*Even if there is any incident they make sure that file is being taken quickly before you add anything that will help solve the problem. That file will be taken*

*to the supervisors' office quickly. What is that now? If its I mean, it's what I am saying that they are not supportive." [FGD1 P#2]*

*"They will say you have done this and that. You know such things, like shifting blame on you and there are really some of us that are vulnerable, who are not talkative like me. Some colleagues are just not supportive." [FGD2 P#5]*

*"The next day I was called at the office and the matron was blaming me why did I send them (deceased and support person) home when they came first at the ward. I tried to defend myself but I didn't help". [FGD1 P#6]*

"*It's really painful, I received file from nursing council twice after 2 incidents and one of the Dr. made a case against me for not giving Konakion of the baby in labour ward but the Konakion is not what killed the babies." [FGD 1. P#5]*

The study found that blame from clinical peers discouraged some midwives from continuing with their normal duties after a death event and caused poor quality of work life among some midwives. A high number of participants reported that the supervisors shifted blame on them instead of being supportive. Cauldwell et al.[98,111] agree with the above observation by stating in their studies that midwives had negative perceptions of the conduct of colleagues and highlighted the problems of "finger-pointing" and blame when a MD occurs. However, Toohill et al.[91] challenged the aforementioned view as they found low levels of the blame game among both obstetricians and midwives, and instead noted that the professionals were worried and fearful. It is so important that midwives and their supervisors remain supportive to one another in order to avoid this kind of blame.

- Blamed by the public

Midwives further reported that they were blamed, labelled and stigmatised by the general public for not providing appropriate care. The excerpts below indicate this:

*"They were calling us names, the killer; we are killing babies and so on. So I was very touched with that case but gradually improved." [FGD1 P#2]*

*"And if you talk to anyone in the community that doesn't understand my workplace they will just go like haah; how did you neglect her." [FGD1 P1]*

*"So when you have that at the back of your mind, you are even thinking oh no maybe I should be somewhere else where I am a little bit out of the profession that is always ending up into problems. We are forever in the newspapers. The community has perspectives of how the nurses and midwives and how badly we are. Nobody really sees the good things we are doing." [I#2]*

Stigma after an adverse event such as death can be proffered on midwives by the public as observed in this study. This situation can be annoying to the midwives and may bring about the re-collection of the event even though midwives were in a good healing process. As seen in the above evidence, the public would mostly overlook the effort that midwives would have put especially after a negative event has happened. This brings about negative emotions, frustration, unjustified feelings of blameworthiness and lack of confidence as was seen among midwives in the UK.[108, 157] Blame from the public may thus bring about low work morale among midwives as was revealed in this study.

- Blamed by family

Some midwives felt unsupported, blamed and attacked by the patients' families after an MD and FSB event. This is clearly illustrated below:

*"The family comes and gives verbal attacking. You are all alone in that." [FGD1 P#1]*
*"Uuuumh, people will tell you, you killed us, they will just be there calling you names." [FGD1 P#1]*

Midwives from the current study observed verbal abuse from patients' family members after the families had been informed that their loved ones or the baby had died. This is a usual human reaction as people normally expect joy when one is pregnant and not a sudden death. Sheen et al.[111] concurred with the aforementioned that midwives report incidences involving attribution from family members for what would have happened. This stance is further supported by Dartey et al.[152] who regards fear of bereaved family members' reaction upon revelation of death as a great

concern to midwives. This could however have a destructive impact on the midwives as it can damage their mental wellbeing and leave them hopeless especially if they are young and inexperienced.[95, 153] The situation might also leave midwives with a sense of guilt as they may develop feelings that they are the ones who caused the death event to happen.

As reported in this study, the effects of MDs and FSBs were not only restricted to the midwives but extended to the midwives' families. It is imperative that both receive support to avoid social isolation and consequently low work morale.

4.3.1.4 Effect on the career

This theme deals with the effects on the midwives' career/ work performance and their profession. Observations from the study shows that midwives corresponded with one another and that MD and FSD have immediate effects on them. The effects were noted to be either positive or negative as presented in the sub-themes that follow:

- **Effects on the midwives' profession**

Witnessing a death event was found to affect the midwifery profession as observed in this study. The effects can either be positive or negative to the midwives.

- Positive effects on the midwives

These are the effects that are constructive to the wellbeing of the midwives after the death events. The positive effects on the midwives include a learning opportunity, perseverance that it kept them going and the growth of professional maturity.

- A learning opportunity

All midwives in the study indicated that having experienced an MD and FSB has taught them a lifelong lesson that they need to be extra cautious when dealing with pregnant women. Moreover, the experience taught them to be alert and improve accurate records in case of death reviews or disciplinary hearing with the health professional body. This can be attested in the following quotes from a discussion group:

*"And also it has some positive effects on you, you are more aware and more serious with your work now where you are just to avoid this kind of negligence.". [FGD1 P#3]*

*"To add there maybe P3, you are more alert with everything. You want to keep your records up to standard, everything you want to write it so that if it comes back to you one day than you have proper records of things that you have done." [FGD1 P#2]*

*"It changed me completely that every time I am receiving a patient, it doesn't matter in what state, C/S or NVD I always double check my work." [FGD2 P#1]*

*"So that will be like a ringing bell in my mind every time I approach a situation I have to think if it that CTG CTG I don't want the same thing again. In that way you are also coping, you are coping forward you don't go backwards again." [FGD4 P#6]*

*"I think as midwives in these situations that we are all in or we encourage us or it teaches us or it enable us to try and learn as much as you can from such incidents you understand? Because like if you don't know how to act when students for example come to you to report you will be more alert and act fast if you have witnessed a maternal death or fresh stillbirth." [FGD2 P#5]*

*"But on the positive side it was an eye opener for me so that I have to see more whenever I have a patient and not take every patient with a previous scar will be the same, what must I anticipate so that the care will not be the same." [I#1]*

**"***Mmmh that case had to be reviewed so that we also learn to avoid mistakes next time on another person. So yes there are serious effects." [I#2]*

*"Yes, I really learnt something positive to prepare me for next event not to happen again or for me to be ready for the next case." [I#2]*

The majority of the midwives admit that they have learnt a lot after the death events. This is demonstrated in many ways such as avoiding any form of negligence through making sure that all

the necessary efforts, such as double checking their work in order to prevent another death and proper record keeping, are made. Besides, respondents also indicated that they became more prepared in cases of complications in order to save the mother or the baby's life. This confirmed other studies that found that the majority of midwives and obstetricians indicated that they became better clinicians as a result of experiencing trauma. [91, 106, 24] Huston[104] also argues that negative a perception is actually perceived as positive as they direct human experience on which way to go. These experiences act as motivators to develop and create safer working environments. In addition, Harrison et al.[105] maintain that health care professionals, including midwives feel empowered and improve towards safer health practices after experiencing a death and other adverse events but only when they receive institutional support, appreciation and trust.

On another note, maternal death review processes following an adverse perinatal event that are essential to determine the contributing factors to the death event can be vital for the improvement of future care as well as the wellbeing of the midwives. On the contrary, Robertson et al[102] note that the experience of perinatal death reviews may promote the perception of trauma. This may result in a defensive clinical practice and reduced self-belief in practice among midwives should they be found negligent, hence contributing to a perceived blame culture at the workplace.[102] In summary, it is apparent that even though most midwives are sometimes left heartbroken after a death case, there could be other positive outcomes as the otherwise sad event may be to the advantage of the midwives.

- Perseverance

In this context, perseverance is defined as a midwife's ability to persist or to endure challenges that may come in the working environment as a result of death events. Experiencing an MD teaches some midwives on how to persevere in the profession instead of just leaving after a death incident. This is demonstrated by some midwives in the following quotation:

> *"It did not make me leave my profession or what but I was heartbroken." [FGD3 P#1]*

Even though some midwives in the study were devastated after experiencing the death events, they stayed at their work place and in the profession. This perseverance is observed by Dartey et al.[24]

who note that midwives continued on despite the negative effects of MDs such as mental fatigue. The presentism situation that was observed in this study may give an indication that midwives go to work due to the existence of a limited workforce. Presentism is a situation where an employee goes to work as usual but displays low levels of productivity due to physical or psychological health problems such a pain or trauma.[8] On a contrary note, Li et al.[88] reported a decrease in presenteeism from pre-to post-EAP after traumatic events. Thus, presenteeism leads to decreased work output since the employee's presence at work does not give surety that work would be successfully done.[24]

- Professional maturity

Professional maturing describes the midwife's ability to grow within the profession. The experience of an MD and FSB is reported to have made some midwives mature in their profession. This is shown in the following insert:

> *"I experienced more deaths and worked longer in the profession, I become mature and I tolerate the deaths better than when I was young". [I#4]*

In spite of the negative impact of MDs and FSBs observed in this study, some participants in the study could still endure the deaths. As a result, they admitted that as they grew older in the profession, became more mature and could take deaths positively. This was revealed in other studies where the majority of midwives and obstetricians indicated that they had become better health practitioners as a result of experiencing traumatic events.[91] Similar sentiments were also reported in a qualitative study in Queensland, Australia, where student midwives indicated that witnessing SBs frequently made them mature in the profession.[106] It can therefore be concluded that midwives still find purpose for professional growth in spite of the negative effects that they experience after death events.

- **Negative effects towards the profession**

Not all the effects on the midwives' profession are positive as some effects can be undesirable. Some participants expressed negative effects towards the profession such as hating the profession with some wanting to leave, having left, or returned to the profession.

- Hate the profession

Some participants stated that, after r MDs and FSBs, they hated the midwifery profession and wanted to change careers. This is demonstrated in the following statements:

> *"I just want to go and do something else. This profession is very stressful especially here in maternity where our fate is hanging because of deaths cases." [FGD1 P#2]*
>
> *"It made me feel so bad, it's like a really bad choice of profession." [FGD3 P#6]*
>
> *"I am really fed up and I wish I can just get a new job out of this profession or even a scholarship to go and study something else." [FGD1 P#1]*
>
> *"When I am talking very bad I feel like midwifery and nursing is not my choice even though I know I was strong enough."[I#4]*
> *"This was really traumatic to myself and I could not stop thinking about packing my things and just go home that moment for good."[I#4]*

The above statements validate the view that some midwives in this study wanted to change profession due to stressful death events that they have experienced. Some believed that they had made wrong career choices and wished to get new jobs or go back to school and change careers. This means that some midwives are just hanging on in the profession because they need to earn a living while they are finding their way out. This can be damaging to the development of the entire midwifery profession as it can result in a decreased workforce of midwives that are already found to be few around the globe.[74, 35] It is therefore important to address the challenges that are experienced by these midwives in order to retain them in the profession.

- Wanted to leave profession

The majority of the participants, especially the young ones, wanted to leave the profession after they had been directly in charge of the patient's care that either died or had an FSB. These midwives indicated that there were moments that they wished they could go and work in other sections of the nursing discipline. This is supported by the following statements:

> *"I felt like can I just not go out of this profession and go work in other wards."* [FGD 3 P#4]
> *"So at the end of it you are like I need to get out of this place as much as I would wanted to have done." [FGD2 P#7]*
>
> *"I always tell myself that if only I can get a better post somewhere and not maternity for me the only way to cope with these problems is to get away from them." [FGD2 P#1]*
>
> *"Yaah like a maternal death or fresh stillbirth after you have tried your level best it will really sometimes you just want to quit." [FGD2 P#4]*
> *"And at times you feel like I am in a wrong profession and you want to quit despite the fact that you as a midwife you have played your role, you have done your best that you could." [*FGD2 *P#7]*
>
> *"If I lose another mother or baby that I monitored properly I will quit this job"* [*FGD2 P#5]*
>
> *"I feel like quitting whenever there is a death. We take incidents differently according to our personalities." [FGD4 P#6]*
> *"I wanted to comment on that. The experiences that we get here ne, you do, you are re-assured, yaah its fine but when you go home the things will come back to you and you feel like oh no I don't want to go back." [FGD4 P#P]*
> *"I felt like can I just not go out of this profession and go work in other wards."* [*FGD4 P#4]*
>
> *"It is very bad. You just want to leave everything, quit but I cannot since I have a family to feed and I cannot leave this for anyone. It's a very bad experience." [I#4]*

*"Mmmh, mmmh, it affects me because sometimes really if I am honest, I feel like like I don't want this profession anymore. I don't even want to do deliveries anymore, I just need to be in this office far from direct contact with patients." [I#4]*

*"Immediately after that incident that I shared I started thinking of resigning after 3 months. I couldn't take it anymore." [FGD1 P#3]*

It was astonishing to find out that most of the midwives in the study wanted to leave the midwifery profession. They stated that they preferred to be nurses in general wards or at primary health care facilities as they believed that there would be minimal effects such as stress from sudden deaths. Some senior midwives also indicated that they wished to ad only stay in the office since there are no risks of trauma from the death cases. Similar effects were noted among midwives who reported partial PTSD as they changed the place of work from maternity to outpatient care more often than those who did not experience post-traumatic stress symptoms after exposure to a severe event.[96] Finally, posttraumatic stress was also found to contribute to attrition of the midwifery workforce in Australia.[96]

Some studies indicated that an intention to leave the profession is derived from the evidence that midwives leave the profession once they are frustrated with their working life and feel incompetent to deliver quality care for childbearing women.[91,18,6] It is further noted that about two thirds of the midwives considered leaving the profession after experiencing a traumatic perinatal event.[91,16] Additionally, some midwives developed fear of staying in the same ward where they had experienced a death event and ended up requesting to be transferred to other wards as shown in the quotes below:

*"I asked to be taken to postnatal ward the second day I came back to work and I t was granted." [FGD P#3]*

*"You just want to go out of the ward to be taken even to ANC where you cannot see such kinds of things happening." [FGD3 P#4]*

*"It crosses your mind and the other time I am thinking uuh, let me just go to another wards were I don't have to face this. Like maternity is a very sensitive department*

*and out of the cases that are taken up to hearing or the nursing council the majority are always maternity cases." [I#2]*

Some midwives in the current study stated that they still want to remain in the profession but requested to be changed to less risky wards within maternity such as Antenatal Clinic. It is also clear from the study that midwives feel more exposed to litigations than other professions. This is one of the main contributing factors identified in the study that lead to midwives wanting to leave the profession. Double trauma for the people who went to the hearings was also found to be a problem. Relating this to elsewhere, some midwives in England changed their professional allocation on a short-term basis and others on a long-term basis to other departments within maternity after experiencing a traumatic perinatal event.[16]

Evidently, some midwives in the focus groups had previously left the profession as demonstrated in the statements below.

*"I left the profession and came back due to professional attachment." [FGD3 P#5]*
*"I developed post-traumatic stress and in January I resigned in 2016. I just decided to come back here because I missed the profession because a true midwife will always remain a midwife." [FGD1 P#2]*
*"I once resigned because of a maternal death that happened during the delivery. I went to private sector because I felt it will be better there because midwives do not do deliveries it's done by the Dr. But they ended up putting me at the maternity ward again. I got stressed there and decided to come back to this maternity because here more people are helpful." [FGD2 P#5]*

Other midwives in the current study reported that they left their current work earlier as they could not cope with the adverse effects from the death events. However, they returned due to professional attachment and also due to a comforting collegiality among midwives at the Windhoek state hospitals. Findings from another study agree with this study's findings as some midwives had taken time away from work after experiencing a traumatic perinatal event.[86] It can thus be pointed

out that at some point in their career, some midwives have felt unhappy about their current jobs and have considered leaving the profession.

- **Effects on the effect on the work performance of midwives**

Apart from the profession, death events can also impact on the work performance of the midwives. These effects can be positive or negative and both effects can be experienced as noted in this study.

- Negative effects

Negative effects are outcomes that are counterproductive that arise as a result of a death event. These include job dissatisfaction and poor support system.

- Job dissatisfaction

This can be referred to as a feeling of being unhappy with one's work or the work environment.[157] Some midwives exhibited signs of job dissatisfaction after experiencing MDs and FSBs. This result in some midwives performing poorly, feeling incompetent and lacking interest in their work as demonstrated in the following quotes:

> *"I started judging my own competency also." [FGD2 P#6]*
>
> *"I started to have self-doubt of my practice as a midwife whenever I get a new patient in the recovery room. I started to ask people to come and just confirm what I was doing even when a patient is stable. I started telling Drs to stay there for at least sometime especially the anesthetist just to make sure that the patient is ok before they leave. I also started to insist patients who had serious problems before C-section especially cardiac, PET and others to be referred to ICU because that time we didn't have high like now since I didn't want problems again." [FGD3 P#1]*
>
> *"Yaah, it makes you feel incompetent." [FGD4 P#5]*
>
> *"Like for me I am just recovering. Now it's only when I feel like it's going away slowly but all these years aah ah [participant shaking her head]. No, sometimes when I think of going on duty aye [no], to that ward again but there is nothing I*

*can do. I also love my job. I want to be experienced in like to be a proper midwife". [FGD4 P#2]*

*"It can be after 10 years, after 5 years, so you are just waiting to be called, you know that there is this case you were involved. So you are not 100% happy with your work, your life is not free, you are just waiting." [FGD3 P#2]*

It is evident from the study that most midwives were not happy with their jobs after experiencing MDs and FSBs. The death experiences compelled the, to judge their competencies and some developed paranoia as well as presenteeism. Other studies prove that witnessing MD and FSB events leads to lack of confidence in one's work, a decrease in work expectation and concern about ability to perform their jobs. [157,108,101,99] It is therefore necessary to support midwives after death events in order to mitigate job dissatisfaction indicated in this study.

- Poor support system

Poor or no support system refers to a situation where there is below standard or an absence of work environment support mechanisms meant to help midwives after they have experienced an MD and FSB. The majority of the midwives who participated in the study indicated that there was little or no professional support in their workplace, especially from their immediate supervisors in dealing with the death cases that they experienced at work. This has led to some of them being blamed for what had happened. In addition, the midwives indicated that there was nothing in place to help them cope after the MD and FSB event other than dealing with it on their own or get emotional support from their colleagues. Therefore, the midwives strongly called for some intervention that would support in dealing with events of such nature. This is evident in the following quotes:

*"Yaah, nothing much of how can we help, how can we handle this case. It's about what you didn't do. Here it's you, here it's you, here it's you." [FGD1 P#1]*

*"There is nothing which like is in place that can help you to cope or maybe a certain person whereby if you fail to cope then you are referred somewhere like go to that office and talk to who who. There is nothing of that sort and I mean nothing." [FGD4 P#2]*

*"There is nothing in place here offered by the employer to help us cope. And only thing that make us midwives more traumatized is you are dealing with these lives every day." [I#1]*

*"….. so a person will find me in the tea room crying but they don't care. They will just pass by you and they start eating their food." [FGD2 P#5]*

*"Aah currently now, its… its there is nothing that you go and somebody talk to you, how are you feeling? Did you sleep the previous night; you just go on, whether you had sleepless nights; whether it torments you for days, 7 years or whatever." [I#2]*
*"I was crying in front there and those senior sisters [referring to midwives] were like uuh at least I wasn't there, I am not involved. So just to hear that, I am still new, I was like what am I supposed to do but later on one sister [referring to midwife] came from 1 PM shift and at least she re-assured me and gave me confidence." [FGD4 P#2]*

*"You cannot even go to the matron [referring to senior registered midwife], matron will shout at you." [FGD4 P#3]*

*"No support is given here from supervisors. That's why most of the people are scared to come work at maternity. If we decide to run away from here who will be here." [FGD4 P#2]*

*"These people are supposed to come as supporter, they wanted to know what happened, what, what [participant raised her voice tone]. What what all these, instead of you know try to, I really don't know [participant shakes her head]." [I#1]*

The findings from the study show that midwives in this study lacked formal support, such as debriefing, counselling and EAP services, in their work place. This finding is also confirmed in Wahlberg et al.[96] who found that midwives lack sufficient formal support and only relied on support from the supervisors, colleagues and friends. Feeling unsupported in the workplace leads to fear, intensified trauma and senses of incompetence that is most likely to affect the midwives

next responsibilities.[91,24] In their study, Wallbank et al[41] found that lack of supervisor support observed in the UK was significantly linked with negative coping strategies. In addition, another study carried out in the UK reported that numerous perinatal events that were regarded as traumatic by the midwives who were working in the maternity department were linked to those practices within the organisational environment.[111] Similarly, poor institutional support to midwives and inadequate resources were found to be contributing to distress among midwives.[111,86] The above observation and evidence of supporting studies underlines the significance of a supportive working environment for midwives after an adverse birthing event.

Midwives who worked in an unsupportive environment or were exposed to emotional trauma are likely to continue suffering in silence.[104] This might have a negative impact on the quality or standard of care. It is further argued that long term effects can have an undesirable impact on the ability to provide support to others.[91, 104] In view of these findings, it is thus necessary to develop an EAP in the work place that can help the midwives with the necessary support in order to avoid low productivity among midwives at the workplace.

### 4.3.2 Participants' coping mechanisms

The second main theme that emerged from the study is on the coping mechanisms that were used by midwives in dealing with the aftermath of MD and FSB. Coping is defined as the process "to deal successfully with a difficult situation".[149] The coping mechanism is initiated by a person's reaction to a situation that is regarded as a threat and in this case an MD and FSB. Two themes were developed and these are Emotional-focused and Problem-focused coping mechanism. Participants, irrespective of their rank at the two health facilities, have used at least one or more coping method as shown in the themes that are discussed below.

#### 4.3.2.1 Emotional-focused coping mechanism

Emotion-focused coping is an attempt to reduce or manage distress associated with the onset of stress.[53] This coping strategy is however associated with negative outcomes and is considered maladaptive in the long term and not beneficial.[40] The method is used when a person has little or

no control over the situation or event and thus there would be no change in managing the cause of the problem but change in the emotion e.g. the way you feel about the stressful event.
This study noted various emotional-focused coping methods that were used and these are included in the following sub-themes: Seeking social support; Escape-avoidance; Distancing; Self-control.

- **Seeking social support**

Social support is a system that involves regulating one's feelings and actions and help people in stressful situations to reduce their anxiety[53]. In this study, social support includes family support, religious consolation and talking to colleagues.

- Family support

This is the kind of support that is provided to the midwife from his or her family members. It was found that some midwives relied on their families for coping with MDs and FSB as indicated in the following quotes both from FGDs and interviews:

> *"I wanted to share on my coping. For me I talk to my husband a lot even though he does not have a health background, he helps a lot." [FGD1 P#4]*

> *"I know things are supposed to be confidential but sometimes I can't just help it but talk to my husband as it help me feel better when I talk." [I#3]*

> *"I also talk to my husband; he doesn't really understand what I am saying." [FGD1 P#3]*

The family support system, which consists of people such as spouses, was found in this study to have assisted some midwives to cope with the effects of the death events. This is crucial in alleviating stress among midwives. Since coping is dependent on how an individual perceive the event, some midwives in Ghana equally confided in their husbands in order to relieve their stress.[117] Therefore, midwives in the study who had experienced death events felt better after speaking with their loved ones.

- Religious consolation

Religious support includes comfort from religious leaders in the form of prayers and attending religious counselling sessions from the church preachers.[114] In this study, spirituality played a key role in helping midwives cope when they experienced death cases. This includes prayers done by individual midwives, going to church, and Chaplains who came to offer divine support to affected participants at the health facility. This was however only accorded to WCH.

> *"I cope through going to church. That's the only way." [FGD1 P6]*
> *"Yaah on day 3 or 4 there was this chaplain man who used to come sometimes. He came that week it was much better, you just tell him how you feel or what happened and he talks to you." [FGD1 P#3]*
>
> *"As I said it was difficult in the beginning until I spoke to that chaplain man who gave me counseling. It helped a bit." [FGD1 P#3]*
>
> *"The other thing is I am a Christian and I pray a lot after the case." [FGD1 P#4]*
>
> *"Yaah, when it comes to me you know we serve a living God that is protecting us because at the end of the day you look at the things that are happening, the case we face but you know God is God. I go home, I take my bible, read some nice scriptures and they calm me down." [FGD4 P#5]*
>
> *"Me I only cope through prayers and my colleagues, nobody else." [FGD3 P#3]*
>
> *"Me as a spiritual person, the coping mechanism I use I just pray a lot. I pray over it and these emotions just start to come out. I pray a lot. It's the only thing that help me cope." [I#1]*

Since Namibia is a secular state and more than 90 percent of the population identify themselves as Christians.[30] It was not surprising to find out that the majority of the midwives in the study resorted to religion as a coping mechanism. The midwives coped through prayers, speaking to pastors, attending church for worship and reading bible scriptures at home. Hutti et al.[38,110,119] concur with this study's findings in their observation that nurses and midwives felt that praying and attending grief rituals, such as the mother or baby's funeral, provided them with closure and assisted them

in dealing with grief. In addition, formal support provided by the health institution itself and from chaplain services have been found to reduce stress.[118 (pg162)] It can be concluded that after going through a death event, midwives feel comforted and cope better through various religious practices.

- Talking to colleagues

Most of the midwives found comfort from colleagues when they console one another after the death events. This is substantiated by the following quotes:

> *"I cope by talking to my colleagues." [FGD1 P#6]*
> *"In these incidences like in my case, the senior sisters [referring to senior midwives] help a lot." [FGD2 P#5]*
> *"The main thing is hearing my colleagues explaining their situations. It enlightened my situation and helped me to cope better." [FGD2 P#2]*
>
> *"But later on one sister [referring to midwife] came from 1 PM shift and at least she re-assured me and gave me confidence." [FGD4 P#2]*
> *"Yaah, I tried to talk to a colleague. Sometimes they give you courage. They tell me that that happened, you are not at fault. When you hear that it will ease you. From there you will feel like ok, Dr is also saying this so I am not at fault. Ok, let me cope, so that can really ease you". [FGD4 P#6]*
>
> *"Eish, you will just, you accept it, it's part of the profession I guess, talk to your colleagues, not that you will come home hoping to feel better." [I#2]*
> *"Most of the time people will just jump to who did what and how bad it was etc. But some colleagues are really helpful in helping me to cope." [I#3]*
> *"Yes, when I talk to somebody, family or colleague then tomorrow I feel different, they always advise me that things can happen." [I#4]*
> *I talk to almost every colleague at work once I have encounter any death while working in the ward." enlighten"[I#4]*

*"Nothing, I will just be strong on myself apart from my colleagues. There is nothing here, as long as I have people around me." [I#1]*

It was found that the majority of the participants used talked to colleagues as a primary coping strategy. Talking lightened the negative event and gave the midwives hope, courage, re-assurance and confidence to continue with their duties. Other studies in Australia and Ghana validated these findings and thus state that some participants admitted that they were only relieved from stress after deliberating the whole incident with fellow colleagues at work and attaining their approval for doing their best.[18,119] Further studies corroborate these findings that the most predominant coping mechanism for nurses and midwives was seeking informal support from colleagues through talking during break times.[158,118] In contrast, experiencing inadequate support from colleagues was found to be significant amongst midwives (Wahlberg et al., 2017).[96] Moreover, Forster et al.[122] argue that talking to colleagues may have had harmful effects as the desolation and shock experienced during the death event may be exaggerated and subsequently cause severe stress when reciting the event to a colleague. Despite all these contradictions, midwives in the study were of the view that the support provided by the colleagues improved their wellbeing and day to day work.

- **Meditation**

Meditation is a mental relaxation practice that is used to remain calm, relieve stress and anxiety related symptoms that come after an adverse event. Meditation exercises include yoga, walking and sound.[53] This study notes meditation as one of the coping mechanisms that were used by some participants in coping with the aftermath of MDs and FSBs. This is illustrated in the quote below:

*"You sit down and you meditate, you get to think of what happened, what you have done better, what you would do, you know you mediate and think about the situation so that next time you don't repeat the same mistake. I would say meditation is key." [FGD2 P#4]*

Only one participant used this type of coping strategy in the study. Meditation is believed to be vital in preventing future errors. This is an indication that meditation is not practiced by many

midwives in the region. Meditation involves re-living the event; some midwives may thus not want to go through such traumatic events all over again.

- **Escape-avoidance and distancing**

Escape-avoidance is a process that involves using behavioural efforts to avoid the problem at hand.[130] At the same time, distancing is defined by Folkman and Lazarus[130] as a distraction oriented form of coping. A few of the study's participants used escape-avoidance and distancing as coping strategies whereby they distance themselves from critical patients as reflected below:

> *"I developed lack of interest and I started running away from critical patients to avoid death cases. This will lead to lack of experience because how am I supposed to learn to act if I am running away." [FGD2 P#5]*
>
> *"Apart from my time heals everything of which I think is not only me I feel like running from the chaotic area." [FGD2 P#1]*

Thus, some of the study's midwives started to run away from critical incidents/patients a coping mechanism seeking to avoid death events. In distancing, health professionals, including nurses and midwives, were attempting to get away from the stressful events without altering the situation that led to the stress.[36] This may have led health professional to develop defensive behaviours that include not communicating with colleagues nor accepting self-inflicted behaviour in order to avoid stress .[36] Akuroma et al[116] found distancing to be the most used coping strategy among the nurses after experiencing death events.

A study conducted in Liverpool, the UK, also attested that some experienced nurses and midwives resorted to depersonalisation by distancing themselves to avoid being emotionally involved in patient care.[39] Midwives and obstetricians in the same study further identified symptoms of intrusion and avoidance after encountering miscarriages, SBs and neonatal deaths.[86] Moreover, midwives developed apprehension in executing their primary duties. This may make them susceptible to basic errors that could have been avoided and eventually, poor service delivery at health care facilities. The midwives would unconsciously exchange the client midwife roles where, a midwife would, instead of seeing the process through flawlessly, be worried about the consequences of what might happen in case of an adverse event.[160] In a scenario such as this, there

would be unconscious exchange of roles whereby a midwife would be worried about the repercussions that may follow in case of a death event. Therefore, midwives in the study tried not to be involved in some cases so that they do not get implicated and avoid being questioned and writing incident reports.

- **Repression/forgetting event**

Repression is defined as the process of subduing or suppressing some thoughts.[161] forgetting the event has been reported as one of the coping mechanisms in this study. This was reported by some participants as stated below:

> *"Aaamh, coping like for me there is no other mechanism like time heals, so only time that pass by then you kind of forget about it although it hits up once in a while." [FGD1 P#1]*
>
> *"I try to forget the event a bit." [FGD3 P#4]*

A few participants in the study indicated that they tried, after experiencing deaths, to suppress the negative thoughts by forgetting the events. This is however a short-term coping strategy as the thoughts are only forgotten for a shorter period.[37]

- **Drinking alcohol**

One participant used substance abuse as a coping mechanism as shown in the quote below:

> *"I started drinking after that incident. I drank for three days consecutive because every time I think of this baby I just feel it was unfair." [FGD2 P#5]*

Resorting to alcohol was found to be one of the coping mechanisms used by a few participants. This maladaptive way of coping, such as substance abuse, was noted in a UK based study on midwives.[41] However, this method is more destructive than other emotional-focused coping mechanisms as it has a negative impact on the body because of the addictive ethanol ingredients. Therefore, the strategy should be the least used strategy.

- **Venting**

According to Carver[58], venting involves speaking one's unkind feelings or expressing one's undesirable feelings. Venting was also one of the coping strategies that were used by some participants during the study. This is reflected in the statement by one midwife in the quotation below:

> *"...I have matured and I take things better and I vent a lot." [I#2]*

In the current study, venting was the least used as only one participant used this method as a coping strategy. This could mean that this study's midwives were not aware of the method or did not consider it as effective enough to result in positive health outcomes. In their study, Muliira and Bezuidenhout[17] observe that midwives in rural Uganda used venting as one of the strategies for coping after occupational exposure to MDs. Venting is therefore identified as one of the least used coping strategy by midwives in the current study.

- **Self-controlling**

Self-control is a process whereby an individual reassures him/herself during challenging times. Midwives who participated in this study were exposed to traumatic death events that required them to self-reassure in order to cope. In this study, the majority of the participants reported that they used self-support as a coping strategy. This is observed in the following excerpts:

> "*Sometimes you keep all to yourself and hope for the best and as time goes you forget but it come back again and again." [FGD4 P#1]*

> *"When it comes to coping ne, sometimes it depends on the degree of negligence of what happened. So just reassure yourself, it happened and nothing I can do. If the case goes to the nursing council let them evaluate and life goes on. You yourself you must just be strong. I break down that moment it happened but my inner child talks to me and I compose myself back very fast." [FGD3 P#4]*

> *"You compare yourself to others who have gone through a similar incident. You start talking to yourself and go like who was also involved in a similar incident.*

*She is still at work, she seems happy, she is smiling and all that, why can't I also be happy. So it's like a mini self-counseling that you do to yourself." [FGD4 P#6]*

*"As my colleague said, coping is not an easy thing because you try to cope on your own."*
*"I rather just keep quiet to myself and let it go." [FGD3 P#3]*
*"And there are also things you just tell yourself that it's not my fault, I did my best. I reassure myself also." [FGD4 P#3]*
*"On my side I didn't seek assistance like Psychologist or something. So it's like I got used to it. I might hurt the time of the incident but like they say time heals all wounds." [FGD2 P#2]*

Self-support was used by almost each and every participant in the study. This method of coping is believed to act as a buffer to negative stress among individuals.[41] Some participants indicated that they reassured themselves by keeping everything to themselves, comparing themselves with what happened to others, telling themselves that it is no their fault and there is nothing that they can do about it and, lastly, they got used to the death events. The above in many ways, could be attributed to lack of professional support that was found in the work place. Self-support could however have negative consequences to midwives such as an escalation of stress and anxiety as found in other studies.[91, 37] Other authors such as Ko et al.[118, 37] corroborate that a self-control strategy was used by the nurses where they used methods such as positive thinking, silence, normalising death, acceptance and the use of recreation and sports after death events. The self-control strategy is thus significant in departments such as maternity and emergency departments where most critical situations are unpredicted, and decisions need to be made urgently and effectively.[36]

- **Perseverance**

Perseverance involves doing something persistently in spite of going through difficulties.[149] Perseverance was reported to be one of the coping mechanism that was used by some participants. This is demonstrated in the quotations below:

*"There is nothing, no counseling or so that we are subjected to after that experience. But somehow here we are sitting and going on. We didn't quit as my*

*colleague said there [participant laughs]. We are moving on but only by God's grace." [FGD3 P#2]*

*"The other thing is I think professional maturity is also helping me now that I have been in the profession for over 10 years I have matured and I take things better…." [FGD3 P#5]*

Some participants indicated that they did not leave the profession like others but got used to the situations and are moving on by God's grace in spite of the challenges that they are going through. Others stated that experience in the profession helps them to persevere as they have matured and are now taking death cases better. This indicates that working in the midwifery profession for a long time and witnessing deaths many times has taught these midwives to withstand MDs and FSBs.

#### 4.3.2.2 Problem-focused coping mechanism

The problem focused coping strategy is about the way an individual takes control over a situation and manages it. It is a proactive attempt to alter or manage the situation. This type of coping is associated with positive health outcomes among midwives after a death event. Typically, this coping mechanism is used purposefully to solve a problem at hand that is perceived as stressful. When midwives experienced death events and focus on the problem, they are likely able to cope better. Problem focused coping is intended to change the negative stress to positive stress or neutral. During this study, a few problem-focused strategies sub-themes were used and these include positive reappraisal and acceptance. Moreover, this study noted that professional counselling was also a coping mechanism that was used by midwives.

- **Positive reappraisal and acceptance**

Engaging in a reassessment of the situation is one of the coping strategies that were used by some midwives who participated in the study. Here, some participants re-looked at the previous events, learned from mistakes made and accepted the situation. This is shown in the quotations beneath:

*"Just in addition to what was said earlier on. Sometimes for one to cope also I try to learn from the previous mistakes." [FGD3 P#6]*

*"You see with my experience of so many years as a midwife. I just had to face reality and get use to the situation of working in maternity department and move on." [I#3]*

*"When the deaths happen to you, you just accept that they have happened and move on." [I#2]*

A positive reappraisal explains determinations to create constructive meanings from problems, and provide personal growth that involves the control of feelings associated with grief that serves as a way to reframe, learn and change from a conflicting event.[36] Various study participants used positive reappraisal and acceptance strategies where they re-think previous experiences, consider the mistakes that happened and accept what has happened. This assisted these midwives to cope and move on. Another study substantiated these findings where positive reappraisal was used by participants through a positive reframing coping method and this was found to enhance happiness and positive quality of work life.[41] Ko et al.[118] indicate that accepting death is a mental process that may take place over longer periods of time, and hence not strictly limited to the work environments. Therefore, accepting death is viewed as a realistic and rational way of taking death as part of life.[118]

- **Professional counselling**

Professional counselling was used by one participant as illustrated in the quotation below:

*"I ended up at the Psychiatrist because I kept on replaying that incident in my head." [FGD2 P#5]*

In spite of the majority of the participants indicating that they did not get any professional support, one midwife acknowledged receipt of professional counselling from a psychiatrist outside the workplace through self-referral. This still indicates that, although there is no professional support available at the work place, some midwives who develop symptoms of PTSD end up seeking such services externally. This is a situation that can be avoided if there was an EAP within the work environment.

Notwithstanding the MD and FSB experience, all midwives in the study found ways on how to cope using emotional focused coping mechanisms and seldom problem focused coping mechanisms in order to deal with the effects of MDs and FSBs in their personal, work and professional environments.

## 4.4 SUMMARY

This chapter presented the study findings for Phase 1 of the study. The results indicated that MDs and FSBs affect midwives in various ways and result in psychological, physical and social effects as well as environmental effects. The psychological effects are reflected in study's subthemes such as traumatised/Shocked, GAD related feeling, and PTSD related feelings and emotional effects on midwives. The physical effects were reflected in subthemes such as poor physical health and poor appetite while social effects were on family impact, loneliness and blamed. Finally, the environmental effects consisted impacts on the midwives' profession and on the work environment.

It was further noted in this chapter that, midwives used different coping strategies. These strategies included seeking social support, meditation, escape-avoidance and distancing, repression under emotional focused strategy and positive reappraisal and acceptance under problem focused coping mechanism. Professional counselling such as going to a psychiatrist was also used under coping mechanism. Emotional-focused strategies were found to be the most used coping mechanism in this study. However, since these strategies are regarded as maladaptive in the long term, positive forms of adaptive problem-focused coping could be advantageous.

The following chapter present and discusses the quantitative results and merge qualitative findings and quantitative results of the study.

# CHAPTER FIVE

# QUANTITATIVE RESULTS AND DISCUSSION

## 5.1 INTRODUCTION

This chapter presents findings from the situational analysis phase of the study. The chapter describes the results of the quantitative part of the study first and then discusses the findings. The quantitative results were derived from the following first three objectives: determine the midwives' level of occupational exposure to MD and SB, evaluate the self-reported level of stress among midwives due to exposure to MD and SB; and determine the coping mechanism used by midwives to cope with the after-effects of MDs and SBs in the absence of an EAP. The mixed methods results were merged using a side-by-side comparison approach. The qualitative findings are then presented first and followed by the quantitative results affirming or refuting the statistical results.

The quantitative data analysis was conducted in three stages. In the first stage, descriptive statistical analyses were carried out. The descriptive analysis was used to provide the study context and characteristics of the midwives in the respective hospitals. The second phase, which included dimension reduction factor analysis, was critical to the modification of variables for multivariate analyses and inference. The factor analysis involved statistical analyses that explored underlying relationships between the variables. The third phase included the inferential multivariate statistical analyses used to develop the composite variables aligned to the research objectives.

## 5.2 DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS (OBJECTIVE 2, 3 AND 4)

This section covers findings from Section A of the questionnaire (See annexure G). Table 5.1 below presents summary statistics of the demographic and job characteristics of respondents to the study.

Table 5.1: Socio-demographic characteristics of respondents at public hospitals in the Khomas Region (N=140)

| Variable | % | (N) | Variable | % | (N) |
|---|---|---|---|---|---|
| **Hospital** | | | **Current rank at work** | | |
| Windhoek Central Hospital | 64.3 | (90) | Registered midwife/accoucheur | 70.0 | (98) |
| Intermediate Hospital Katutura | 35.7 | (50) | Enrolled midwife/accoucheur | 30.0 | (42) |
| **Gender** | | | **How many years as R/E midwife** | | |
| Female | 97.9 | (137) | less than 2 years | 17.9 | (25) |
| Male | 2.1 | (3) | 2-3 years | 14.3 | (20) |
| **Age Category** | | | 4-5 years | 17.9 | (25) |
| Less Than 30 | 38.6 | (54) | 6-7 years | 10.7 | (15) |
| 30 - 39 | 26.4 | (37) | 8 years and longer | 39.3 | (55) |
| 40 - 49 | 20 | (28) | **Ward currently working** | | |
| 50 and above | 15 | (21) | Antenatal clinic | 5.0 | (7) |
| **Marital Status** | | | Antenatal ward | 45.0 | (63) |
| Single | 47.9 | (67) | Post-natal ward | 28.6 | (40) |
| Cohabitating | 9.3 | (13) | Neonatal unit | 21.4 | (30) |
| Married | 35.7 | (50) | **Period in current ward** | | |
| Separated | 0.7 | (1) | Less than 6 months | 4.3 | (6) |
| Divorced | 2.9 | (4) | 6-11 months | 15.7 | (22) |
| Widowed | 3.6 | (5) | 1-2 years | 28.6 | (40) |
| **Level of Education** | | 0 | 3-4 years | 22.9 | (32) |
| certificate | 30 | (42) | 5-6 years | 1.4 | (2) |
| diploma | 25.7 | (36) | 7 years and longer | 27.1 | (38) |
| Bachelor's degree | 12.9 | (18) | | | |
| Honors degree | 22.1 | (31) | | | |
| Postgraduate diploma | 7.1 | (10) | | | |
| Master’s degree | 2.1 | (3) | | | |
| PhD | 0 | 0 | | | |

The demographic characteristics included gender, age and marital status, while the job characteristics included qualifications, current rank, length of service as a midwife, and ward are currently working in. The findings indicate that the majority of the midwives were from the National referral hospital, Windhoek Central Hospital 64.3% (n= 90), with the remaining 35.7% (n = 50) being from Katutura Intermediate Hospital. The results also showed that 97.9% (n =137) of the respondents were women. This high percentage of female respondents is attributed to the fact that the midwifery profession is associated with a high number of female midwives. This is not surprising as the midwifery profession is traditionally for females.

The largest single group of respondents 38.6% (n=50), fell in the 22–29 age group. The smallest single group of respondents, 15% (n=21), was in the ≥ 50 age group. This means that the majority of the respondents in this study were young professionals. The age distribution of midwives is consistent with previous studies, such as Bánovčinová[41,105,94], which found similar age trends in midwives, with the majority falling in the 22 to 31 years' age range. The findings also show that work experience categories were consistent with the respondents' age categories.

The midwives' years of work experience were between 1 and 37 years, guided by the age range. However, this study zoomed in on the early career year midwives and focused on the length of service categories that had less than 8 years as a midwife. Subsequently, a majority of the respondents 39.3% (n=55), worked for more than 8 years as a midwife, while more than 50% (n=70) of the respondents reportedly worked for about 5 years and 10.7% (n=15) had the experience of 6-7 years as midwives.

The majority of respondents 47.9% (n=67) were either single or married (35.7%, n=50), while a minority 9.3% (13) were either cohabiting, separated (0.7%, n=1), divorced (2.9%, n=4) or widowed (3.6%, n=6). These findings indicate that the midwives can be classified into two main categories of those living with a partner in a long-term relationship (married or cohabiting) at 45% (n=63) and those without a partner (55%, n=77). On the contrary, a study by Muliira et al.[17] found more midwives to be married (51%) as opposed to the current study. Marital status is not considered in the midwifery profession when midwives are to be posted in duty stations in Namibia, unlike other countries such as Nigeria.[160]

Table 5.1 findings indicate that 30% (n=42) of the respondents had a certificate qualification; 25.7% (n=36) of the midwives held diplomas, 35% (n=59) of midwives had graduate degrees, while 9.2% (n=13) of the respondents had a postgraduate qualification. The high number of undergraduate degree holders among registered midwives is consistent with the age of midwives as the majority of them are young, and the curriculum of the degree course was only introduced about 9 years ago in the country. The largest group (70%, n=98) of midwives in terms of rank were the registered midwives, who hold a diploma or better. The smallest group (30%, n=42) worked as enrolled midwives and holds certificates in nursing and midwifery. In addition, a smaller percentage of enrolled nurses was found at maternity wards because of the nature of the departments where they are working since maternity requires more personnel that can manage the complications and because enrolled nurses are only trained to manage normal birth midwifery. The findings by Leinweber et al.[93] that more registered midwives (55%) possessed bachelor's degrees in Australia also support the above argument.

The midwives who participated in the study worked in various maternity wards during the study. It was noted that 45% (n=63) of the respondents were working in the Antenatal ward (45%), while the smallest group of respondents (5%, n=7) were working at the Antenatal Clinic. Of the respondents who participated in the study, 28.6% (n=40) of the midwives worked in the Post-Natal Ward, while 21.4% (n=30) worked in the Neonatal wards during data collection.

The study established that most respondents were young single females currently working in Antenatal wards with less than 6 years of working experience. It is thus vital that support be provided to these professionals as they have less working experience and work in very risky working environments/wards where death is likely to happen.

## 5.3 OBJECTIVE 2: DETERMINE THE MIDWIVES' LEVEL OF OCCUPATION EXPOSURE TO MATERNAL DEATHS AND STILLBIRTHS

This section focuses on the context of the exposure to MDs and FSBs. It presents the variables and findings in section B of the questionnaire and their associations with the socio-demographic variables in Section A. The analysis includes midwives' exposure to MDs and FSBs, correlational analysis of demographic characteristics and level of occupational exposure to MDs and FSBs, age, marital status, education level, rank, years of experience, deaths witnessed, the reason for MD and FSB, type of support received, frequency of MDs and FSBs, professional preparedness to deal with deaths as well as confirmatory factor analysis of midwives' exposure to MDs and FSBs.

### 5.3.1 Midwives exposure to Maternal Deaths and Fresh Stillbirths

This section shows the descriptive statistics on occupation exposure to MD and FSB. This is followed by cross-tabulated sections of the exposure to MDs and FSBs. The section ends with a

pairwise comparison of the exposure to MDs and FSBs. In addition, Table 5.2 presents the 11 variables on the exposure to MDs and fresh SBs. This includes the number of deaths witnessed, number of deaths in charge of, reasons for the MD or FSB, obligations, support after the death event, the frequency of FSBs in current practice, the last time the MD and SB cases were observed, the variables on the EAP and professional preparedness for these events.

Table 5.2: Midwives' exposure to MD and FSB events

| Exposure Description | % | (N) | Exposure Description | % | (N) |
|---|---|---|---|---|---|
| **Number of Deaths witnessed** | | | **If EAP was available, how likely will you access the programme** | | |
| 1 death | 20.7 | (29) | More likely to access | 68.6 | (96) |
| 2-3 deaths | 34.3 | (48) | Likely to access | 23.6 | (33) |
| 4-5 deaths | 31.4 | (44) | Less likely to access | 5.0 | (7) |
| 6 deaths and above | 13.6 | (19) | Unlikely to access | 2.9 | (4) |
| **Number of deaths in charge of** | | | **Last time experiencing MD** | | |
| None | 20.7 | (29) | Less than a week ago | 0.7 | (1) |
| One case | 42.9 | (60) | 1-3 weeks ago, | 2.9 | (4) |
| Two cases | 18.6 | (26) | 1-3 months ago | 17.1 | (24) |
| Three cases | 7.1 | (10) | 4-6 months ago | 20.0 | (28) |
| Four cases | 1.4 | (2) | 7-12 months ago | 12.1 | (17) |
| Five cases and above | 9.3 | (13) | More than a year ago and longer | 30.7 | (43) |
| **Reasons for Stillbirth** | | | Not applicable | 16.4 | (23) |
| Placenta Abruptio | 33.6 | (47) | **Last time experiencing FSB** | | |
| Cord around the neck | 25.7 | (36) | Less than a week ago | 3.6 | (5) |
| Antepartum | 20.7 | (29) | 1-3 weeks ago | 11.4 | (16) |
| Shoulder dystocia | 8.6 | (12) | 1-months ago | 25.0 | (35) |
| Ruptured uterus | 7.9 | (11) | 4-6 months ago | 17.9 | (25) |
| Hypertension disorders | 2.1 | (3) | 7-12 months ago | 12.9 | (18) |
| Others | 1.4 | (2) | More than a year ago and longer | 21.4 | (30) |
| **Reason for mother's death** | | | Not applicable | 7.9 | (11) |

| | | | | | |
|---|---|---|---|---|---|
| Postpartum Haemorrhage | 47.1 | (66) | **Frequency of FSB in current practice** | | |
| Hypertension Disorders | 30.7 | (43) | One death every 2 weeks | 10.0 | (14) |
| Infection | 12.9 | (18) | One death per month | 24.3 | (34) |
| Unsafe Abortion | 5.7 | (8) | One death every 3 months | 25.7 | (36) |
| Ruptured Uterus | 2.1 | (3) | One death every 4-5 months | 20.7 | (29) |
| Others | 0.7 | (1) | One death every 6 months | 8.6 | (12) |
| **Obligations after the death case** | | | One death per year | 3.6 | (5) |
| Inform relatives or mother | 32.9 | (46) | Not applicable | 7.1 | (10) |
| support relatives or mother | 20 | (28) | **Extent of professional preparedness to handle deaths** | | |
| Take care of the baby | 24.3 | (34) | Very well prepared | 12.1 | (17) |
| Prepare the corpse for mortuary | 4.3 | (6) | Well prepared | 32.1 | (45) |
| Write an incident report | 15.7 | (22) | Not so well prepared | 7.1 | (10) |
| Others | 2.9 | (4) | Not prepared at all | 48.6 | (68) |
| **Type of support received after death event** | | | | | |
| Personal Support | 77.9 | (109) | | | |
| Debriefing sessions | 12.9 | (18) | | | |
| Clinical Supervision | 5 | (7) | | | |
| Professional Counselling | 4.3 | (6) | | | |

The majority of respondents (34.3%, n=48) had witnessed 2-3 deaths or 4-5 deaths (31.4%, n= 44) in their professional lives. The midwives' sample's inclusion criteria were that they should at least have witnessed one death (20.7 %, n= 29). The findings also showed that at least 13.6% (n= 19) of the midwives had witnessed 6 or more deaths in their professional lives. Exposure to MD and FSB events is found to aggravate the death distress among midwives.[109, 151]

Furthermore, the respondents were asked about the number of these death events they experienced while in charge of the event. The major response was having witnessed at least one death (42.9%,

n= 60) in the event that they were in charge of. The findings also showed that 20.7% (20) of the respondents were not in charge of the death cases that they witnessed.

The results also showed that 47.1% (n=66) of MDs were caused by Postpartum Haemorrhage (PPH), while the ruptured uterus caused the least 2.1% (n=3). This is consistent with the MoHSS (2018) statistic that rated PPH the number one cause of MDs in the country. The results indicate further that the leading cause of FSBs was placenta abruptio, accounting for 33.6% (n=47), with the least cause being hypertensive disorders (2.1% n= 3). A majority of the respondents, 30.7% (n=47), last experienced MDs for more than a year before the period of the study's data collection, while experiences of an FSB stood at 25% (n=35) a month prior to this study data collection. The results indicate that MDs are not so common at the health facilities where the study was conducted. This could be because these settings are located in the city where the health care level is better than 19.6% (n=44) in rural areas of Uganda that experienced MD less than a week to three weeks ago.[17] A higher number of FSBs experienced a month before the study indicates that the quality of care rendered to women during labour is poor.

The results also indicate that the majority of the midwives were more likely 68.6% (n=96) or likely 23.6% (n= 33) to use the EAP if it was available. Moreover, most of the respondents, 48.6% (n= 68), felt that they were not professionally prepared to handle deaths in their workplace. On the contrary, Muliira and Bezuidenhout[17] oppose the current study findings as their study shows that the majority (51%) of the midwives reported that they were professionally prepared to handle MD. However, in the event of patient deaths, the major support that the midwives received was personal 77.9% (n= 109) while 12.9% (n= 18) received debriefing sessions. The least type of support given to respondents was clinical supervision and professional counselling that stood at

5% (n=7) and 4.3% (n=6), respectively. Similarly, other studies support these findings as they found that midwives received more personal support from their colleagues.[38, 161, 98]

Although most of the participants experienced MDs more than the previous year, FSB cases were experienced frequently, and most midwives were not professionally prepared to deal with death events. This calls for training among midwives on the intrapartum care of clients to improve the quality of care and consequently reduce FSB cases.

### 5.3.2 Correlational analysis between levels of occupation exposure and MD and FSB variables

The study used Spearman's rank correlation analysis to measure the strength of a monotonic relationship between the variables of interest. The study then used the non-parametric Spearman's correlation analysis, which requires the data to be interval or ratio level or ordinal and monotonically related. The study preferred the non-parametric Spearman's correlation instead of Pearson's correlation, as there is no requirement of normality. The findings are presented in Table 5.3.

Table 5.3: Correlation Matrix of demographic characteristics and level of occupation exposure to MD and FSB Variables

| Code | Variable | 1 | 2 | 3 | 4 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 17 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Hospital where participant works | 1.00 | | | | | | | | | | | | | |
| 2 | Age Category | 0.12 | 1.00 | | | | | | | | | | | | |
| 3 | Marital Status | -0.01 | .318** | 1.00 | | | | | | | | | | | |
| 4 | Level of Education | .172* | -.171* | 0.07 | 1.00 | | | | | | | | | | |
| 5 | Current rank at work | -0.10 | -0.04 | -0.15 | -.818** | | | | | | | | | | |
| 6 | Number of years employed as R/E midwife | 0.07 | .559** | .360** | -0.07 | 1.00 | | | | | | | | | |
| 7 | Ward currently working | 0.11 | 0.11 | 0.10 | -.179* | .176* | 1.00 | | | | | | | | |
| 8 | Period in current ward | 0.09 | .474** | 0.14 | 0.00 | .517** | -0.04 | 1.00 | | | | | | | |
| 9 | Number of Deaths witnessed | -0.01 | .308** | 0.12 | 0.08 | .473** | -0.04 | .472** | 1.00 | | | | | | |
| 10 | Number of deaths in charge of | -0.13 | .373** | 0.07 | 0.13 | .445** | 0.08 | .340** | .623** | 1.00 | | | | | |
| 11 | Reasons for Stillbirth | -0.06 | 0.12 | -0.06 | -0.04 | .248** | -0.04 | .326** | .535** | .532** | 1.00 | | | | |
| 12 | Reasons for mother's death | -0.07 | .416** | .168* | -0.11 | .349** | 0.12 | .182* | .397** | .388** | .416** | 1.00 | | | |
| 13 | Obligations after the death case | -0.02 | 0.07 | -0.14 | 0.03 | 0.09 | -0.03 | 0.11 | 0.08 | .243** | .172* | 0.16 | 1.00 | | |
| 14 | Type of support received after death event | -.226** | 0.03 | 0.10 | -0.09 | 0.08 | .283** | -0.04 | -0.08 | 0.12 | 0.12 | .254** | -0.02 | 1.00 | |
| 16 | Last time experiencing MD | 0.02 | -0.09 | 0.02 | 0.11 | -0.06 | -0.08 | -0.07 | -.242** | -0.05 | -0.11 | -.226** | -0.03 | -0.09 | |
| 17 | Last time experiencing FSB | 0.05 | 0.06 | .166* | 0.07 | 0.02 | 0.14 | -0.07 | -.297** | -.169* | -.248** | -0.06 | 0.03 | 0.08 | 1.00 |
| 18 | Frequency of events in current practice | 0.00 | -0.01 | 0.15 | 0.00 | -0.14 | 0.14 | -0.11 | -.265** | -.266** | -.341** | -0.06 | -0.13 | 0.07 | .597** |
| 19 | Extent of professional preparedness to handle deaths | -.166* | -0.04 | -0.08 | 0.00 | 0.15 | .253** | 0.09 | 0.03 | -0.05 | 0.02 | -.229** | 0.05 | -.310** | 0.02 |

Note: * Correlation is significant at the 0.05 level (2-tailed), ** Correlation is significant at the 0.01 level (2-tailed).

The findings indicate the significant monotonic relationships between the socio-demographic variables and the midwives' exposure to MDs and FSBs. The results are colour-coded to highlight the significance and strengths of the relationships. The colour codes also highlight the variables with significant relationships with MDs (in gold) and FSBs (in light blue). Table 5.3 shows the pairwise relational effects of the Section A and Section B variables and indicates small to strong relationships between the variables, ranging from -0.818 to 0.623 with a significance level varying ($p < .05$, $p < .01$). The findings are presented in the following sections:

5.3.2.1 Hospital and ward effects on exposure to death event

Table 5.3 findings indicate that the hospital environments between the two public hospitals were significantly different in terms of the level of education ($r = 0.172$, $p < 0.05$), type of support received after a death event ($r = -0.226$, $p < 0.01$) and the extent of professional preparedness to handle deaths ($r = -0.166$, $p < 0.05$). The findings imply that IHK (n=50) has a significantly higher education level than WCH (n =90) with regards to the midwives' qualifications. The WCH was found to provide more support after a death event than the IHK, thus making WCH midwives more professionally prepared to handle deaths than their counterparts at the IHK.

Similarly, the findings indicate that both hospitals maternity wards had significant relationships with the type of support received after a death event ($r = 0.283$, $p < 0.01$) and the extent of professional preparedness to handle deaths ($r = 0.253$, $p < 0.01$). The implications of these findings are highlighted in Figure 5.3 on the following page.

Nonetheless, Figure 5.1 presents the bar graphs of cumulative percentage by Hospital Wards. The figure also highlights environmental differences between the two state hospitals with respect to the type of support and professional preparedness in the event of a death.

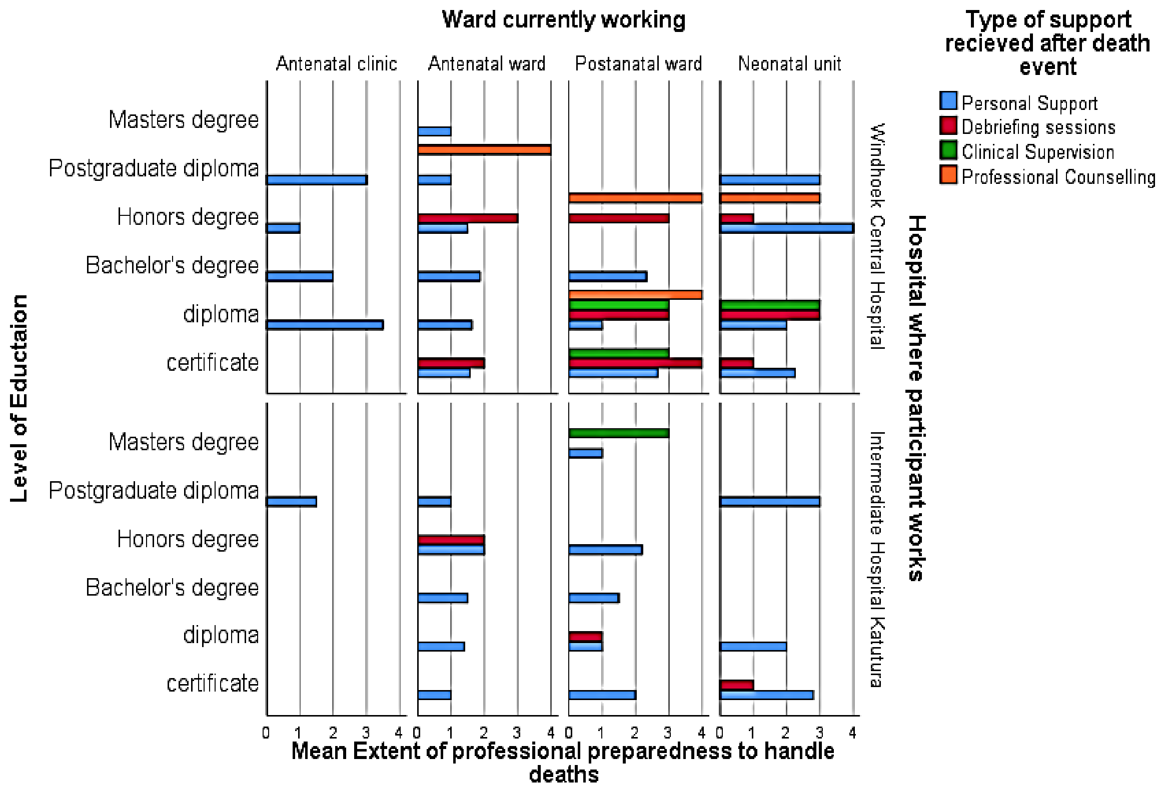



Figure 5.1: The type of support given by midwives at different hospitals in different wards

The findings presented in Figure 5.1 indicate that the majority of midwives within the Antenatal Ward at both hospitals (45%) did not receive professional support after the death event and thus are poorly prepared for death events as evidenced by the mean professional preparedness 2 below, signifying poor preparedness. Those who had debriefing sessions after the event was poorly or partially prepared. Yet, those who received professional counselling (1.4%) in the same ward were well prepared to handle a death event.

The findings indicated that the Post-Natal Ward at the WCH provided the best support after a death event, with 80% of the midwives in the ward indicating they were professionally prepared to handle a death event. The results show that the type of support received in the department included professional counselling (24%), debriefing sessions (29%), clinical supervision (29%) and personal support (17%). Moreover, findings from the WCH's Neonatal unit (9%) indicate less support, with at least two thirds of the midwives reporting having received personal support after the death event (67%) while those that received debrief sessions stood at 17%, professional counselling at 8% and a further 8% received clinical supervision. These findings suggest that professional counselling and clinical supervision are critical support services, ensuring that midwives are professionally prepared to handle a death event. However, the findings from this study reveal that some wards at the WCH provided the midwives with the necessary support for them to be professionally prepared to handle any exposure to an MD or FSB. These findings support other studies that found that maternity wards provided support to ensure midwives were prepared to deal with death events.[128,] The findings from the IHK show that the midwives mostly relied on personal support, which makes them poorly prepared to handle a death event after exposure to one. The study found that the maternity wards significantly impact the midwives' exposure to MD or FSB death events in the two public hospitals located in the Khomas Region.

Consequently, the study computed a categorical dummy variable of the Hospital Ward Effect by multiplying the type of support received after a death event variable with the extent of professional preparedness to handle the deaths variable and the current ward variable. The variable was also separated into categories guided by the type of support received after a death event. The categories were scaled on an ordinal scale of 1 (not adequately prepared) to 5 (effectively well prepared), and the variable had a mean of 1.8 and standard deviation of 1.02, which indicated that on average, the

midwives in both hospitals were not adequately prepared to deal with MD and FSB events professionally. This finding concurs with that of Ellis et al.[163,37,98], who indicate that midwives and nurses felt unprepared to deal with SBs and therefore proposed the need for training and continuity of care. Therefore, there is a need for professional support at both hospitals, especially at antenatal wards, and preparedness training for midwives to equip them with the knowledge on how to deal with MDs and FSBs.

5.3.2.2 The Midwives' level of occupation exposure to Maternal Deaths

The findings indicate that exposure to MD for a prolonged time had a significant impact on the midwives. The results presented in Table 5.3 show that exposure time, proxied by the age category, has significant monotonic relationships with the number of variables, which includes the reasons for mother's death ($r = 0.416$, $p < 0.01$). The findings also show significant associations of age category with marital status ($r = 0.318$, $p < 0.01$), level of education ($r = -0.171$, $p < 0.05$), experience as a registered midwife ($r = 0.559$, $p < 0.01$), period in the ward ($r = 0.474$, $p < 0.01$), number of deaths witnessed ($r = 0.308$, $p < 0.01$) and number of deaths in charge ($r = 0.373$, $p < 0.01$).

The findings imply that MD's leading causes and occurrences in the two public hospitals were positively associated with the midwives' age, level of experience, and exposure in high-risk wards. Consequently, the study used Cronbach's alpha and Principal Component Analysis (PCA) to estimate the composite variable for the Midwives' Level of Occupation Exposure to MD. Principal Component Analysis is a method for reducing the dimensionality of a set of observed variables by creating an optimum number of weighted composites.[162] Bandalos et al.[163] note that component analysis models the observed co-variation among variables as a function of latent constructs. As

such, PCA was used to estimate the optimum weights for the latent construct of the Midwives' Level of Occupation Exposure to MDs using the correlated variables presented in Table 5.4.

Table 5.4: Descriptive and reliability analysis results for the Occupational Exposure to Maternal Death (OEMD) (N= 140)

| Variable | Mean | Std. Dev. | Weights | K.M.O | Cronbach's Alpha | Eigenvalue | % of Variance |
|---|---|---|---|---|---|---|---|
| OEMD | 13.62 | 4.67 | 1.00 | | | | |
| Number of years as R/E midwife | 3.39 | 1.55 | 0.80 | 0.74 | 0.785 | 2.748 | 54.95 |
| Period in current ward | 3.83 | 1.55 | 0.77 | | | | |
| Age Category | 2.13 | 1.08 | 0.77 | | | | |
| Number of Deaths witnessed | 2.38 | 0.96 | 0.71 | | | | |
| Reason for mother's death | 1.89 | 1.12 | 0.64 | | | | |

Table 5.4 reflects the results of the descriptive and reliability analysis on the Occupation Exposure to Maternal Death Component factor (OEMD) to determine if the observed variables loaded together as expected, with adequate correlation and meeting the criteria of reliability and validity. The Kaiser-Meyer-Olkin (KMO) (0.740) and Bartlett's test for sampling adequacy was significant ($p < 0.01$), and the Cronbach's alpha was sufficient at 0.785. The optimum weights on the component show that the chosen variables are adequately correlated for component analysis, with values ranging from 0.64 to 0.8. Table 5.4 also presents the composite mean of OEMD (M = 13.62, S.D = 4.67), an eigenvalue of 2.748 (> 1.00) and these five correlated item variables accounts for 54.95% variability in the composite variable, OEMD.

The findings in Table 5.4 further indicate that the Midwives' Level of Occupation Exposure to Maternal Death is determined by the years of experience as a registered midwife (beta = 0.8), the period spent working in high risk wards (beta = 0.77), midwives' age group (beta = 0.77), number

of deaths witnessed (beta = 0.71), and reason for mother's death (beta = 0.64). The findings imply that the levels of occupational exposure to maternal death in the two public hospitals are determined by the reasons for the MDs and number of MD witnessed and age group, years of experience and time spent working in high MD risk Wards. Thus, the findings show that prolonged time related occupational exposure to MDs has a significant impact on the midwife's welfare. Therefore, Shorey et al.[110] point out that midwives at maternity wards should be rotated and take turns from ward to ward after a few months to avoid the negative impact of deaths on midwives.

5.3.2.3 Overall Midwives' level of occupational exposure to Maternal Deaths and Fresh Stillbirths

In determining the Midwives' level of occupational exposure to MDs and FSBs, the study relied on the correlational associations presented in Table 5.3 and the Cronbach's alpha test for reliability to group variables with common components. As a result, the study extracted four key components to understand the midwives' level of occupational exposure to MD and FSB events at both public hospitals. The components include the Occupational Exposure to Maternal Death (OEMD), the Occupational Exposure to Fresh Stillbirth (OEFSB), the Ward Support and Professional Preparedness (WSPP) and the Occupational Exposure Time Effects (OETE) factors. Table 5.5 presents the descriptive summary statistics of these four components.

Table 5.5: The descriptive and reliability analysis results for midwives' exposure to Maternal Death and Fresh Stillbirth events (N = 140)

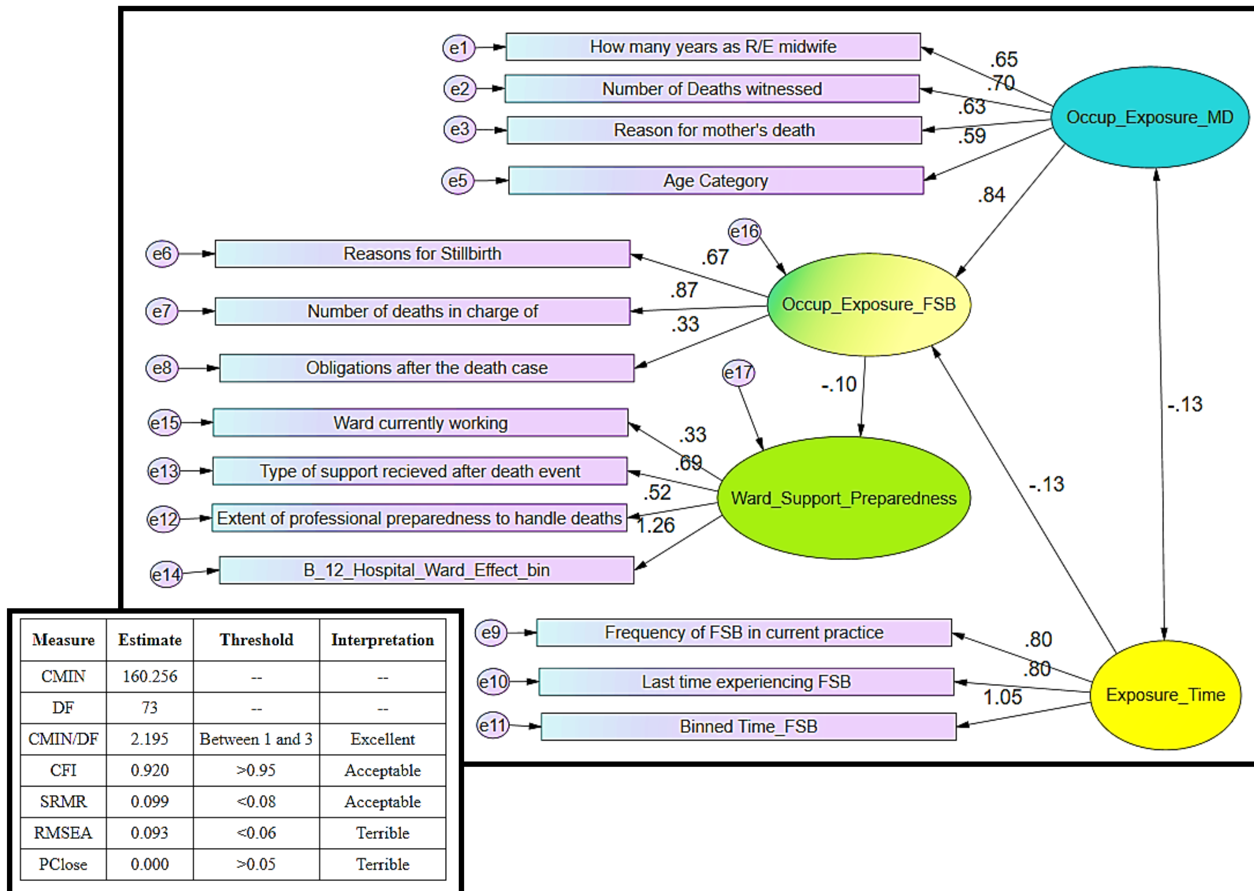
| Composite Factor | Variables | Mean | Std. Dev | Skewness | Kurtosis | Reliability | Standard regression weight | Std. Error | Critical ratio | P-value |
|---|---|---|---|---|---|---|---|---|---|---|
| **Occupational Exposure to MD** | Years As REM | 9.79 | 3.58 | 0.39 | -0.87 | 0.74 | 0.648 | 0.239 | 5.976 | 0.001 |
| | B1_Number Deaths Witnessed | | | | | | 0.705 | 0.153 | 6.326 | 0.001 |
| | B4_Maternal Death reason | | | | | | 0.629 | | | 0.001 |
| | Age Category | | | | | | 0.59 | 0.163 | 5.574 | 0.001 |
| **Occupational Exposure to FSB** | B3_Stillbirth reason | 7.56 | 3.35 | 1.15 | 1.14 | 0.73 | 0.668 | 0.107 | 7.39 | 0.001 |
| | B2_Deaths In Charge | | | | | | 0.868 | | | 0.001 |
| | B5_Obligations after death | | | | | | 0.333 | 0.112 | 3.639 | 0.001 |
| **Exposure Time** | B10_Frequency FSB | 10.52 | 4.01 | 0.33 | -0.42 | 0.89 | 0.803 | 0.076 | 14.115 | 0.001 |
| | B9_LastCase _FSB | | | | | | 0.8 | 0.079 | 13.967 | 0.001 |
| | B_13_Time FSB_binned | | | | | | 1.049 | | | 0.001 |
| **Ward Support & Preparedness** | Current_Ward | 11.43 | 7.32 | 1.79 | 3.14 | 0.78 | 0.328 | 0.046 | 4.775 | 0.001 |
| | B6_Support after_death | | | | | | 0.693 | 0.046 | 8.975 | 0.001 |
| | B11_Extent Professional Preparedness | | | | | | 0.515 | 0.031 | 6.347 | 0.001 |
| | B_12_Hospital _Ward Effect_binned | | | | | | 1.262 | | | 0.001 |
| **OFSB to OEMD** | Occup_ Exposure _FSB | <--- | Occup_Exposure_MD | | | | 0.839 | 0.228 | 6.446 | 0.001 |
| **OFSB to Exposure Time** | Occup_ Exposure _FSB | <--- | Exposure_Time | | | | -0.13 | 0.072 | -1.875 | 0.061 |
| **FSB to Ward Environment** | Ward_Support _Preparedness | <--- | Occup_Exposure_FSB | | | | -0.103 | 0.047 | -2.293 | 0.022 |

Table 5.5 summarises statistics on central tendency, reliability and validity of the composite factors computed using SPSS AMOS Confirmatory Factor Analysis (CFA). The results also present

statistics on the standard error, critical ratio and the estimated probability (p-value) to test the validity of the component weights.

The critical ratio is derived from the unstandardised regression weight divided by an estimate of its standard error. The Critical Ratio (C.R) statistic has a standard normal distribution under the null hypothesis that the parameter has a population value of zero. The results show that most of the C.R estimates are greater than 2 (in absolute value), implying that the weights were significantly different from 0 at the 0.05 level. Additionally, all intra-component relationships had p-values less than 0.05, which significantly validates the variables composition of the composite factors.

Table 5.5 also shows that the standard weights of the individual contribution of the variables to the composite factors have positive effects ranging from 0.333 to 1.262. In contrast, the Cronbach alpha reliability values range from 0.73 to 0.89. As such, the four-factor Midwives' Exposure to Maternal Death and Fresh Stillbirth Events Model indicates a reasonably acceptable fit on all 14 items. Figure 5.2 presents the structure of the relationships of the four-factor model on the next page.




| Measure | Estimate | Threshold | Interpretation |
|---|---|---|---|
| CMIN | 160.256 | -- | -- |
| DF | 73 | -- | -- |
| CMIN/DF | 2.195 | Between 1 and 3 | Excellent |
| CFI | 0.920 | >0.95 | Acceptable |
| SRMR | 0.099 | <0.08 | Acceptable |
| RMSEA | 0.093 | <0.06 | Terrible |
| PClose | 0.000 | >0.05 | Terrible |

Figure 5.2: Confirmatory Factor Analysis of midwives' exposure to MD and FSB events

Figure 5.2 presents the standardised estimate values and relationship pathways for the Midwives' Exposure to Maternal Death and Fresh Stillbirth Events factors. The findings indicate the model fit measures, which include the estimates, threshold and interpretation. The model adequacy was evaluated by means of goodness-of-fit measures for the overall structural model. Maximum likelihood estimation, with residual moments and modification indices, was used for the model estimation and structural path coefficient. The results show an excellent goodness-of-fit of 2.195, an acceptable Comparative Fit Index (CFI) (0.92) and Standardized Root Mean Square Residual (SRMR) (0.099). The Root Mean Square Error of Approximation (RMSEA) (0.093) and PClose (0.0) show poor fitness. However, the model is acceptable regardless of the poor RMSEA and PClose statistics, which are affected by low degrees of freedom (DF =73). The study used the Hu

et al.[146] cut-off criteria, where RMSEA measures of <0.06, >0.06, and >0.08 indicate excellent, acceptable, and terrible fit, respectively.

However, Hu et al.[146] suggested 0.10 as the cut-off for poor fitting models, arguing that there was a greater sampling error for small degrees of freedom (df) and low sample size (N) models. Consequently, models with small df and low N can have artificially large values of the RMSEA.[164] As such, Kenny et al.[164] argue that we can ignore the RMSEA for low df models as in this model. The PClose, which measures a one-sided test of the null hypothesis, was also ignored since the RMSEA equals .05. Thus, the model was accepted as not close fitting (i.e., the RMSEA is greater than 0.05), implying that a bigger sample size than the 140 used would be ideal for a closely fitting model.

Figure 5.2 findings indicate that exposure time has a negative association with OEMD (beta = -0.13), which implies that Occupational Exposure to Maternal Deaths has declined over time. The composite OEMD factor comprised of the number of deaths witnessed decreasing (beta = 0.70), age (beta = 0.59), years of experience (beta = 0.65), the most common reasons for MD (beta = 0.59). As such, the findings revealed that over time the older and more experienced midwives tended to have less exposure to the more common causes of MD compared to their younger and inexperienced counterparts. Consequently, the findings reveal that the most common reasons for MDs were PPH (47.1 %), hypertension disorders (30.7%) and infections (12.9%) (See Table 5.2). In addition, the findings suggest that the older and more experienced midwives can avoid the most common reasons of MD, which implies that PPH, hypertension disorders and infections can be effectively reduced when an older and more experienced midwife is in charge of the event. Thus,

the years of experience as a registered midwife have a significant impact on the levels of exposure to MDs and the cause of the MD events.

## 5.4 OBJECTIVE 3: EVALUATE THE SELF-REPORTED LEVEL OF STRESS AMONG MIDWIVES DUE TO EXPOSURE TO MATERNAL DEATHS AND FRESH STILLBIRTHS

Section C of the questionnaire asked about the components of the Death Distress Scale according to Abdel-Khalek[59]. The Death Distress Scale consists of 3 subscales (Anxiety, Obsession and Depression), and each subscale has 8 items. The section's questions were measured using a five-point Likert scale that dealt with the self-reported stress levels due to the midwives' exposure to MD and FSB events. Descriptive statistics are presented first and followed by correlation analysis and CFA. Respondents' views on the death distress scale, correlation analysis with socio-demographic and occupational exposure, and stress level among midwives are discussed below.

### 5.4.1 Respondents' responses on the death distress scale

The respondents' stress level among midwives due to exposure to MD and FSB was scored using the death distress scale. The death distress sub-scales, namely death obsession, death anxiety and death depression, are described underneath. Table 5.6 below shows the descriptive statistics of the respondents on the death distress scale.

Table 5.6: Respondents responses on a five-point death distress scale (n=140)

| Item description | Responses on a five-point scale | | | | | | Total |
|---|---|---|---|---|---|---|---|
| | | No | Little | Moderate | Much | Very much | |
| Death obsession | | | | | | | |
| The idea that I will die dominates me | n | 48 | 47 | 29 | 4 | 12 | 140 |
| | % | 34.3 | 33.6 | 20.7 | 2.9 | 8.6 | 100 |
| I fail to dismiss the notion of death from my mind | n | 27 | 54 | 29 | 17 | 13 | 140 |
| | % | 19.3 | 38.6 | 20.7 | 12.1 | 9.3 | 100 |
| Thinking about death pre-occupies me | n | 36 | 47 | 31 | 13 | 13 | 140 |
| | % | 25.7 | 33.6 | 22.1 | 9.3 | 9.3 | 100 |
| I find it greatly difficult to get rid of thoughts about death | n | 18 | 32 | 40 | 26 | 24 | 100 |
| | % | 12.9 | 22.9 | 28.6 | 18.6 | 17.1 | 140 |
| The idea of death overwhelms me | n | 60 | 34 | 19 | 19 | 8 | 100 |
| | % | 42.9 | 24.3 | 13.6 | 13.6 | 5.7 | 140 |
| I have exaggerated concerns with the idea of death | n | 51 | 64 | 7 | 16 | 2 | 100 |
| | % | 36.4 | 45.7 | 5.0 | 11.4 | 1.4 | 140 |
| I find myself rushing to think about death | n | 49 | 26 | 36 | 13 | 16 | 100 |
| | % | 35 | 18.6 | 25.7 | 9.3 | 11.4 | 140 |
| I think about death continuously | n | 91 | 18 | 14 | 9 | 8 | 100 |
| | % | 65 | 12.9 | 10 | 6.4 | 5.7 | 140 |
| Death anxiety | | | | | | | |
| I am very much afraid to die | n | 32 | 21 | 53 | 13 | 21 | 140 |
| | % | 22.9 | 15 | 37.9 | 9.3 | 15 | 100 |
| It does not make me nervous when people talk about death | n | 14 | 28 | 50 | 32 | 16 | 140 |
| | % | 10 | 20 | 35.7 | 22.9 | 11.4 | 100 |
| I am not afraid to die at all | n | 14 | 27 | 50 | 33 | 16 | 140 |
| | % | 10 | 19.3 | 35.7 | 23.6 | 11.4 | 100 |
| I am not particularly afraid to die during childbirth or to have a stillbirth | n | 24 | 12 | 30 | 27 | 47 | 140 |
| | % | 17.1 | 8.6 | 21.4 | 19.3 | 33.6 | 100 |
| The thought of death never bothers me | n | 21 | 25 | 22 | 28 | 44 | 140 |
| | % | 15 | 17.9 | 15.7 | 20 | 31.4 | 100 |
| I fear dying a painful death | n | 8 | 31 | 16 | 27 | 58 | 140 |
| | % | 5.7 | 22.1 | 11.4 | 19.3 | 41.4 | 100 |
| I am afraid of having a heart attack | n | 19 | 18 | 15 | 24 | 64 | 140 |
| | % | 13.6 | 12.9 | 10.7 | 17.1 | 45.7 | 100 |
| The sight of a dead body is horrifying to me | n | 23 | 25 | 19 | 53 | 20 | 140 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | % | 16.4 | 17.9 | 13.6 | 37.9 | 14.3 | 100 |
| Death depression | | | | | | | |
| When I think about death I lose interest in activities of life | n | 32 | 50 | 30 | 18 | 10 | 140 |
| | % | 22.9 | 35.7 | 21.4 | 12.9 | 7.1 | 10 |
| I lose interest in caring for myself when I think about death | n | 32 | 33 | 52 | 8 | 15 | 140 |
| | % | 22.9 | 23.6 | 37.1 | 5.7 | 10.7 | 100 |
| When death is on my mind, my body seems to lose energy and slows down | n | 38 | 71 | 13 | 7 | 11 | 140 |
| | % | 27.1 | 50.7 | 9.3 | 5 | 7.9 | 100 |
| The thought of death strengthens my energy | n | 49 | 57 | 9 | 11 | 14 | 140 |
| | % | 35 | 40.7 | 6.4 | 7.9 | 10 | 100 |
| It is hard to concentrate when death is on my mind | n | 21 | 34 | 60 | 13 | 12 | 140 |
| | % | 15 | 24.3 | 42.9 | 9.3 | 8.6 | 100 |
| Death makes me discouraged about the future | n | 39 | 28 | 52 | 9 | 12 | 140 |
| | % | 27.9 | 20 | 37.1 | 6.4 | 8.6 | 100 |
| Death makes me feel hopeless | n | 29 | 36 | 54 | 7 | 14 | 140 |
| | % | 20.7 | 25.7 | 38.6 | 5 | 10 | 100 |

5.4.1.1 Death obsession

On the obsession scale, between 65% (n=91) and 12. 9% (n=18) of the respondents indicated a no response on the death obsession scale eight items; 45.7% (n=64) to 12.9% (n=18) responded to little responses; 28.6% (n= 40) to 5% (n=7) responded to moderate responses; 18.6 (n=26) to 2.9% (n=4) responded to much; and 17.4% (n=24) to1.4 (n=2) responded to very much responses. The results indicate that most midwives rated themselves low on the death obsession scale. These findings contrast with those from a study by Muliira et al.[17], where midwives who witnessed MDs had a mild to moderate death obsession (71%).

5.4.1.2 Death anxiety

The responses on this scale, show on the positively stated questions that, 5.7% (n=8) to 22.90% (n=32) responded to a no response while 12.9% (n=8) to 22.1% (n=31) responded to the little response; 10.7% (15) to 37.9% (n= 53) indicated moderate; 9.3% (n=13) to 37.9 n=53) indicated much; and 14.3% (n=20) to 45.70% (n=64) indicated very much. The results indicate that most midwives rated themselves moderate to high on positive statements on the death anxiety scale of the death distress scale.

On the negatively stated statements, the results indicate that a 7.9% (n=11) to 15.0% (n=21) of the participants responded to a no response; 8.6% (n=12) to 19.3% (n=27) to little response; 15% (n=22) to 35.7% (n=50) to the moderate response; 19.3% (n=27) to 31.40% (n= 44) indicated much response, and 11.40% (n=16) to 35.7% (n=50) responded to very much response. The findings, therefore, indicate that respondents rated themselves high on much and very much on the negatively stated questions. Overall, based on the death anxiety scale, the study's respondents rated themselves high on this scale. A study conducted in Uganda found similar findings where most

midwives (93%) had moderate to high death anxiety.[17] This justifies the need for a strong support system to assist midwives who experienced MDs and FSBs.

On the negatively stated statements, the results indicate that a 7.9% (n=11) to 15.0% (n=21) of the participants responded to a no response; 8.6% (n=12) to 19.3% (n=27) to little response; 15% (n=22) to 35.7% (n=50) to the moderate response; 19.3% (n=27) to 31.40% (n= 44) indicated much response, and 11.40% (n=16) to 35.7% (n=50) responded to very much response. The findings therefore indicate that respondents rated themselves high on much and very much on the negatively stated questions. Overall, based on the death anxiety scale, the study's respondents rated themselves high on this scale. A study conducted in Uganda found similar findings where most midwives (93%) had a moderate to high death anxiety.[17] This justifies the need for a strong support system that can assist midwives who experienced MDs and FSBs.

5.4.1.3 Death depression

Concerning the death depression scale, 12.9% (n=15) to 35% (n=49) of the midwives responded to a no response; 20% (n=28) to 50.7% (n=71) indicated little; 6.4% (n=9) to 42.9% (60) indicated a moderate; 5% (n=7) to 30.7% (n=43) indicate a much response; and 7.1% (n=10) to 17.1% (n=24) indicate a very much response. The results indicate that the respondents rated themselves little to moderate. Therefore, most respondents did not rate themselves high on the death depression subscale of the death distress scale. This agrees with Muliira et al.[17], who found mild death depression (53%) among the midwives.

The summary of findings of the death distress scale is presented in Table 5.7 below. The five-point Likert scale was rated 1-5 whereby No=1, Little =2, Moderate=3, Much =4 and Very Much =5.

Abdel-Khalek[59] indicates that the higher the score in each subscale, the higher the level of distress. To better analyse and report the findings, the scores were combined at the lower end of the scale, whereby little and moderate scores were combined and much and very much at the top end of the scale.[17,103] The scores were thus categorised into mild (8-18 scores), moderate (19-29 scores), and high distress (30-40 scores) as depicted in Table 5.7 that follows.

Table 5.7: Descriptive Statistics of the Self-reported level of stress scores of midwives on the death distress scale (n=140).

| Death distress Sub-scales | Variables | n | % |
|---|---|---|---|
| Death Obsession | | | |
| | Mild Distress | 88 | 62.9 |
| | Moderate Distress | 42 | 30.0 |
| | High Distress | 10 | 7.1 |
| Death Anxiety | | | |
| | Mild Distress | 1 | .7 |
| | Moderate Distress | 102 | 72.9 |
| | High Distress | 37 | 26.4 |
| | | | |
| Death Depression | Mild Distress | 58 | 41.4 |
| | Moderate Distress | 72 | 51.4 |
| | High Distress | 10 | 7.1 |

The findings reveal that the high levels of distress among the midwives mainly were related to death anxiety that ranged from moderate (72.9%, n=102) to High (26.4%, n=37) distress levels. The moderate to high death anxiety experienced by these midwives could have resulted from experiencing more than one MD and FSB; the young age of the majority of midwives and inadequate clinical experience; or poor support services.[17,35] This was followed by death depression which ranged from mild (41.4%, n=58) to moderate (51.4%, n=72). The third subscale, death obsession, reports the least distress among the midwives, with the majority of the respondent reporting mild distress (62.9%, 88), moderate (30 %, n=42) and high (7.1%, n=10). Other studies conducted in various countries reveal that midwives continue to work in distressing situations after witnessing MDs and perinatal deaths, resulting in a maladaptive coping mechanism.[33, 165, 111, 84]

Thus, high levels of preparedness for such exposures should be part of the midwives training while peer support is needed to prevent severe consequences for midwives involved and their profession.

### 5.4.2 Correlational analysis of death distress with demographic data and exposure to Maternal Death and Fresh Stillbirth

The study used Spearman's rank correlation analysis to measure the strength of a monotonic relationship between the variables of interest. The study used Non-Parametric Spearman's correlation to assess the strength and significance of the relationships between the composite death distress factors with socio-demographic information and the midwives' occupational exposure to MDs and FSBs. The findings of the significant associations are presented in Table 5.8.

Table 5.8: Correlation Matrix of significant socio-demographic and occupational exposure with Death Distress

| Variable | Death anxiety | Death obsession | Death depression |
|---|---|---|---|
| Socio-demographics | | | |
| Current Ward | -0.05 | -.182* | -0.12 |
| Experience in Current Ward | 0.05 | 0.15 | .177* |
| Hospital Ward Effect | -0.04 | -.186* | -0.12 |
| Ward Support preparedness | -0.04 | -.184* | -0.12 |
| Occupational exposure | | | |
| B1_Number of deaths witnessed | 0.12 | 0.13 | .285** |
| B2_Deaths_Incharge | .172* | 0.06 | .181* |
| B7_Likelihood to use EAP | -0.10 | -.197* | -.212* |
| B9_Last case_ FSB | .180* | -0.03 | -0.06 |
| B11_Extent_ProfessionalcPreparedness | 0.04 | -.239** | -0.06 |
| Occupation Exposure to MD | 0.09 | 0.00 | .217** |
| Death distress | | | |
| Death depression | 0.15 | .353** | 1.00 |

The findings indicate that the maternity wards (1 = Antenatal clinic, 2 = Antenatal ward, 3 = Postnatal ward, 4 = Neonatal ward) were negatively associated with death obsession ($r = -0.186$, $p < 0.05$) and positively associated with death depression ($r = 0.177$, $p < 0.05$). These findings imply that midwives working in the ANC are likely to have a high death obsession and a mild death depression, while those working in the Post-natal or Neonatal wards are likely to have a high death depression and mild death obsession. This could be because midwives in the Antenatal Clinic experience less death events since they do not conduct deliveries at the clinic. In addition, the results showed that hospital wards had no significant effect on the self-reported death anxiety of the midwives.

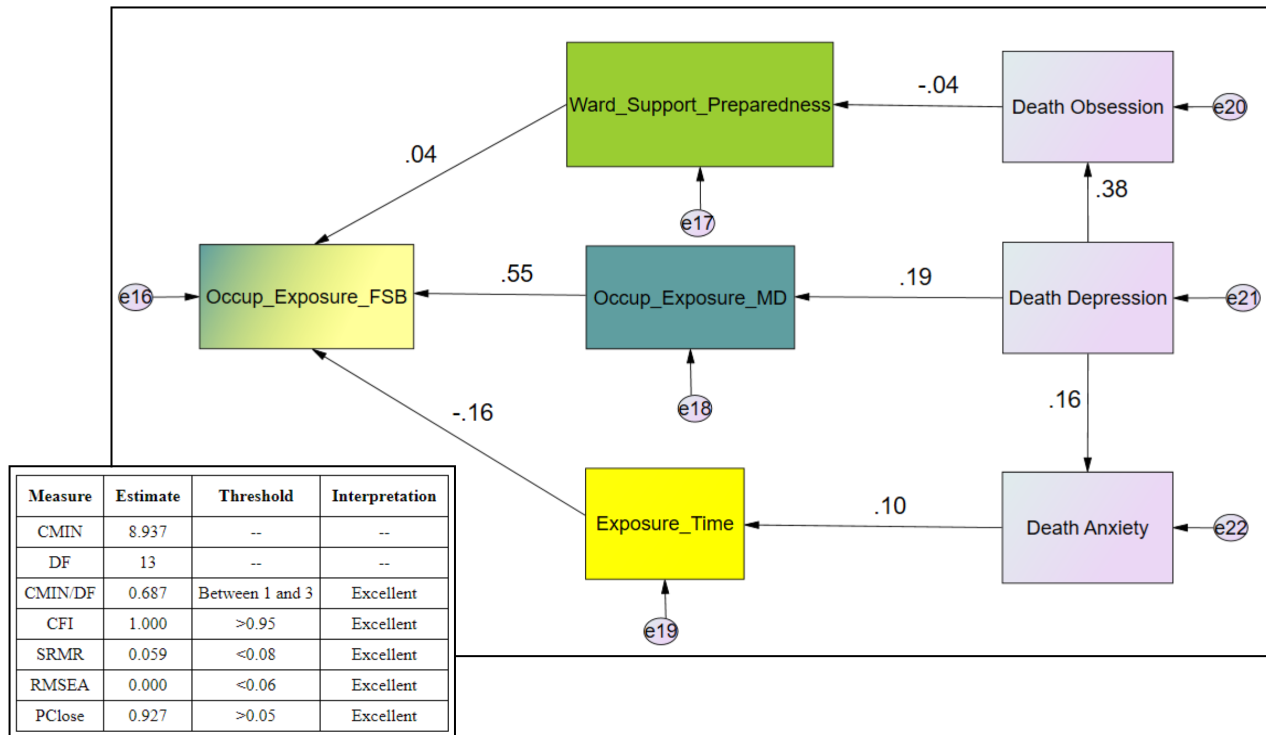
With regards to occupational exposure, the findings reveal that death anxiety was associated with recent deaths in charge and exposure with significant positive relations with the number of deaths in charge ($r = 0.172$, $p < 0.05$) and the last time an FSB death was witnessed ($r = 0.180$, $p < 0.05$). The findings imply that the midwives get increasingly death anxious when the number of deaths in charge increases over time. It is therefore predicted that a reduction in the number of FSBs and deaths would lead to a further decrease of death anxiety .[110]

In addition, death obsession was found to have a negative association ($r = - 0.239$, $p < 0.01$) with the extent of professional preparedness of the midwives to deal with a death event (1 = poorly prepared, 2 = well prepared). These findings suggest that midwives who are poorly prepared to handle and deal with MD and or FSB are more likely to have high death anxiety. This could mean training the midwives on how to manage death events is expected to reduce the death anxiety.

Overall, the findings indicate that all the significant variables were positively associated with death depression. This suggests that years of experience ($r = 0.353$, $p < 0.01$), deaths witnessed ($r = 0.353$, $p < 0.01$), exposure to MDs ($r = 0.217$, $p < 0.01$) and death obsession ($r = 0.353$, $p < 0.01$) will lead to an increase in death depression. This suggests that poorly prepared midwives will be death obsessed and suffer from death depression, despite their years of experience if they continually witness MDs. The finding from a WHO report conducted in 93 countries around the globe on Midwives' Voices, Midwives Realities states clearly that work-related distress is a shared burden among midwives irrespective of the location (WHO, 2016).

### 5.4.3 Levels of stress among midwives due to exposure to Maternal Death and Fresh Stillbirth

The study's determination of the Midwives' stress level due to exposure to MDs and FSBs relied on the correlational associations presented in Table 5.5 and the Confirmatory Factor Analysis of Midwives' Exposure to MD and FSB Events in Figure 5.3. As a result, the study used Figure 5.3 models of four components on the midwives' level of Occupational Exposure to Maternal Death and FSB events in the two public hospitals. The four components and their linkages were maintained, while the correlational matrix provided guidelines on the links between death distress levels and the occupational exposure factors. Finally, the study used SPSS AMOS to establish the linkages through Confirmatory Factor Analysis with the final model presented in Figure 5.3.




| Measure | Estimate | Threshold | Interpretation |
|---|---|---|---|
| CMIN | 8.937 | -- | -- |
| DF | 13 | -- | -- |
| CMIN/DF | 0.687 | Between 1 and 3 | Excellent |
| CFI | 1.000 | >0.95 | Excellent |
| SRMR | 0.059 | <0.08 | Excellent |
| RMSEA | 0.000 | <0.06 | Excellent |
| PClose | 0.927 | >0.05 | Excellent |

Figure 5.3: Confirmatory Factor Analysis of the self-reported level of stress among midwives due to exposure to MDs and FSBs

Figure 5.3 indicate that the model has excellent goodness of fit. The findings suggest a strong positive relationship between Occupational exposure to FSBs and MDs (beta = 0.55) and death obsession and depression (beta = 0.38). The findings also indicate that death distress and occupational exposure interact at three levels. The first level is the direct positive relationship between OEMD and death depression (beta = 0.19), which shows that exposure to MD increases death depression.

The second level linkage was between ward support preparedness and death obsession (beta = -0.04), which indicates a small negative relationship that suggests that well-prepared midwives are not obsessed over FSBs. Additionally, the third level linkage was between exposure time and death anxiety (beta = 0.10). The exposure time was found to have a negative relationship with

occupational exposure to FSB (beta = - 0.16). Consequently, these findings imply that FSBs related to the least reported causes (such as shoulder dystocia or a ruptured uterus) will likely have high death anxiety in the short term than would a commonly reported cause (like placenta abruptio or cord around the neck).

## 5.5 OBJECTIVE 4: DETERMINE THE COPING MECHANISMS USED BY MIDWIVES TO COPE WITH THE AFTER EFFECTS OF MATERNAL DEATHS AND STILLBIRTHS IN THE ABSENCE OF AN EAP

Section D of the questionnaire enquired on the coping mechanisms used by midwives to deal with the effects of MDs and FSBs using a Brief Cope Scale. The Brief Cope Scale consists of 13 constructs: self-destruction, active coping, denial, substance abuse, emotional support, instrumental support, behavioural disengagement, venting, planning, acceptance, religion, self-blame and positive reframing.[58] Descriptive statistics are presented first, followed by correlation analysis and CFA.

### 5.5.1 Coping mechanisms used by respondents

This study adopted Carver[58]'s Brief Cope scale in Section D of the questionnaire to identify 13 coping strategies used in relation to stressors in the work environment. Consequently, these strategies could be categorised into problem-focused coping (active coping, planning, positive reframing, acceptance, using emotional support, and using instrumental support); emotion-focused coping (religion, venting, and self-blame), and avoidance coping (self-distraction, substance use, behavioural disengagement, and denial).[58] The responses of the respondents on the four-point Likert scale is shown in Table 5.9.

The coping mechanisms indicated in Table 5.9 start with the lowest on the scale. I haven't been doing this at all=Not; I have been doing this a little =A Little bit; I have been doing this Moderately; I have been doing this a Lot. The findings indicate that the majority of the midwives were more likely to resort to emotion-focused coping, which includes a lot of self-blame in which they criticise themselves on what happened (47.1% n=66); religion through praying and meditating (52.1%; n=73) and getting relief in religion or spiritual beliefs (42.1%; n=59); self-distraction were they have been turning to work or other activities to take their mind off things (57.1%; n=80) and denying that it was real (45%; n=80). On the contrary, Muliira et al.[17] found that most midwives in their study used problem-focused coping methods after witnessing an MD. Problem-focused coping is found to be a positive way of coping as it is directed at investigating and solving the problem.[40, 16]

The least methods used by midwives in the study were problem-focused coping methods such as Planning like I have been thinking hard about what steps to take (41.4%; n=58), active coping including (46.4%; n=65) I have been taking action to try and make the situation better, positive reframing (50.7%; n=71), and instrumental support like I have been getting help from other people (57.1%; n=80). Studies conducted in the UK and Slovakia reveal similar findings among midwives and doctors as these professionals frequently used active coping, acceptance, and instrumental support, which relate to problem-focused coping, after experiencing MDs.[98,40]

Table 5.9: Four-point Likert scale responses on the Brief-COPE Scale

| Item description | | I haven't been doing this at all=Not | I have been doing this a little =A Little bit | I have been doing this Moderately | I have been doing this a Lot | Total |
|---|---|---|---|---|---|---|
| Self-blame | | | | | | |
| I have been criticising myself | n | 21 | 17 | 36 | 66 | 140 |
| | % | 15.0 | 12.1 | 25.7 | 47.1 | 100 |
| I have been blaming myself on what happened | n | 22 | 24 | 28 | 66 | 140 |
| | % | 15.7 | 17.1 | 20.0 | 47.1 | 100 |
| Religion | | | | | | |
| I have been trying to get relief in my religion or spiritual beliefs | n | 24 | 26 | 31 | 59 | 140 |
| | % | 17.1 | 18.6 | 22.1 | 42.1 | 100 |
| I have been praying and meditating | n | 20 | 23 | 24 | 73 | 140 |
| | % | 14.3 | 16.4 | 17.1 | 52. | 100 |
| Self-distraction | | | | | | |
| I have been turning to work or other activities to take my mind off things | n | 12 | 15 | 33 | 80 | 140.0 |
| | % | 8.6 | 10.7 | 23.6 | 57.1 | 100.0 |
| I have been doing other things to think about it less, such as watching TV, reading and sleeping | n | 33 | 22 | 59 | 26 | 140 |
| | % | 23.6 | 15.7 | 42.1 | 18.6 | 100 |
| Denial | | | | | | |
| I have been saying to myself this isn't real | n | 21 | 29 | 27 | 63 | 140 |
| | % | 15.0 | 20.7 | 19.3 | 45.0 | 100 |
| I have been refusing to believe that it happened | n | 25 | 27 | 33 | 55 | 140 |
| | % | 17.9 | 19.3 | 23.6 | 39.3 | 100 |
| Behaviour disengagement | | | | | | |
| I have given up trying to deal with the problem | n | 32 | 23 | 57 | 28 | 140 |
| | % | 22.9 | 16.4 | 40.7 | 20.0 | 100 |
| I have given up the attempt to cope | n | 30 | 26 | 31 | 53 | 140 |
| | % | 21.4 | 18.6 | 22.1 | 37.9 | 100 |
| Positive reframing | | | | | | |
| I have been trying to see it in a different light, to make it seem more positive | n | 71 | 22 | 19 | 28 | 140 |
| | % | 50.7 | 15.7 | 13.6 | 20.0 | 100 |
| I have been looking for something good in what happened | n | 30 | 47 | 26 | 37 | 140 |
| | % | 21.4 | 33.6 | 18.6 | 26.4 | 100 |
| Acceptance | | | | | | |
| I have been accepting the reality of the fact that it happened | n | 52 | 27 | 29 | 32 | 140 |
| | % | 37.1 | 19.3 | 20.7 | 22.9 | 100 |
| I have been learning to live with it | n | 34 | 56 | 21 | 29 | 140 |
| | % | 24.3 | 40.0 | 15.0 | 20.7 | 100 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Planning | | | | | | |
| I have been trying to come up with a strategy about what to do | n | 57 | 26 | 32 | 25 | 140 |
| | % | 40.7 | 18.6 | 22.9 | 17.9 | 100 |
| I have been thinking hard about what steps to take | n | 58 | 24 | 22 | 36 | 140 |
| | % | 41.4 | 17.1 | 15.7 | 25.7 | 100 |
| Active coping | | | | | | |
| I have been concentrating my efforts on doing something about the situation I am in | n | 58 | 26 | 23 | 33 | 140 |
| | % | 41.4 | 18.6 | 16.4 | 23.6 | 100 |
| I have been taking action to try and make the situation better | n | 65 | 39 | 14 | 22 | 140 |
| | % | 46.4 | 27.9 | 10.0 | 15.7 | 100 |
| Venting | | | | | | |
| I have been saying things to let my unpleasant feelings escape | n | 33 | 63 | 30 | 14 | 140 |
| | % | 23.6 | 45.0 | 21.4 | 10.0 | 100 |
| I have been expressing my negative feelings | n | 74 | 36 | 17 | 13 | 140 |
| | % | 52.9 | 25.7 | 12.1 | 9.3 | 100 |
| Instrumental support | | | | | | |
| I have been getting help from other people | n | 80 | 22 | 16 | 22 | 140 |
| | % | 57.1 | 15.7 | 11.4 | 15.7 | 100 |
| I have been trying to get advice or help from other people on what to do | n | 61 | 20 | 26 | 33 | 140 |
| | % | 43.6 | 14.3 | 18.6 | 23.6 | 100 |
| Emotional support | | | | | | |
| I have been getting emotional support from others | n | 79 | 17 | 20 | 24 | 140 |
| | % | 56.4 | 12.1 | 14.3 | 17.1 | 100 |
| I have been getting comfort and understanding from someone else | n | 72 | 32 | 20 | 16 | 140 |
| | % | 51.4 | 22.9 | 14.3 | 11.4 | 100 |
| Substance abuse | | | | | | |
| I have been using alcohol or other drugs to make myself better | n | 120 | 12 | 5 | 3 | 140 |
| | % | 85.7 | 8.6 | 3.6 | 2.1 | 100.0 |
| I have been using alcohol or other drugs to help me through it | n | 116 | 13 | 7 | 4 | 140 |
| | % | 82.9 | 9.3 | 5.0 | 2.9 | 100 |

Coping was assessed via two items relating to a specific behavioural or cognitive strategy.[95] The respondents rated the extent to which they have engaged in the defined activity on a four-point Likert scale, from one (the participant did not use the activity at all) to four (the participant used this activity frequently). As such, the summed-up scale of two resulted in an 8-point scale ranging from 1 to 8. The 8-point scale was then recoded to a 4-point, where (1 and 2 = 1), (3 and 4 =2), (5 and 6=3), (7 and 8=4), The Cronbach alpha for the 7-point scale was 0.771, while the 4-point scale

had a reliability of 0.758. The descriptive statistics of the recoded variables are presented in Table 5.10 below.

Table 5.10: Coping strategies employed by Midwives at Public Hospitals in the Khomas Region (N=140)

| Variables | Not | | A Little bit | | Moderately | | A Lot | | Mean | Std. Dev | Skewness | Kurtosis |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % | | | | |
| Self blame | 7 | 5.0% | 14 | 10.0% | 58 | 41.4% | 61 | 43.6% | 3.24 | 0.83 | -1.01 | 0.59 |
| Religion | 9 | 6.4% | 20 | 14.3% | 47 | 33.6% | 64 | 45.7% | 3.19 | 0.91 | -0.90 | -0.08 |
| Self distraction | 4 | 2.9% | 21 | 15.0% | 62 | 44.3% | 53 | 37.9% | 3.17 | 0.79 | -0.67 | -0.05 |
| Denial | 5 | 3.6% | 23 | 16.4% | 62 | 44.3% | 50 | 35.7% | 3.12 | 0.81 | -0.64 | -0.13 |
| Behaviour Disengagement | 4 | 2.9% | 39 | 27.9% | 56 | 40.0% | 41 | 29.3% | 2.96 | 0.83 | -0.23 | -0.85 |
| Positive Reframing | 15 | 10.7% | 59 | 42.1% | 43 | 30.7% | 23 | 16.4% | 2.53 | 0.89 | 0.16 | -0.75 |
| Acceptance | 16 | 11.4% | 56 | 40.0% | 47 | 33.6% | 21 | 15.0% | 2.52 | 0.89 | 0.09 | -0.71 |
| Planning | 39 | 27.9% | 33 | 23.6% | 39 | 27.9% | 29 | 20.7% | 2.41 | 1.11 | 0.06 | -1.33 |
| Active coping | 34 | 24.3% | 55 | 39.3% | 26 | 18.6% | 25 | 17.9% | 2.30 | 1.03 | 0.37 | -0.98 |
| Venting | 17 | 12.1% | 76 | 54.3% | 38 | 27.1% | 9 | 6.4% | 2.28 | 0.76 | 0.38 | -0.01 |
| Instrumental Support | 46 | 32.9% | 39 | 27.9% | 37 | 26.4% | 18 | 12.9% | 2.19 | 1.04 | 0.31 | -1.12 |
| Emotional Support | 50 | 35.7% | 49 | 35.0% | 25 | 17.9% | 16 | 11.4% | 2.05 | 1.00 | 0.60 | -0.71 |
| Substance abuse | 109 | 77.9% | 21 | 15.0% | 8 | 5.7% | 2 | 1.4% | 1.31 | 0.64 | 2.22 | 4.61 |

Table 5.10 presents the results of the coping strategies used by midwives to overcome stress. The findings indicate that the majority of the respondents used emotion-focused coping strategies, which include self-blame (M = 3.24, S.D = 0.83), religion (M=3.19, S.D =0.91), and venting (M = 2.28, S.D = 0.76). The results also indicate that 29.3% to 37.9% of the respondents used avoidance coping strategies a lot which is part of emotion-focused coping. The strategies include self-distraction (M = 3.17, S.D = 0.79), denial (M = 3.12, S.D = 0.81) and behavioural disengagement (M = 2.96, S.D = 0.83). It is however worth noting that midwives avoided the abuse

of substances (M = 1.31, S.D = 0.64). Similarly, midwives in another study also least used substances (mean = 2.27; SD = 0.68,).[40]

The findings in Table 5.10 further indicated that the midwives reported using problem-focused coping strategies a little, with their mean values all less than 2.55. The strategies included positive reframing (M = 2.53, S.D = 0.89), acceptance (M = 2.52, S.D = 0.89), planning (M = 2.41, S.D = 1.11), active coping (M = 2.30, S.D = 1.03), using instrumental support (M = 2.19, S.D = 1.04), and using emotional support (M = 2.05, S.D = 1.00). On the contrary, the majority of respondents in another study rated active coping (mean = 5.60; SD = 1.77) as the main coping strategy they used to overcome stress.[40] Therefore, it is necessary to encourage the midwives to use these positive coping strategies after an MD or FSB as these strategies promote positive health outcomes.

### 5.5.2 Correlational analysis between level of exposure and coping mechanisms

The study used correlational associations between the five factors coping mechanism composite factors and self-reported level of stress among midwives due to exposure to MDs and FSBs to find common associations linking coping mechanisms to the self-reported stress levels. Table 5.11 presents the correlational matrix.

Table 5.11: Association between level of exposure and coping

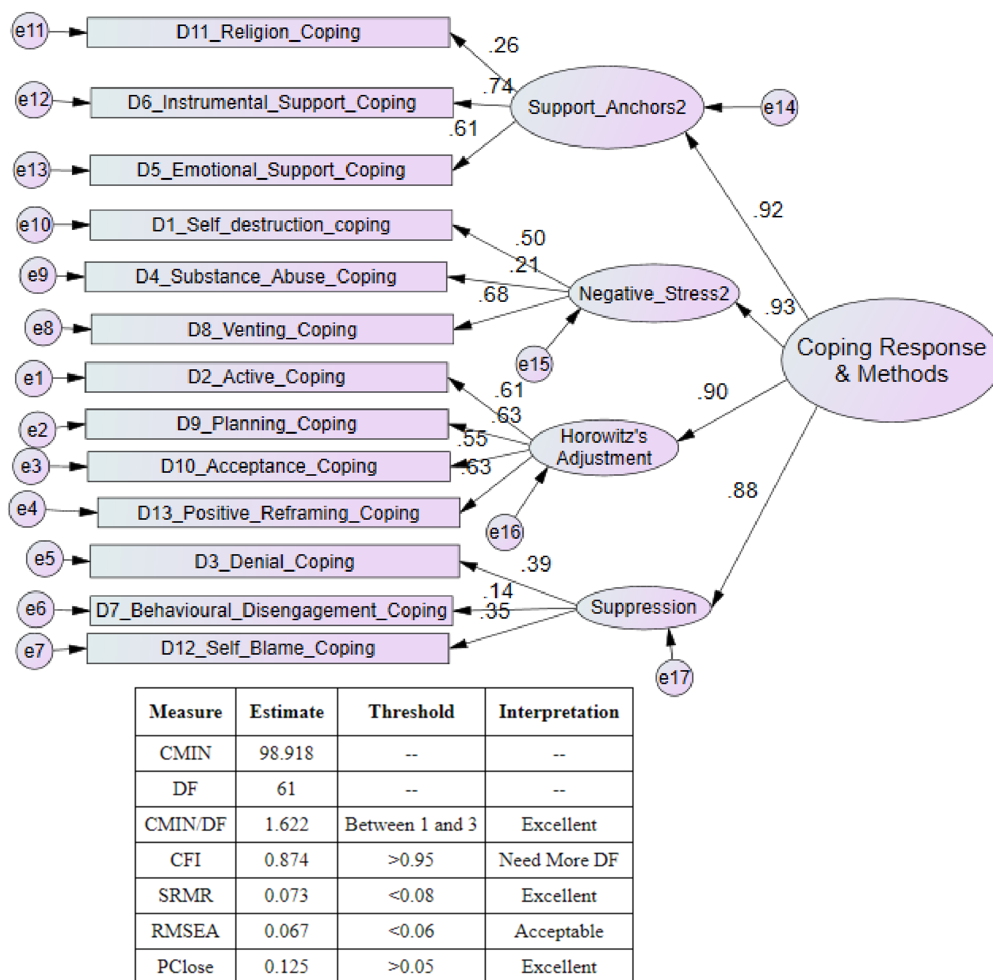
| Variable | Occupational Exposures to FSBs | Occupation Exposure to MDs (OEMD) | Exposure Time | Brief Coping Strategies |
|---|---|---|---|---|
| Occupational Exposure to FSBs | 1.00 | | | |
| Occupation Exposure to MDs | .491** | 1.00 | | |
| Exposure Time | -.239** | -0.11 | 1.00 | |
| Brief Coping Strategies | 0.05 | .226** | .174* | 1.00 |
| Horowitz's Adjustment | 0.06 | .213* | .167* | .970** |
| Suppression | 0.07 | .220** | 0.17 | .985** |

| Negative Stress | 0.03 | .221** | .180* | .988** |
|---|---|---|---|---|
| Support_Anchors2/ | 0.04 | .226** | 0.15 | .977** |

The results presented in Table 5.11 are based on the Spearman correlation analysis of the composite factors. The findings show that Occupational Exposure to FSB (OEFSB) does not directly associate with all coping strategies. However, Occupational Exposure to Maternal Death association results is significant across all coping strategies. The findings also show that exposure to OFSB becomes significant when exposure time to FSB is considered. The findings suggest that midwives who encounter FSB should immediately be subjected to coping strategies under the Horowitz adjustment ($r = 0.167$, $p < 0.05$) and negative stress ($r = 0.180$, $p < 0.05$). This will consequently benefit the midwives to cope better to improve their wellbeing.[35, 17, 24]

### 5.5.3 Confirmatory Factor Analysis of coping mechanisms used by midwives after the aftermath of Maternal Deaths and Fresh Stillbirths

This section tests propositions and hypotheses relating the linkages between the current coping mechanisms midwives use in the aftermath of MDs and FSBs. The study uses CFA to propose statistically valid causal linkages using the software SPSS AMOS version 23. The final model and fitness statistics are presented in Figure 5.4.




| Measure | Estimate | Threshold | Interpretation |
|---|---|---|---|
| CMIN | 98.918 | -- | -- |
| DF | 61 | -- | -- |
| CMIN/DF | 1.622 | Between 1 and 3 | Excellent |
| CFI | 0.874 | >0.95 | Need More DF |
| SRMR | 0.073 | <0.08 | Excellent |
| RMSEA | 0.067 | <0.06 | Acceptable |
| PClose | 0.125 | >0.05 | Excellent |

Figure 5.4: Five factors of the coping mechanism used by midwives in the aftermath of MDs and FSBs

Figure 5.4 indicates the findings from the confirmatory factor analysis of Section D of the questionnaire. The 13-Brief Coping Scale items were reduced to a 5-factors model guided by the stress response and coping theories and models discussed in the literature review presented in Chapter 2 (page 26). The relationships and links were estimated using Lazarus et al.[56(pg234)]. The Transactional model of stress and coping and Horowitz's's[52] Stress Response Theory. The resultant

model has excellent fitness, and the maximum likelihood relationships between the items and the factors are statistically significant, thus validating the linkages and relationships.

Findings in Figure 5.4 shows that the Horowitz adjustment or positive stress refers to strategies that use problem-focused coping such as active coping (beta = 0.61), planning (beta = 0.63), positive reframing (beta = 0.63) and acceptance (beta = 0.55). The problem-focused coping strategies include using emotional support (beta = 0.61) and using instrumental support (beta = 0.74), and loaded with religion support (beta = 0.26), to form the Support Anchors factor. Religion in this study seems to play a supporting anchor coping strategy instead of suppressing emotions, as suggested in Carver's [58] Brief Cope scale.

Furthermore, the findings in Figure 5.4 indicate that suppression emotion-focused coping (religion, venting, and self-blame) and avoidance coping (self-distraction, substance abuse, behavioural disengagement, and denial) were superimposed into the suppression factor and the negative stress factor.[40] The findings suggest that the suppression factor comprises of self-blame (beta = 0.35), behavioural disengagement (beta = 0.14) and denial (beta = 0.39) while, the negative stress or avoidance focused coping comprises of venting (beta = 0.68), self-distraction (beta = 0.50) and substance use (beta = 0.21). Consequently, the five composite variables were not computed, as done in previous sections. The variables were computed using the SPSS AMOS data imputation function, which computes the composite factors as regression factors and provides a more accurate representative factor based on the regression beta estimates.

Table 5.12 presents the maximum likelihood regression beta estimates for the five-factor coping mechanism midwives use in the aftermath of Maternal Deaths and Stillbirths.

Table 5.12: Maximum Likelihood Regression Estimates for the Brief Coping Scale Model

| Variables | link | Endogenous Factors | Estimate | S.E. | C.R. | P-value |
|---|---|---|---|---|---|---|
| Support_Anchors 2 | <--- | Brief Coping | 1 | | | |
| Positive_Stress 2 | <--- | Brief Coping | 0.929 | 0.2 | 4.645 | 0.001 |
| Response 2 | <--- | Brief Coping | 0.542 | 0.164 | 3.304 | 0.001 |
| Negative_Stress 2 | <--- | Brief Coping | 0.655 | 0.161 | 4.08 | 0.001 |
| D5_Emotional_Support_Coping | <--- | Support_Anchors | 1 | | | 0.001 |
| D6_Instrumental_Support_Coping | <--- | Support_Anchors | 1.255 | 0.216 | 5.801 | 0.001 |
| D11_Religion_Coping | <--- | Support_Anchors | 0.405 | 0.159 | 2.554 | 0.011** |
| D1_Self_distraction_coping | <--- | Negative_Stress | 1 | | | 0.001 |
| D8_Venting_Coping | <--- | Negative_Stress | 1.309 | 0.28 | 4.673 | 0.001 |
| D7_Behavioural_Disengagement_Coping | <--- | Suppression | 0.334 | 0.258 | 1.293 | 0.196 |
| D12_Self_Blame_Coping | <--- | Suppression | 0.893 | 0.347 | 2.573 | 0.001 |
| D3_Denial_Coping | <--- | Suppression | 1 | | | 0.001 |
| D4_Substance_Abuse_Coping | <--- | Negative_Stress | 0.31 | 0.155 | 2.006 | 0.045** |
| D2_Active_Coping | <--- | Positive Stress | 1.089 | 0.198 | 5.512 | 0.001 |
| D9_Planning_Coping | <--- | Positive_Stress | 1.192 | 0.213 | 5.596 | 0.001 |
| D10_Acceptance_Coping | <--- | Positive_Stress | 0.867 | 0.172 | 5.058 | 0.001 |
| D13_Positive_Reframing_Coping | <--- | Positive_Stress | 1 | | | 0.001 |

The results reflected in Table 5.12 showed all the associated links and relationships to be significant ($p < 0.05$), except for behaviour disengagement's relations. In Horowitz's Stress Response Theory, trauma is the central aspect. The critic Horowitz postulates that a response could either lead to repetitive intrusion or an attempt to suppress the incident.[52] Consequently, the five-factor coping mechanisms represent Horowitz’s pathological stress responses to trauma through adjustment and response.

Table 5.13: Merging of Qualitative and Quantitative results

| OBJECTIVES | FINDINGS | CONCLUSIONS | Merging findings | CHALLENGES |
|---|---|---|---|---|
| Objective 1<br>Explore and describe the experience of midwives regarding maternal deaths and stillbirths. | Qualitative<br>• Psychological effect of MD and FSB on midwives<br>▪ Traumatised/Shocked<br>▪ Generalised Anxiety Disorder (GAD) related feeling<br>▪ Post-Traumatic Stress Disorder related feelings<br>▪ Emotional effects on midwives<br><br>• Physical effects of MD and FSB on midwives<br>▪ Poor physical health<br>▪ Poor appetite<br><br>• Social effects of MD and FSB on midwives<br>▪ Family impact<br>▪ Loneliness<br>▪ Blamed<br><br>• Career effects of MDs and FSBs on midwives<br>▪ Effects on the midwives' profession<br>▪ Effects on the work environment of midwives<br><br>• Emotional-focused coping mechanism<br>▪ Seeking social support<br>▪ Meditation<br>▪ Escape-avoidance and distancing<br>▪ Repression/forgetting event<br>▪ Drinking alcohol<br>▪ Venting<br>▪ Self-controlling<br>▪ Perseverance<br><br>• Problem-focused coping mechanism<br>▪ Positive reappraisal and acceptance<br>▪ Professional counselling | • MD and FSB effects on Midwives<br>○ Psychological effects<br>○ Physical effects<br>○ Social effects<br>○ Environmental effects<br>• Employed Coping mechanisms by midwives<br>○ Emotional focused coping<br>○ Problem – focused coping | • MD and FSB effects on midwives (objective 1, 2 and 3)<br><br>• Exposure to MD and FSB with inadequate professional support system (environment) to deal with MD and FSB (Objective 1 and 2)<br><br>• High death distress (objective 1 and 3)<br><br>• Coping mechanism (objective 1 and 4 | • Exposure to MDs and FSBs with inadequate professional and environmental support<br>• MD and FSB effects on midwives<br>• Death distress among midwives<br>• Emotional focused versus Problem focused coping mechanisms<br>• |
| Objective 2<br>Determine the midwives' level of occupation exposure to maternal deaths and stillbirths. | Quantitative<br>• Exposure to MD and FSB 31.4% (n= 44)<br>• FSBs a month ago more common than MDs, (25%, n=35) indicating poor quality of care given to women during labour<br>• Inadequate professional support systems at work 4.3%. (n=6)<br>• Younger midwives have high exposure to the most common causes of MD. (beta = 0.59)<br>• Inadequately prepared to professionally deal with MD and FSB events in the work place 48.6% (n= 68) mean of 1.8 and standard deviation of 1.02. | • Exposure to MD and FSB<br>○ Inadequacy of professional support systems that deal with MDs and FSBs<br>○ Inadequately prepared to professionally deal with MD and FSB events in the work place | | |
| | | | | |

| | | | | |
|---|---|---|---|---|
| Objective 3<br>Evaluate the self-reported level of stress among midwives due to exposure to maternal death and stillbirth. | Quantitative<br>○ High levels of distress related to death anxiety among midwives range from moderate 72.9%, (102) to high 26.4% (37)<br>▪ Midwives get increasingly death anxious when the number of deaths in charge increases over time ($r = 0.180$, $p < 0.05$).<br>▪ Death anxiety associated with a recent death in charge exposure with significant positive relations with number of deaths in charge ($r = 0.172$, $p < 0.05$) and the last time an FSB death was witnessed ($r = 0.180$, $p < 0.05$).<br><br>○ Death depression among midwives range from moderate distress 51.4 (72) to mild distress 41.4(58)<br>▪ High death depression among midwives in Postnatal and Neonatal wards ($r = -0.186$, $p < 0.05$)<br><br>○ Death obsession in midwives range from 62.9% (88) mild distress to moderate distress 30% (42)<br><br>▪ Midwives working at Antenatal Clinic are likely to have mild death obsession 62.9% (n=88)-<br>▪ Working in maternity negatively associated with death obsession ($r = -0.186$, $p < 0.05$)<br><br>▪ Death obsession was found to have a negative association ($r = - 0.239$, $p < 0.01$) with the extent of professional preparedness of the midwives to deal with a death event (1 = poorly prepared, 2 = well prepared).<br>▪ Hospital wards negatively associated with death obsession ($r = -0.186$, $p < 0.05$) and positively associated with death depression ($r = 0.177$, $p < 0.05$)<br>▪ Strong positive relationship between Occupational exposure to FSB and MD (beta = 0.55) and between death obsession and depression (beta = 0.38). | ▪ High death distress effect<br>○ Anxiety<br>○ Obsession<br>○ Depression | | |
| Objective 4<br>Determine the coping mechanism used by midwives to cope with the | Quantitative<br>• Self-blame 43.6% (n=61)<br>• Religion 45.7% (n=64)<br>• Self-destruction 37.9% (n=53) | Emotional focused coping mechanism<br>○ Self-blame<br>○ Religion | | |

| | | | | |
|---|---|---|---|---|
| after effect of maternal deaths and stillbirths in the absence of an EAP. | • Denial 35.7 (n=50)<br>• Behavior disengagement 29.3%(n=41)<br>• Positive reframing 16.4% (n=23)<br>• Acceptance 15% (n=21)<br>• Planning 20.7%(n=29)<br>• Active coping 17.9%(n=25)<br>• Venting 9%(n=6.4)<br>• Instrumental support 18%(n=12.9)<br>• Emotional support 11.4% (n=16)<br>• substance abuse 1.4% (n=2) | ○ Self-destruction<br>○ Denial<br>○ Behavior disengagement<br>○ substance abuse<br>○ Emotional support<br>Problem focused mechanism<br>○ Positive reframing<br>○ Acceptance<br>○ Planning<br>○ Active coping<br>○ Venting<br>○ Instrumental support | | |

Evidence for the development of EAP and implementation strategies

Table 5.13 above describes how the results of qualitative findings and quantitative results were merged. The results were merged using a side-by-side comparison approach or parallel database variant, according to Creswell et al.[46]. The results were for the evidence needed to develop the EAP and its implementation strategies. The study findings indicate that MDs and FSBs affect midwives that include psychological, physical, social effects and environmental effects. Moreover, midwives used emotional and problem-focused coping mechanisms in managing the effects of MDs and FSBs. These coping strategies assisted midwives in dealing with the death events whenever they happened. This finding is supported by objectives 1, 2 and 3.

Furthermore, midwives in the Khomas Region are exposed to high MDs and FSBs. They have inadequate professional and environmental support systems to deal with the death events as supported by objectives 1 and 2 of the study. This made midwives inadequately prepare for the professional handling of MD and FSB events in the workplace. There is an insufficient professional support system to deal with the MDs and FSBs.

Finally, midwives in the current study exhibited high death distress (objective 1 and 3) as evidenced by high death to moderate anxiety, moderate to mild distress, death depression and mild distress to moderate death obsession. As a result, the midwives used more emotional coping strategies than problem-focused ones, as evidenced by objectives 1 and 4.

## 5.6 SUMMARY OF FINDINGS

Chapter 4 presented the results and interpretation of the study. The first objective determined the midwives' level of occupational exposure to MD and SB. The findings indicated that exposure to MDs for a prolonged time had a significant impact on the midwives. The results implied that the levels of Occupational Exposure to Maternal Deaths at both public hospitals are determined by the reasons behind the occurrence of MDs, the number of MDs witnessed, and age group, years of experience and time spent working in high MD risk Wards. Thus, the findings suggest that prolonged occupational exposure to MDs has a significant impact on the midwife's welfare,

indicating that the years of experience as a registered midwife have a significant impact on the levels of exposure to MDs and the cause of the MD event. The results also indicated that the majority of the midwives were more likely (68.6%) or likely (23.6%) to use the EAP if it was available.

On the second objective, the findings indicated the self-reported stress level among midwives due to exposure to MD and SB. The results revealed that the midwives' high levels of distress were mainly related to death anxiety, mild to moderate due to death depression and moderate low due to death obsession. The last objective determines the coping mechanism used by midwives to cope with the after effect of MDs and SBs in the absence of an EAP on the Brief COPE Scale. It was found that midwives mainly used emotion-focused coping strategies that included self-blame, religion, and venting, self-distraction, denial and behavioural disengagement. Since emotional focused coping is maladaptive, it will be beneficial to assist midwives who use these coping methods in the positive adaptive problem-focused coping through interventions and tailor-made work programmes specific for midwives. The findings, therefore, suggested that midwives who encountered FSB should immediately be subjected to coping strategies under the Horowitz adjustment and negative stress model.

Chapter 6 that follows introduces phase 2 of the study and focuses on the conceptualisation of the study.

# CHAPTER SIX

# PHASE 2: CONCEPTUALISATION OF THE STUDY

# CONCEPTUAL FRAMEWORK BY DICKOFF, JAMES AND WIEDENBACH'S (1968): THE PRACTICE THEORY

## 6.1 INTRODUCTION

The previous phase presented and discussed the findings of the qualitative and quantitative part of the study and the merging of the results of the qualitative and quantitative of the study. This chapter discusses phase two of the study. The chapter also covered the conceptualisation of the study results that led to the logical framework of the development of the EAP. Grove et al.[125] define a conceptual framework as a set of highly nonfigurative terms related to concepts that describe assumptions, the phenomenon of interests and echo philosophical foundation. It can be stated that a conceptual framework classifies or categorises the phenomenon, explains the phenomenon of interest, expresses assumptions and reflects a philosophical ban that enables a researcher to link findings of the study to the body of knowledge and field of practice. The outcome of the situational analysis in the previous phase formed the basis for this chapter. Therefore, this phase answered the fifth objective that was to develop a conceptual framework that guided this study. The purpose of Phase 2 was to conceptualise the findings of Phase 1 and connect them to the practice theory of Dickoff et al.[54] frameworks. This helps to establish the connection between practice and theory. This was done by identifying the content of the activities that are stipulated under the theory in 6.2. The practice Theory includes the survey list components such as agent, recipient, context, dynamics, procedure, and terminus discussed in detail below.

## 6.2 DICKOFF, JAMES AND WIEDENBACH'S (1968) THE PRACTICE THEORY

Dickoff et al.[54] theory have three components, namely: the aim that specifies the purpose of activities in any given study, and a narrative on how to accomplish the six-fold activities to achieve the overall goal, and finally, the survey list ingredients. The survey list of this theory consisted of the following questions:

- Who performs the activity, i.e. the agent? The researcher, counsellor and management are the agents in this study.
- Who is the recipient of the activity? The recipients of the activity in this study were midwives.
- In what context is the activity performed? In this study, the activity was performed in the health care facility-maternity wards at referral hospitals in the Khomas Region (IHK and WCH)
- What are the dynamics? These are challenges that may hinder the activity from realising the endpoint.
- What are the procedures of the activity? The procedure activities in this study were the development of an EAP and implementation strategies for midwives affected by maternal death and stillbirths.
- What is the terminus or endpoint of the activity? It is the ability of midwives to cope with MDs and FSBs.

Table 6.1: The survey list according to Dickoff et al.54 in the context of this study.

| Survey list | Description |
|---|---|
| Agent | The researcher, hospital management, counsellor, Psychologist and Psychiatrist |
| Recipient | Midwives |
| Context | Health facilities |
| Dynamics | Challenges:<br>• MD and FSB effects on midwives;<br>• Exposure to MDs and FSBs with an inadequate professional and support system (environment) to deal with MDs and FSBs;<br>• Death distress among midwives;<br>• Emotional focused versus Problem focused coping mechanism (See table 5.11). |
| Procedures | • EAP and Implementation strategies developed |
| Terminus | • Ability of midwives to cope with MDs and FSB |

The figure below (6.1) shows the reasoning map of the activities adapted from Dickoff et al.[54] The Practice Theory guides the conceptualisation of phase 2 of the study.

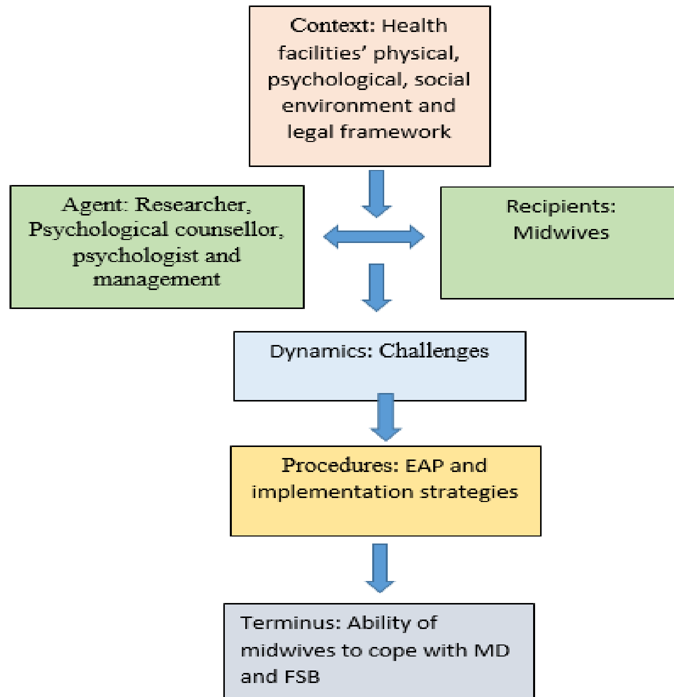



Figure 6.1: Reasoning map for the development of EAP and implementation strategies

### 6.2.1 Context

Dickoff et al.[54] define a context as the environment where the activity would have been conducted. According to the international standards, the context should be based on a physical environment that explains where the study or activity took place, and the psychological environment, social environment and legal framework. In this study, the physical environment was the two public referral hospitals (WCH and IHK) in the Khomas Region. Various characteristics of the physical, psychological and social environment are discussed below.

### 6.2.2 Characteristics of health facilities

The expected characteristics of health facilities include the physical environment, and here they should provide a conducive working environment that is supportive and safe to both employees and the clients to impact the EAP. The physical environment should also have sufficient space for training during the implementation of EAP. Moreover, the health facility should promote career

growth for employees, and there should also be a succession plan for younger employees to take over management positions upon retirement or the resignation of the current managers. There should also be rewards in non-monetary incentives given to the employees for good work performance to motivate them. Enough resources are vital components that a health institution should provide for health practitioners (midwives) to offer quality care.[166] These include enough materials and human resources that can reduce occupational health hazards among employees during the provision of health care. In addition, the agent, especially management, should promote a supportive social environment for the hospital human resources to function effectively and create an enabling environment suitable to provide support to the midwives. Management should also ensure a good channel of communication, trust, teamwork and social interaction within the workforce.[166] As described below, the characteristics of health facilities include the physical environment, psychological environment, social environment and legal framework.

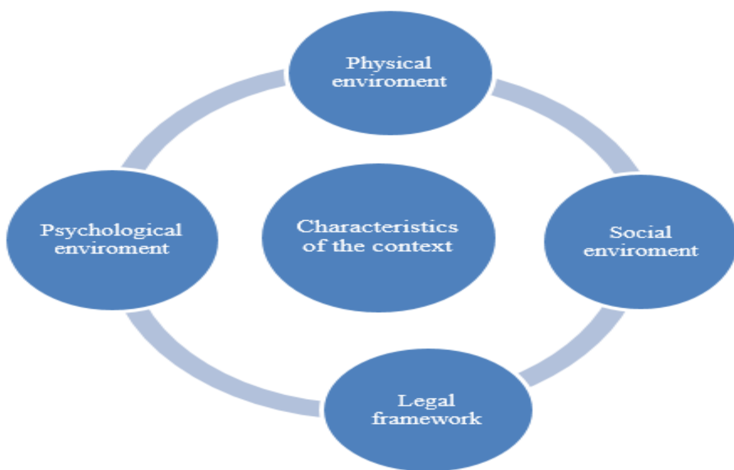



Figure 6.2: Characteristics of the context

6.2.2.1 Physical environment

The physical environment is defined as the place where people live, work or play.[167] In this context, the physical environments are the two hospitals where the study was conducted and where the EAP will be implemented. These are all referral hospitals, with one, the WCH, a national highest referral hospital with various specialisation departments. This hospital also has a maternity department where non-referral clients can walk in while the rest of the departments are for referrals d from all

regions in the country because it offers the highest level of care. The other hospital where the study was conducted, the IHK, also serves as an intermediate referral hospital in the region.

#### 6.2.2.2 Psychological environment

The psychological environment refers to the interaction of various features of the environment that are sources of stress and relevant to the employees' behaviours, such as how they feel, think and behave.[167] In this study, the psychological environment included opportunities for counselling to enable the midwives to deal with all the psychological challenges such as emotional trauma and shock experiences, as depicted in Table 5.13.

#### 6.2.2.3 Social environment

The social environment is described as the immediate social setting where people live or where something happens or develops and where there is social cohesion and social values and norms.[97] It includes the culture in which the individual was educated or lived and the people and institutions they interact with. In this study, the social environment includes social support in the hospital environment that is needed to counter the social effects experienced for recipients to function optimally (see Table 5.13).

#### 6.2.2.4 Legal framework

In this context, the legal framework refers to policies and guidelines related to the midwives' wellness at the workplace and legislation that guides the practice of some agents such as psychological counsellors, psychologists and psychiatrists. These legal parameters include the MoHSS National Occupational Health Policy of 2006.[168] The legal framework of the Health Profession Council of Namibia (HPCN) as an umbrella body has various legislations on health professionals such as the Nursing Act and regulations relating to the scope of practice of nurses and midwives, (Government Gazette No 3249, Notice 153 of 2004 as amended by Act No 6703 of 2018), regulations relating to the scope of practice of Social work and the Psychology Act legislation (Government Gazette No. 4218, Notice 30 2009), legislation on the Medical and Dental Act and regulations that regulate the scope of practice of the Medical and Dental Practitioners

(Government Gazette No. 6249, Notice No. 35 of 2017) and the Regulations relating to the occupational health and safety of employees at work (Regulation 156 of 1997 as per Labour Act No 11 of 2007 as amended by Labour Amendment Act 2 of 2012) that caters for a safe working environment.[170,171,172,173] The HPCN legislations regulate the practice of counsellors, psychologists and psychiatrists. The above-noted regulations ensure that the health personnel correctly conduct their practice. This is vital as these professionals will be part of the agents in the programme.

The scope of practice of an enrolled and registered midwife is quite expansive. It includes assessing and diagnosing the health need of a patient; prescribing, providing and executing a midwifery regimen to meet the needs of a patient; handling the delivery and the postnatal period; establishing and maintaining an environment in which the physical and mental health of a patient is promoted, and referring cases that they cannot manage to other health professionals.[169] Further roles include identifying and managing high risk factors and emergency conditions in a patient during labour, delivery and the postnatal period, which are all done by a registered midwife. It should be noted that an enrolled midwife provides the above normal midwifery care but only under the direct or indirect supervision of a registered midwife.[169]

The psychological counsellors' scope of practice focuses on the following: administering and interpreting the psychological testing and assessment of a person's aptitude, interest and attitudes; counselling people on their career, community mental health etc.; assisting a clinical psychologist or an educational psychologist in carrying out other duties and making referrals of persons to a psychologist or other health professionals for further management.[170] In addition, a psychologist assesses, diagnoses, and treats psychological and mental ailments and disorders in humans, and dysfunctions in human behaviour; assists any person, groups of people, couples and families on their wellbeing and relationships, work or professions or occupations, and mental health; performs psychological assessments and diagnoses on patients; makes psychological interventions such as counselling and psychotherapy and behaviour therapy, family psychotherapy, cognitive psychotherapy, psychoanalysis and psychoanalytical psychotherapy; assists patients to implement changes and alleviate any distress or disorder; assist with career development; and refers patients to other health professionals for further management.[170]

The government notice 35 of 2017, Medical and Dental Act and regulation stipulate the various duties falling under the scope of practice of a Psychiatrist. These include the duty to take a medical history and clinical examination of a patient for purposes of diagnosing physical, mental or psycho-social health conditions; performing medical or clinical procedures on a patient as part of diagnosing, preventing, treating, rehabilitating or alleviating the medical condition of that patient, and prescribing or administering of any medicine, substance or medical device; and referring f a patient to an appropriate health practitioner.[171]

Regulations relating to occupational health are also important. The National Occupational Health Policy of 2006 links occupational health with the promotion and protection of employees' health, including the relationship between work and the health of employees at the workplace.[170] The work environment is expected to have a wellness programme in place that includes an EAP designed to support health professionals including midwives that are affected by any work and personal problems, in order to assist them to balance the work and non-work life. This helps to improve the employees' quality of work life and prod[168] It is, therefore, the responsibility of to assist them in balancing at the work place without any charge. The type of occupational health services to be provided is dependent on the nature and occupational exposure to the risk factors.[168]

The regulations relating to the health and safety of employees at work (Regulation 156 of 1997) specifies that employers ought to reduce the risks caused by the hazards by minimising both the effects of the hazards on employees and the level and period of their exposure to the hazard by arrangement and organisation of work.[172] This regulation applies to midwives since they are regularly exposed to risks at their workplace. The health and safety regulations further stipulate that "an employer shall, in consultation with the workplace safety representatives, regularly prepare and review a written policy and programme on the protection of the health and safety of employees". The programme should target improving the working conditions at the workplace, including but not limited to health and safety awareness and wellness and training programmes.[172]

Hazards are classified as physical, biological, psycho-social, chemical and ergonomic hazards, with workers being exposed to different hazards depending on the work process and working

environment.[9] The most common hazards in the midwives' environment include ergonomic chemical, biological, psycho-social and physical. Contacts with human fluids are a biological hazard, while noise and slipping on wet floors are categorised as physical hazards to midwives. Gases that include anaesthetic and oxygen are classified as chemical hazards, whereas lifting patients, repetitive motion, fatigue and pushing beds and trolleys, amongst others, are ergonomic hazards.[9] Witnessing or experiencing death events that include MDs and FSBs, which are a subject in this study, is regarded as a psycho-social hazard as it affects the mental state of the midwives and may lead to poor performance and job dissatisfaction.[9] Therefore, an EAP is one of the means through which work-related hazards and personal life problems experienced by employees could be addressed.

### 6.2.3 Agent

An agent is defined by Dickoff et al.[54] as someone who can make the activity happen or make it materialise. An agent is also any person who specialises in enabling the change process whereby new values, attitudes, and behaviour are adopted.[54] In this study, the agents could be the researcher, psychological counsellor (referred to as a counsellor in this study), psychologist, Psychiatrist, and management of the health facilities where the study was conducted. A researcher is a person who performs scientific research either independently or by collaborating with other people.[51] Llewelyn et al.[173] defines a psychological counsellor as a professional who assists people with mental health support through counselling to resolve distress and crises. A psychologist is a person who assesses, diagnoses, and treats people who are suffering from distress and serious mental disorders.[173] In addition, a psychiatrist is a clinician or medical doctor who specialises in diagnosing treatment and prevention mental disorders.[173] Finally, this researcher is a health professional and an educator while the psychological counsellor, psychologist and the management are part of the health facilities where the programme will be implemented.

Figure 6.3: Agents in this study

6.2.3.1 Characteristics and experiences that an agent needs to facilitate EAP success

An agent must facilitate the process effectively and bring about the desired outcome, and as such, the researcher must have the following prerequisite characteristics or qualities. The first quality is that the researcher should have scientific knowledge and relevant experience in the research process and be conversant with the developed program (EAP).

The researcher also needs to be assertive, self-motivated, competent and confident to execute the responsibilities that come with the project. Furthermore, the researcher should understand the policies that affect the activities to be implemented under the EAP, such as the occupational health policy and labour regulations. This assists the implementation process and subsequently makes it effective. In this study, the agent who is an educator shall play a vital role in empowering and transferring interpersonal skills to other agents (hospital management and counsellor) on what has to be done and how the program should be implemented. The researcher needs to be creative in the development of the EAP and implementation strategies.

The counsellor, psychologist, and Psychiatrist should possess good communication skills such as being a good listener, simplifying the message communicated to the recipient, and being neutral during the engagement with recipients.[166] Effective communication qualities are also needed; as a result, the counsellor, psychologist and Psychiatrist should have the ability to avoid defamatory language with recipients and hold personal values such as trustworthiness, competency, honesty and loyalty.[166] Moreover, the counsellor, psychologist and Psychiatrist should be respectful and conform to etiquette such as addressing recipients by their names, showing a willingness to answer their questions without being judgmental, paraphrasing what the recipient would have said, having enough time to listen to the recipients and by maintaining confidentiality. Empathy is also a vital characteristic that a counsellor, psychologist and Psychiatrist should have as it can lead to gratified recipients. Empathy is when the counsellor gets an understanding of the recipient's position without being emotionally involved.[166]

Most importantly, the hospital management as an agent should possess good leadership, be analytical, coordinate, and have other social skills to render support to the recipients during the implementation process of the EAP. Possession of these qualities will therefore ease the working environment and make it more conducive to the recipients.

6.2.3.2 Role of agents

The agent plays a very crucial role in the realisation of the outcome of the study. In this study, the researcher, who is an educator, needed to provide skills to the recipients of the EAP programme. Moreover, the researcher shall also play a key role in developing the EAP and implementation strategies. Here, the researcher as a developer of the EAP and strategies for implementation will facilitate and empower other agents during program implementation by training other agents, namely; the hospital management together with other agents in the MoHSS to make sure that the midwives' managers are trained and knowledgeable on how the EAP should be implemented.

In addition, as an agent, the hospital management should ensure that the working environment is made conducive for the midwives. This will be done by providing support that was found lacking

to the recipients during the programme's implementation. The study's findings showed that recipients were unprepared to deal with death events; as a result, the hospital management will play a role in conducting in-service training and workshops for the recipients to empower them.

The counsellor also plays a crucial role in conducting a mental assessment and providing professional counselling to the recipients during the implementation of the programme. In this regard, the counsellor ensures that recipients cope positively with their problems, thus promoting a balance between the work and non-work life of the midwives.

The clinical professionals, such as psychologists and psychiatrists, play the role of making appropriate diagnoses and treatment and in assisting recipients who would be experiencing symptoms of severe psychological effects such as GAD related feelings, PTSD related feelings and emotional disorders when the program is implemented.

### 6.2.4 Recipient

A recipient is a beneficiary of activities.[54] In this study, the midwives affected by MDs and FSBs at WCH and IHK are the recipients. The concept midwife is derived from the French language, which means "with women.[63(pg1)] According to the International Confederation of Midwives[63(pg1)], “a midwife is a person who has completed a midwifery education programme that is based on the ICM Essential Competencies for Basic Midwifery Practice and the framework of the ICM Global Standards for Midwifery Education and is recognised in the country where it is located; who has acquired the requisite qualifications to be registered and legally licensed to practice midwifery and use the title 'midwife; and who demonstrates competency in the practice of midwifery”. Moreover, a midwife’s work revolves around providing care to women, their families and the community in which they live.[174] Midwives provide care to families prenatally, pregnant women, during labour and delivery, postnatal, and newborns and infants. In addition, the midwives’ roles in the community settings include advocating for women and their families through health education and counselling, promotion of family planning and breastfeeding.[169] Once midwives are licensed, they can practice in health facilities, communities and homes.[63]

#### 6.2.4.1 Characteristics of good midwives

The recipients in this study, all adults that were registered and enrolled midwives, possessed various notable qualities. A good midwife is expected to have specific characteristics, including being knowledgeable, to provide quality health care services to their clients to prevent MDs, neonatal deaths and other birth complications. They should also be willing to get involved, which is a key characteristic of midwives as the EAP is voluntary and will require midwives to have a positive drive for participation during the implementation of the programme.

Furthermore, midwives need to be respectful, accountable and have good communication and interpersonal relations with their colleagues to prevent challenges such as isolation resulting from MDs and FSBs.[63] Perseverance is another quality expected of midwives for them to cope with the adverse events that happen in their lives. These characteristics will help the recipients to withstand the challenges that they face in their daily professional lives. The role of the midwives is provided for in the Nursing Act, 2004 (Act No. 8 of 2004) and the regulations that permit the practice of the registered and enrolled nurses and midwives.[169] Ultimately, midwives, as health care professionals, need to be caring, honest and have strategic thinking ability.[166]

#### 6.2.4.2 Challenges affecting midwives

As per Table 5.13, the study showed that the midwives experienced various challenges such as MD and FSB effects on midwives, exposure to MDs and FSBs with inadequate professional and environmental support, death distress among midwives, and a conflict between emotional focused and problem-focused coping mechanisms. These challenges require midwives to possess the necessary skills to overcome them. Amongst others, midwives should have a good receptive mind to the knowledge and counselling services that will be provided during the EAPs. Finally, midwives should be committed to using the EAP services for the duration of the programme.

#### 6.2.4.3 Skills needed to overcome the challenges

The possibilities of overcoming the challenge are largely influenced by the recipient's perceived outcome of the implementation of the EAP. If, for example, the midwives consider that an improvement of the Quality of Work Life will help them balance the work life and improve their quality of work, then the implementation of the programme would most likely be easy. However, failure to perceive the benefits thereof will make the implementation very difficult. In addition, and with regards to Professional development: if the recipients see the EAP as a way of improving their professional development, they will be willing to participate in the programme and vice versa.

Finally, with regards to recipients and agent interrelationships, a poor relationship between the agent and recipient will affect the implementation of the programme. In this study, a poor relationship between the counsellor, hospital management and the midwives will make the midwives hesitant to access the EAP services.

### 6.2.5 Dynamics [challenges]

Dickoff et al.[54] explain that dynamics are internal energy or motivating factors that enable an individual to become successful. These challenges were taken from the merging presented in Table 5.13 at the end of Chapter 5. The following challenges were found to have affected the midwives' ability to function or do certain things: MD and FSB effects on midwives, exposure to MDs and FSBs with inadequate professional and environmental support, death distress among midwives, and emotional focused versus problem-focused coping mechanism. These dynamics/challenges are explained in detail in chapters 4 and 5 of the study.

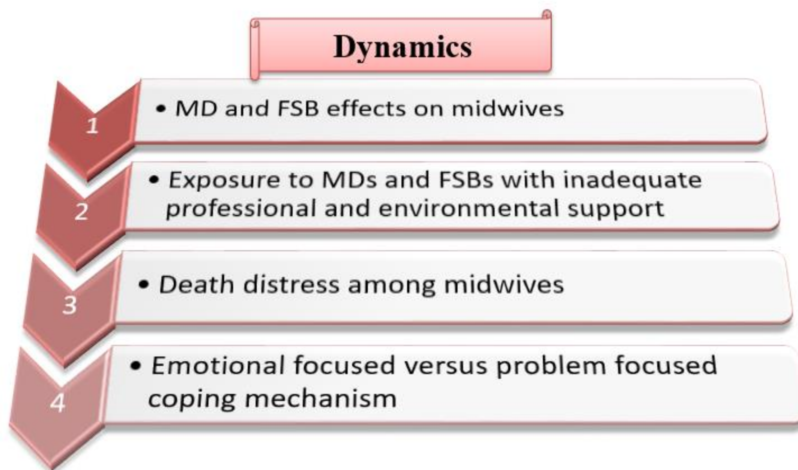



Figure 6.4: Dynamics of the study

### 6.2.6 Procedure

According to Dickoff et al.[54], procedure relates to the rules or processes used to guide or are followed on how activities should be carried out to achieve the terminus. Dickoff et al.[54] further explain that the protocol or procedure for reaching a goal does not have an order that needs to be followed, but they allow more latitude for an activity to be achieved. This study followed this process in the development of EAP and implementation strategies. The procedures were based on the challenges that were identified in Phase 1 of the study. The procedures aimed at developing an EAP and implementation strategies as discussed in Chapter 7 of the study.

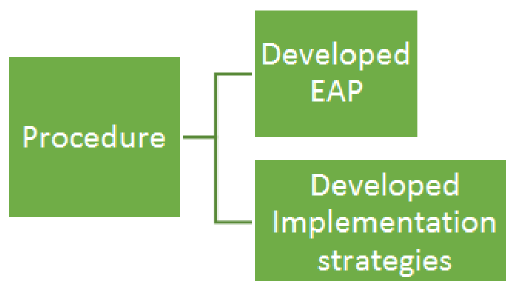



Figure 6.5: Procedure of the study

### 6.2.6.1 The Employee Assistance Programme

An EAP is a work-based voluntary programme designed to assist organisations in addressing productivity issues and employees to identify and resolve professional and personal concerns through free and short-term counselling, confidential assessments, referrals, and follow-up services to employees who have personal and work-related problems.[1, 175] An EAP was developed in this study to assist the employees in mitigating the challenges in the dynamic. The counselling that is provided under EAP is the short-term one, about six sessions. The key components of the counselling include; Developing the client/clinician relationship; Clarifying and assessing the presenting problem or situation; Identifying and setting counselling or treatment goals; Designing and implementing interventions; and Planning, termination, and follow-up. [175] Confidential assessment involves assessing individual employees who are troubled to timely identify their problems after the exposure to a traumatic event of MD and FSB. The assessments will be conducted at the midwives' workplace by internal EAP staff or outside their workplace by external professionals. Midwives can either do a self-referral or be referred by others to the EAP officer (psychological counsellor) for intervention. In cases where the EAP officer cannot manage the problem or at the midwife preference, a further referral can then be done to the psychologist and subsequently to the psychiatrist internal or external EAP. Detailed information on how the EAP will work is provided in chapter 7.

### 6.2.6.2 Implementation strategies developed to support midwives affected by MDs and FSBs

Strategies are defined as action plans designed to achieve long-term objectives.[57] In this study, implementation strategies were developed using Howe's C@PS model developed in 1999 and modified in 2011. The Compass Aligned Performance System is a strategic management tool aimed at simplifying the strategies and making a plan to implement design strategies that are to be achieved by an organisation.[57] Compass Aligned Performance System consists of components of a strategic plan that include strategic objectives, critical success factors, key performance indicators, values and vision. According to Howe[57], the strategies need to be made simple to make the implementation process easy. Thus, the strategies were simplified, and the developed strategies were summarised.

The strategies were developed based on the dynamics (challenges) identified in Phase 1 of the study. The strategies comprise of the following: provision of support services to midwives through an EAP at the workplace, training of midwives on how to deal with MDs and FSBs, motivation of midwives through a visible support system from management, and training supervisors on the EAP and how to make referrals. Details on the developed implementation strategies are presented in Phase 3 (chapter 7 page 225) of the study.

### 6.2.7 Terminus

Terminus is defined as the last stage or the preferred end result of an activity of a project that would have been carried out.[54] This end result should be carried out by the agents in the project through the procedures, and it confirms whether set objectives were achieved or not. The terminus of this study is the ability of affected midwives to cope with MDs and FSBs after going through the developed EAP. It is expected that midwives would be better prepared for death events after obtaining training and counselling support through EAP and contribute to creating a safer and conducive working environment and using positive coping mechanisms effectively. This is expected to create a balance in the quality of work and non-work life of the midwife.

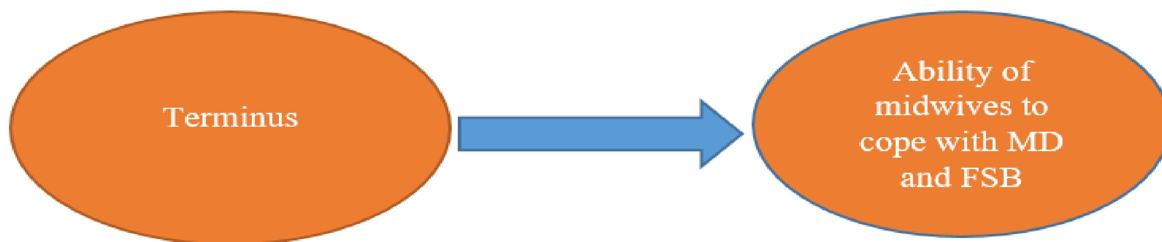



Figure 6.6: Terminus of the study

## 6.3 SUMMARY

This chapter discussed the conceptual framework that formed the basis of Phase 2 of the study. The Practice Theory postulated by Dickoff et al. (1968)[54] was applied following the six survey lists, agent, recipient, context, procedure, dynamics and the terminus to realise the end product or terminus of the study.

Chapter 7 and Phase 3 that follow describe the EAP development processes.

# CHAPTER SEVEN

# DEVELOPMENT OF THE EAP AND IMPLEMENTATION STRATEGIES TO SUPPORT MIDWIVES AFFECTED BY MATERNAL DEATHS AND STILLBIRTHS

## 7.1 INTRODUCTION

The previous chapter discussed the conceptualisation of the study according to Dickoff et al. (1968)[56] concepts, which included a survey list consisting of the agent, recipient, context, procedure, dynamics, and terminus. Chapter 5 further served as a basis on which the development of the EAP was based.

Chapter 7 describes the third phase of the study wherein the purpose was to develop an e EAP that supports midwives affected by MDs and FSBs in the Khomas Region, as depicted by the results from the situational analysis. The chapter further elaborates on the development of the strategies necessary for the guidance of the program implementation. The objectives of this phase were to develop an EAP that would support midwives in coping with the effects of MDs and SBs and develop implementation strategies for the EAP to support these affected midwives.

## 7.2 OVERVIEW OF THE DEVELOPMENT OF THE EMPLOYEE ASSISTANCE PROGRAMME

An EAP is a work-based voluntary programme that provides free and short-term counselling, confidential assessments, referrals and follow-up services to employees with personal and work-related problems.[175] The findings from the situational analysis indicated the need for the development of an EAP. The necessity for this development of an EAP was based on the recognition of various challenges that included MD and FSB effects on midwives, exposure to MDs and FSBs with inadequate professional and environmental support, death distress among midwives, and emotional focused versus problem-focused coping mechanisms. Therefore, the EAP is developed to support the affected midwives, and it is expected that they should be able to cope with MDs and FSBs after going through the programme. The structure of the programme is explained below.

## 7.3 STRUCTURE OF EMPLOYEE ASSISTANCE PROGRAMME

The programme is based on a particular theoretical foundation. It consists of numerous components that include the philosophical basis, aims, principles, objectives, approach, the content of EAP/activities, expected outcome and evaluation of the process, as discussed below.

### 7.3.1 Philosophical basis of Employee Assistance Programme

The development of the EAP was based on Lokanadha and Mohan's (2010)[58] QWL model that is described below. Quality of Work Life is defined as a favourable and unfavourable working environment and an employee's satisfaction with the work environment. [56,133]

Quality Work Life includes the provision of an appropriate safe work environment, occupational health care and suitable working time.[56] This model was deemed fit in EAP development as midwives' well-being was affected by the poor work environment resulting in poor quality of work life. The model has five dimensions of QWL such as health and well-being, job security, job satisfaction and competence development. The application of these dimensions in this study is described below.

Health and well-being look at the physical and psychological aspects of employees in their working. In this study, this dimension expands on how the challenges identified in Phase 1, such as the physical, psychological, and emotional effects, will be addressed upon implementation of the EAP. Therefore, a stressful working environment has a negative impact on the health and well-being of the midwives, resulting in physical illness and psychological disorders, as was observed in this study.

The provision of job security looks at measures that promote the improvement of work morale amongst employees. In the current study, midwives who had experienced MD and FSB were found to have developed job insecurities due to fear of litigation by the HPCN. This component may undesirably affect the employees' morale, inspiration and loyalty to an organisation.[56] An employee's job satisfaction is considered how an employee views their jobs in their work

environment.[134] In this context, the study's midwives expressed concerns over job dissatisfaction due to a poor working environment or poor support at work. This changes the cognitive, attitude and social behaviour of the employees toward their work. Developing an occupational health programme, such as an EAP, could assist in overcoming the negative factors that trigger the sense of job dissatisfaction within midwives in the Khomas Region. Moreover, competency development motivates career growth. This can be applied in this study by providing a support system in the workplace that can encourage workplace learning and in-service training developed in the EAP.

The fact that non-work life balance aspects consider the balance between the work and home life of an employee and seek to create a balance in the two makes the environment vital in reducing perceived stress among employees in an organisation.[56, 134] This component can be applied in this study since midwives have experienced personal and professional challenges. In addition, the development of an EAP is henceforth expected to support midwives maintain a balance between work and home environment to improve productivity.

### 7.3.2 Aim of the Employee Assistance Programme

The EAP aims to facilitate the management of effects of MDs and FSBs, high distress, exposure of MDs and FSBs, and support midwives in coping with the effects of MDs and FSBs to improve their quality of work life.

### 7.3.3 Principles of the Employee Assistance Programme

The EAP should consist of specific vital principles to ensure that an employee participates in the programme without any fear. The principles include privacy and voluntarism, confidentiality, protection from stigmatisation and timeous intervention.

#### 7.3.3.1 Privacy and Voluntarism

Primarily, the programme should ensure that the privacy of the midwives is maintained. It should further ensure that the midwives information is kept confidential after the consultation to avoid stereotyping and discrimination (see Table 5.13). The EAP will ensure this by requiring the use of a private room to ensure counsellor-client privilege and confidentiality during the consultation

with midwives. This will ensure continuity in the provision of services from the programme. Finally, participation in the EAP should be voluntary, and recipients not be coerced to participate in the programme.

7.3.3.2 Confidentiality

Confidentiality is considered a fundamental tenet of the EAP principles that should be maintained at all times. This principle includes the right of an individual midwife to have their particular information shared through EAP maintained in confidence. A confirmation of the client's rights should be given in writing and be provided to all midwives before they are offered services. A confidentiality agreement should be made available to the midwives who participate in the programme. If they wish for the disclosure of personal information, they ought to consent in writing. However, Attridge[12] states that employees' rights are not absolute as their confidentiality can be breached in cases where their colleagues or the people they care for are in danger. The EAP counsellor, psychologist or psychiatrist has a right to inform the employer about the well-being and progress of the midwife with the midwife's consent. Therefore, shared confidentiality agreements need to be in place. The exact information that will be shared with the employer and how it should be shared should also be discussed and agreed upon with the client. It should nevertheless be borne in mind that inappropriate disclosure of the midwife information to a third party constitutes an unlawful transgression or misconduct. The midwives' personal data should be protected so that only an EAP professional can access such private information. Confidentiality helps maintain trust, mutual respect and honesty between the midwives and providers, such as counsellors and other health professionals, of services in the EAP. This principle is considered a key element in counselling sessions.

7.3.3.3 Protection from stigmatisation

Employees' perceptions of stigma at the workplace are regarded as a major barrier to participation in EAPs.[2] Treating all employees as equal is considered one of the best ways of promoting the use of the EAP at the workplace in the event of substantial personal challenges like what has been observed amongst the midwives in this study.

#### 7.3.3.4 Timeous intervention

It is expected that for an EAP to be as effective, prompt identification of problems among employees will be made, and a timeous referral to the EAP practitioner will be made. This will improve productivity and job satisfaction among employees.

### 7.3.4 The approach of the Employee Assistance Programme

An EAP can be provided through the s internal model, external model and blended approach. The mode of provision depends on factors such as the availability of personnel to render services, preferences of the midwives in the programme and availability of funding for the provision of required services. Even though an EAP has many models, as specified above, the EAP developed for this study will be provided through a blended approach.

The EAP for this study is envisaged to use a combination of internal and external approaches. Using this model, midwives will be offered EAP services at their workplace by internal EAP staff and outside their workplace by external professionals. Access to an EAP can be in different categories; an employee can self-referral after an MD or FSB event or be referred by others. Once a supervisor identifies a troubled midwife within the workplace, they will be referred to the EAP within the workplace for intervention. The internal model can be the best approach in this context as participants in the programme work shifts, making it easier for them to access the programme. However, external services may also be sought under the following instances: making referral cases to a provider that may not be available within the MoHSS at the time of need, such as psychologists or psychiatrists, at the midwives' request or as deemed necessary by the EAP officer.

### 7.3.5 Objectives of the Employee Assistance Programme

For an EAP to be successful, it needs to have objectives that can guide the achievement of the aim of the programme. The following objectives of this programme were derived from the challenges that were identified in phase one of this study:

- To enhance the skills of midwives to deal with MD and FSB events of patients under their care,

- Improve the working environment of midwives affected by MDs and FSBs to increase job satisfaction and job performance,
- To manage the high death distress among midwives and improve resilience among midwives,
- To enhance the well-being and positive coping behaviour of midwives.

### 7.3.6 Content of the Employee Assistance Programme

The content of the EAP was determined using the data from the situational analysis in Phase one of this study (see Table 5.13). It followed the SAEAPA 2015 standards based on international standards.[1] The content of the EAP addressed the following: enhancing the skills of midwives to deal with MD and FSB events of patients under their care, managing the high death distress among midwives to promote the health and well-being of midwives, improving the working environment of midwives to increase job satisfaction and job performance, and promoting positive coping strategies to enhance the well-being of midwives. The skills of the midwives will be improved through the in-service training programme for midwives developed under EAP to deal with MD and FSB. To manage death distress, midwives are assisted through, amongst others, critical incident identification and intervention planning, debriefing services, short term counselling, referral and treatment, monitoring and follow-up. The working environment of midwives is improved by providing EAP services such as debriefing, individual assessments, counselling and referral etc., to increase job satisfaction and job performance. Positive coping strategies are promoted through training on the strengthening of positive coping mechanisms to enhance the well-being of midwives.

All activities are aimed to support midwives to cope with the effects of MDs and FSBs to improve their quality of work life. In addition, hospital management and midwives' supervisors who need to offer support to the midwives are also included in the activities that the programme will provide. The activities that the EAP will provide are described and discussed below.

#### 7.3.6.1 Description of the Employee Assistance Programme activities

In this programme, various activities will be performed in the form of clinical and non-clinical services to be offered to the participants. These include:

- Critical incident identification and intervention planning,
- Debriefing services,
- Individual assessment and referral,
- Referral and treatment,
- Short term counselling intervention,
- Monitoring,
- Follow-up,
- Training.

Clinical services

7.3.6.2 Critical incident identification and intervention planning

A critical incident in this context is when a midwife experiences a distressing situation that overwhelms the midwife's normal coping ability. This occurs as a result of a midwife's experience of distress in their working environment. If these problems are identified during the assessment level, the EAP practitioner (in this case, a counsellor) has to resolve the midwife's problem. The critical incidents service is available 24 hours via onsite support, telephone or advice line/helpline and online services with the EAP counsellor. The 24 hours is necessitated by the nature of the midwives' jobs as they work shifts with MDs and FSBs happening anytime. On the same day, onsite support or call back for midwives in a crisis or with immediate needs should be done. Therefore, the EAP practitioner should practice positive confrontation, inspiration, and short-term interventions with midwives during a call back.

7.3.6.3 Debriefing services

This service aims to attend to the immediate traumatic experience after an MD and FSB and help normalise the situation at work. Conducting debriefings after the incidents is necessary. It alleviates stressful situations and anxiety in which midwives may find themselves that it can spill over to their families if no intervention is made. Formal debriefing that consists of peer debriefers (all midwives who were involved in the MD and FSB) and an EAP practitioner should be conducted. This process should be done without casting blame on anyone, and all midwives should

be given a chance to express their feelings. Therefore, a timeline should be set to conduct the debriefing process (it should be done within 48 hours after the event).

#### 7.3.6.4 Individual assessment and referral

A further step or activity expected in this programme is to conduct an assessment on the employees who are troubled to timely identify the midwives' problems and the magnitude of the problems that may affect their job performance, present behavioural risks and promote a healthy and safe work environment. Since this programme is a self-referral programme, midwives will be encouraged to describe the incident, how they felt and identify their strong points and weaknesses. This will help the counsellor during the ongoing processes of the consultation with the midwives. All midwives will have a mental assessment during their first visits. Once a problem is identified, the midwife is referred to the appropriate health professional for further management, depending on the problem. Thereafter, a midwife is expected to balance their work and non-work life and consequently improve the QWL.

#### 7.3.6.5 Referral and treatment

Midwives who are experiencing symptoms of severe psychological effects such as GAD related feelings, PTSD and emotional disorders should be referred to relevant clinical professionals, such as a psychologist and psychiatrist, within the organisation for appropriate diagnosis, treatment and assistance. Since this EAP will use a blended approach, the midwives could be referred to the relevant health professionals mentioned earlier within the MoHSS or external to a professional of the midwives' choice. The midwives have the right to be referred to any psychiatrist or psychologist outside their working environment.

#### 7.3.6.6 Short term counselling intervention

One on one counselling services with the EAP practitioner is mandatory, and it should be based on the individual midwife's identified problems. This aims to address the psychological, physical and social effects that the midwives would have experienced as a result of MDs and FSBs. Short term counselling needs to be conducted and should consist of six sessions per troubled midwife.

Counselling is aimed at improving midwives' symptoms of depression, anxiety, stress etc. However, midwives who experienced the same death incident may be counselled together if they wish so. This may help the midwives support each other and promote perseverance and wellness among midwives. In an event where a troubled midwife is booked off due to an MD and FSB, counselling can help such a midwife to reintegrate faster with colleagues in their work environment.

#### 7.3.6.7 Monitoring

This process includes ongoing tracking of midwives on the progress that they are making while receiving EAP services. This can be done by identifying and assessing the affected midwives' job performance, health and productivity. Monitoring standardised tools need to be in place so that EAP workers can make sure that all monitoring is documented. This includes Standard Operating Procedures (SOPs) for counselling and registers recording the midwives' visits to an EAP, including the referrals to the outside services. Therefore, individual midwives will be informed that monitoring records from the visits to the EAP will be kept and destroyed five years after case closure. Case closure reports should also be provided at the end of service provision.

#### 7.3.6.8 Follow-up

Making follow-ups on midwives in the programme aims to see if their conditions would have improved after receiving EAP services such as counselling or referral to clinical professionals for treatment. Follow up should be conducted regularly (after every second visit to the EAP service provider and after completing interventions). Employees referred outside an organisation should submit a comprehensive progress report from the clinical professional to the EAP professional within the organisation (MoHSS). Consent will, however, be sought from the individual midwife should the employer request information from the EAP service provider.

Non- Clinical services

7.3.6.9 Training

Training should be conducted both for affected midwives, their supervisors and hospital management. The types of training may vary according to the identified challenges in the situational analysis of the study. The ongoing education training can be conducted in collaboration with other internal departments in the two training hospitals, namely WCH and IHK.

The training should be conducted for the following groups:

- In-service training program for midwives,
- Training program for supervisors and hospital management.

Table 7.1: A Training programme for midwives

| Training content for the midwives in-service training program |
|---|
| • In-service training on preparedness on how to deal with exposure to MD and FSB events.<br>• Training on how to manage death distress from MDs and FSBs.<br>• Training on stress management from exposure and high distress to MDs and FSBs.<br>• Training on how to improve resilience in the workplace after inadequate professional and environmental support.<br>• Training on professional career development/career counselling after inadequate professional and environmental support.<br>• Training on grief and loss management after exposure to traumatic death events (MDs and FSBs).<br>• Training of midwives on the strengthening of positive coping strategies.<br>• Training of midwives on the importance of counselling service after an MD and FSB. |

Table 7.2: Training programme for supervisors and hospital management

| Training programme content for supervisors and hospital management |
| --- |
| • Training on the identification of troubled midwives in the workplace.<br>• Training on how to manage death distress from MDs and FSBs.<br>• Training on the provision of environmental support to midwives and forge teamwork.<br>• Training on how to manage death distress among midwives who are exposed to MDs and FSBs.<br>• Training on the promotion of resilience among midwives through the provision of professional support at the workplace.<br>• Training on the impact of high death distress and exposure to MDs and FSBs.<br>• Training on the importance of professional career development among employees.<br>• Training on the strengthening of positive coping mechanisms among midwives. |

Training will be conducted using the following training methods:

- Lecture (Power Point presentation)
- Debate
- Group discussions and presentation of feedback
- Role-plays

The following materials will be used to advertise the programme during the training of supervisors: pamphlets, posters and flyers.

### 7.3.7 The expected outcome of EAP

Once the EAP is implemented, the following outcomes are expected: improved skills for midwives on how to deal with MDs and FSBs, improved working environment and developed resilience among midwives, reduced distress that leads to enhanced health care, well-being and promotion of positive midwives, and achievement of a balance between work and non-work life for the midwives.

#### 7.3.7.1 Accessibility of the EAP

The EAP will be available for all midwives affected by MDs and FSBs who need the services. The EAP services will be provided at the two hospitals where the study was conducted. Referral cases can get the services at the psychologist and psychiatrist at the WCH hospital as it is the only place with such clinical professionals. This might not negatively affect the midwives from IHK as both hospitals are close to each other. However, midwives may also be referred to the psychologist or psychiatrist of their choice within the Khomas Region.

Face to face EAP services will be available from 08H00 to 17H00 onsite during the week. An e-booking system, telephone or WhatsApp platform will be available for participants seeking to make bookings to avoid unnecessary consultation waiting time. The services will be available after working hours through a telephone from 17H01 to 07H59 in cases of critical stressful events. The midwives who need to be referred to external providers for further intervention will access the services available during working hours and via telephone, email and WhatsApp after working hours and at the weekends. During weekends, there shall be an EAP practitioner on call for critical incidents. The services will be provided in English as an official language. All midwives can speak the language or another local language spoken by the EAP practitioner, considering the understanding of the client.

#### 7.3.7.2 Participation in the EAP

Detailed information on the existence of the EAP and its importance should be made available by the EAP practitioner to all the midwives in the midwifery department. Participation in the EAP programme will be voluntary, and midwives will not be coerced to participate. Management support is needed to encourage and support midwives during their participation in the EAP. A comprehensive communication plan should be made available to all the midwives in the midwifery department. Confidentiality will be maintained during and after EAP services.

#### 7.3.7.3 Evaluation of the EAP

Evaluation refers to the scientific process of measuring the effectiveness, efficiency and relevance of the programme.[1] It is vital to specify the evaluation plan during the designing of an EAP to assist the improvement of the programme.

Purpose of evaluation:

This process aims to identify the outcome and impact of the programme and the source of information required for the evaluation of the EAP.[1] This is a crucial process as it measures the success and failure of the programme to determine whether the objectives of the programme were achieved. Similarly, evaluation can also determine the cost-effectiveness of the EAP.

Characteristics and criteria of evaluators:

This refers to who should evaluate the programme. The following role players in the EAP should be included in the evaluation of the EAP: EAP practitioner/counsellor, psychologist, a psychiatrist, a representative from hospital management, a senior midwife etc. An external person or evaluator, such as an EAP expert, should also be included in the evaluation process to maintain the objectivity of the evaluation process. Finally, the evaluation should follow a scientific process.

Approaches of evaluation:

Once the EAP is implemented, an evaluation needs to be conducted annually. The evaluation should focus on components such as confidentiality, and the EAP services offered, such as counselling, debriefing and referrals, and the programme's administration should be evaluated. The standards that will be used as a measurement guide should be specified. A survey or interview should be completed when the midwives exit the programme to evaluate the programme. Quarterly reports on the utilisation of the services, challenges and successes experienced should be included in the report and shared with the relevant offices such as the hospitals' management. Finally, anonymity should be maintained during the evaluation and reporting process.

## 7.4 STRUCTURE OF THE EAP'S IMPLEMENTATION STRATEGIES

Minzberg[178] describes strategies as a problem-solving mechanism that an organisation uses to accomplish its activities. Strategies are developed to identify challenges within an institution and develop interventions to overcome such challenges. Strategies are designed to ensure that an organisation's overall set goals are achieved with minimal time and in accordance with the available human and financial resources.[176] Furthermore, the aim of the strategies is for the agents and recipients in the context to overcome the dynamics. According to Howe[57], the developed strategies should be simplified to make the implementation process easy.

### 7.4.1 The Philosophical basis of implementation strategies for the EAP

Howe's [57] C@PS model guided the implementation strategies for the EAP. The Compass Aligned Performance System model is a strategic management tool that consists of various objectives to simplify the strategies and make a plan to implement designed strategies that an organisation seeks to achieve. These objectives are aligned to the planned commitments of the teams within an organisation and track down the monthly progress on specific objectives on the balanced scorecards of the institution. Howe[57] notes that there was a gap in the effective implementation of the strategy. The C@PS model can permit an extensive record of work accomplished by demonstrating objectives that are achieved, not achieved and not required. According to Howe[57], the C@PS model is built on four pillars: simplicity, ownership, flexibility, and accountability. This model includes six main components, which are vision, value, critical success factors, key performance indicators and strategic objectives. These components incorporate various activities that clarify the strategies that are significant to the organisation.[57]

### 7.4.2 The rationale for the development of implementation strategies

One of the principal reasons for developing these strategies was to address the challenges identified in the study. The reality that this EAP was not for implementation compelled the researcher to develop strategies that will guide the implementation of the EAP thereafter. It was the researcher's view that this will ease the entire implementation process of this programme as the guiding

strategies will be in place and, in that way, support the midwives that would have been affected by MDs and FSBs.

Strategies are vital means that can be used to achieve objectives to address identified challenges.[176] Strategies are crucial as they utilise evolving changes to overcome obstacles using available resources. Therefore, developing strategies is regarded as the most efficient, cost-effective and existing comprehensive process of performance.[57] In addition, the C@PS model allows comprehensive feedback to be given by employees within an organisation and can simultaneously measure their job performance and satisfaction.

### 7.4.3 The guiding principles for the development of implementation strategies

Strategy formulation and development are two main components that are used in strategy development. These components differ in such a way that strategy formulation involves identifying challenges during the situational analysis part of the study. In contrast, strategy implementation encompasses the activities that need to be done to solve the challenges.

It is imperative to remember the principles that guide the development of strategies while developing the implementation strategies. This study was guided by Howe's[57] C@PS that includes key strategic objectives, key performance indicators, critical success factors or proposed actions, values and the vision. These guiding principles are discussed in detail in the subsections that follow.

#### 7.4.3.1 The strategic objectives

Strategic objectives are crucial goals that an organisation or part thereof is trying to achieve. These objectives give direction to the accomplishment of developed strategies. In this study, the strategic objectives were to:

- Improve the working environment of midwives affected by MD and FSB;
- Enhance the well-being and promote positive coping behaviour of midwives;

- Enhance the skills of midwives to deal with MD and FSB events of patients under their care;
- Manage the high death distress and improve resilience among midwives;
- Empower midwives' supervisors on how to offer support to midwives.

7.4.3.2 The key performance indicators

Key performance indicators are measurable actions that can assess the success or progress towards achieving specific strategic objectives within an organisation during the implementation process.[57] These indicators are based on the strategic objectives as specified in Table 7.3 below.

7.4.3.3 The critical success factors or the proposed actions

The critical success factors are activities that need to be done to achieve objectives or for the proposed actions to succeed. If these factors (specified in Table 7.3 below) are not undertaken, the strategic objectives and, consequently, the organisation's vision will not be realised.

7.4.3.4 Values

According to Howe[57], value is linked to an organisation's culture and needs to be reflected in the way people behave within and outside the institution. In this context, values look at the corporate culture of the MoHSS and the extent to which the midwives work in conformity. This is to be witnessed by the researcher and the recipient of the EAP. The following values have been recognised in the study: professionalism, confidentiality, commitment to services, integrity and dignity, impartiality and empowerment of individuals.

7.4.3.5 Vision

Vision deals with a broad goal of what the organisation wants to achieve in the long term. It displays all the various facets that the organisation wishes to attain. In the context of this study, the developed implementation strategies contribute to the overall achievement of the vision of the MoHSS. The vision of the EAP and its strategies is to be an employee-centred programme that supports and enables midwives to cope with MDs and FSBs.

### 7.4.4 Proposed justification and strategies to support the implementation of the EAP

The strategies that support the implementation of the EAP were developed after the programme development. These strategies were derived from the challenges that were identified from the results of the study. Four strategies were developed, and these are the provision of support services to midwives through an EAP at the workplace, training of midwives on how to deal with MDs and FSBs, motivation of midwives through a visible support system from management, and training of supervisors on the EAP and how to make referrals. These strategies were discussed using the Howe[57] C@ps model. The strategies were derived from the challenges derived from the study, as illustrated in Table 7.3 below.

Table 7.3: Proposed strategies for implementation of the EAP

| Strategies | Evidence (challenges) |
|---|---|
| Strategy 1: Provision of support services to midwives through an EAP at the workplace. | • Exposure to MDs and FSBs with inadequate professional and environmental support.<br>• Emotional focused versus Problem-focused coping mechanism |
| Strategy 2: Training of midwives on how to deal with MDs and FSBs. | • Exposure to MDs and FSBs with inadequate professional and environmental support.<br>• Death distress among midwives.<br>• Emotional focused versus problem-focused coping mechanism. |
| Strategy 3: Motivation of midwives through a visible support system from management. | • Exposure to MDs and FSBs with inadequate professional and environmental support. |
| Strategy 4: Training of supervisors on the EAP and how to make referrals. | • Exposure s to MD and FSBs with inadequate professional and environmental support. |

#### 7.4.4.1 Provision of support services to midwives through the EAP at the work place

This strategy aims to address the high exposure to MDs and FSBs, inadequate professional and environmental support to affected midwives, and the need to improve the coping mechanism through EAP. The following guiding principles explain this strategy in detail:

- Strategic objectives: improve the working environment of midwives affected by MDs and FSBs.

- Critical success factors: the provision of counselling services to midwives, training of midwives' managers, the promotion of a balance between the midwives work and non-work life, an increase of job satisfaction among midwives by $> 5\%$ by the end of 2021, and improve the health and well-being of midwives.
- Key performance indicators: counselling services offered to 85% of affected midwives by the end of 2021, a training programme for managers to be implemented during the year 2021, the balance between work and non-work life of midwives to be promoted, overall health and well-being of midwives improved and staff turnover of $<5\%$ by 2025.

#### 7.4.4.2 Training of midwives on how to deal with MDs and FSBs

This strategy aimed to prepare the midwives on how to deal with the effects of MDs and FSB deaths. This strategy is explained in detail according to the following principles:

- Objective: To enhance the midwives' skills in dealing with the death events of patients under their care.
- Critical success factors: conduct in-service training for midwives, design a training programme for midwives on how to deal with death events, and implement a training programme for midwives on how to deal with death events.
- Key performance indicators: designing and implementing incentive strategies for midwives, designing a training programme on how to deal with death events, and implementing a training programme on how to deal with death events.

#### 7.4.4.3 The motivation of midwives through support systems from management

This strategy aims to reduce the incidences of staff exodus through the provision of services that address personal and work-related issues that lead to the exodus. This strategy is discussed below under the guiding principles components.

- Strategic objective: manage the death distress and improve resilience among midwives.
- Critical success factors: conduct professional development counselling and develop and implement a reflection plan of success stories in midwifery care.

- Key performance indicators: professional development counselling conducted successfully to 85% of midwives by 2025 and the development and implementation of a reflection plan of success stories in midwifery care by 2025.

7.4.4.4 Training of supervisors on the EAP and how to make referrals

This strategy aims to educate midwives' supervisors on the EAP and how to refer midwives to EAP. The following guiding principles describe this strategy:

- Strategic objective: empower midwives' supervisors on how to offer support to midwives.
- Critical success factor: design a training programme for midwives' supervisors.
- Key performance indicator: a training programme for supervisors implemented during the year 2025.

Table 7.4 below summarises the description of the strategies following Howe's (2011)[57] (C@PS) guiding principles.

Table 7.4: Strategies for the implementation of the EAP

| Strategy 1: Provision of support services to midwives through an EAP at the work place | | | | |
|---|---|---|---|---|
| Strategic objectives | Critical success factors | Key performance indicators | Values | Vision |
| Improve the working environment of midwives affected by MDs and FSBs. | Provision of a conducive working environment. | Job satisfaction among midwives increased by > 5% by the end of 2025.<br><br>Productivity and job performance increased by > 10% by 2025. | Professionalism;<br><br>Confidentiality;<br><br>Commitment to services;<br><br>Integrity and dignity;<br><br>Impartiality;<br><br>Empowerment of individuals. | To be an employee-centred programme that supports and enables midwives to cope with MDs and FSBs. |
| | Promote a balance between the work and non-work life of the midwives. | The promotion of a balance between midwives' work and non-work life. | | |
| Enhance the wellbeing and positive coping behaviour of midwives. | Training and provision of counselling services to midwives. | Training and counselling services offered to 85% of affected midwives by the end of 2025. | | |
| | Improve the health and well-being of midwives. | Overall health and well-being of midwives improved by 2025. | | |
| Strategy 2: Training of midwives on how to deal with MDs and FSBs | | | | |
| Enhance the skills of midwives on how to deal with death events of patients under their care. | Design a training programme for midwives on how to deal with death events. | Training programme for midwives on how to deal with death events designed by 2022. | | |
| | Implement a training programme for midwives on how to deal with death events. | Training programme on how to deal with death events implemented by 2025. | | |
| | Conduct in-service training for midwives. | Two in-service training for midwives conducted by 2025. | | |
| Strategy 3: Motivation of midwives through a visible support system from management | | | | |
| Improve resilience among midwives. | Conduct professional development counselling. | Professional development counselling conducted successfully to 85% of midwives by 2025. | | |
| | Develop and implement a reflection plan of success stories in midwifery care. | Reflection plan of success stories in midwifery care developed and implemented by 2025. | | |
| Strategy 4: Training of supervisors on the EAP and how to make referrals | | | | |
| Empower midwives' supervisors on how to offer support to midwives. | Design a training programme for midwives' supervisors on the EAP and how to make referrals. | Training programme for supervisors implemented during the year 2025. | | |

## 7.5 VALIDATION OF AND IMPLEMENTATION STRATEGIES FOR THE EAP BY EXPERTS

Experts validated the draft EAP and implementation strategies during the development process. It was challenging to hold a face-to-face meeting and an online meeting with all the stakeholders due to the COVID-19 pandemic. The only face to face meeting was held with midwives and midwives' managers for maternity departments at the two public health training hospitals. In addition, the study's findings, the draft EAP, and implementation strategies were sent to the stakeholders via emails and to get their input. The stakeholders included an official from the Department of Family Health at the MoHSS national level, an EAP expert, a social worker, two psychologists and two psychiatrists. Later on, an online meeting was conducted with the midwives' educators from the two training institutions' midwifery departments.

The stakeholders studied the developed EAP and implementation strategies and subsequently considered them pertinent to the identified challenges and gave minimal inputs. The experts gave inputs on the EAP as follows: usage of an EAPASA standards document that is based on international association standards to describe the content of the EAP for a chronology of events and also to provide a good flow, inputs on the vision, model of the programme and EAP training content. The experts identified a few shortcomings in the developed strategies. The shortcomings were addressed through: changes to the strategies, adding more indicators to some strategies, using percentages or numbers, and looking at the five-year time frame instead of one year (2021). The EAP and strategies were thus revised and finalised.

## 7.6 SUMMARY

This chapter discussed the rationale, guiding principles, the process of developing the strategies and the verification of the strategies. The chapter highlighted the developed EAP and how it will support midwives in coping with the effects of MDs and FSBs. This included the description of the philosophical basis that guides the EAP development, the actual developed programme, and the rationale and the guiding principles. The developed EAP will use the blended approach that uses both internal and external models of provision of EAP services. This model was chosen due

to its versatility. The services that the programme will offer and how participation in the programme will be managed were explained in detail.

Even though the developed EAP was not implemented during this study, the chapter presented still the strategies that will guide the programme during the implementation phase. The C@PS model guided the strategy development process. The chapter concluded with the validation process of the EAP and implementation strategies by various experts.

Chapter 8 presents the conclusion and the study's contribution to the body of knowledge, limitations, and recommendations.

# CHAPTER EIGHT

# CONCLUSIONS, CONTRIBUTIONS, LIMITATIONS AND RECOMMENDATIONS OF THE STUDY

## 8.1 INTRODUCTION

The previous chapter dealt with the development of the EAP and the associated implementation strategies. This chapter presents the study's conclusions according to different study phases, starting with the specific objectives in the situational analysis phase, development of conceptual framework and development of an EAP and implementation strategies. The chapter further presents the contributions made by the study, study limitations and recommendations made from the study's findings.

## 8.2 PURPOSE OF THE STUDY

The purpose of the study was to develop an EAP that supports midwives who are affected by MDs and SBs in the Khomas Region. For the purpose to be achieved, FGDs, individual interviews and questionnaires were conducted and used to collect the data that provided evidence on the need to develop an EAP.

Five objectives were developed to achieve the purpose of the study. These objectives were to: explore and describe the experiences of midwives with regard to MDs and FSBs, determine the midwives' level of occupational exposure to MDs and SBs, evaluate the self-reported levels of stress among midwives due to exposure to MD and SB, determine the coping mechanism used by midwives to deal with the after effects of MD and SB in the absence of an EAP, develop a conceptual framework that will guide the study, develop an EAP that will support midwives in coping with the effects of MDs and SBs, and develop implementation strategies for the EAP to support midwives that would have been affected by MDs and SB.

## 8.3 CONCLUSIONS OF THE STUDY

The study's conclusion is divided into three sections: the situational analysis, development of the conceptual framework, and development of an EAP and implementation strategies. The conclusions are derived from the objectives of the study as described below.

### 8.3.1 Objective 1 (Phase 1): Explore and describe the experiences of midwives with regard to maternal deaths and fresh stillbirths

The findings indicated that midwives experience death in unique ways. Most of the midwives expressed negative consequences as a result of MDs and FSBs, there are a few who viewed it positively. Five themes originated from this objectives: psychological effect of MDs and FSBs on midwives; physical effects of MDs and FSBs on midwives; social effects of MDs and FSBs on midwives; effects on the career; and emotional and problem-focused coping mechanisms. The following conclusions were made based on the findings of the themes:

- Psychological effects of MDs and FSBs on midwives

All midwives experienced psychological effects such as trauma, GDA related feelings, and PTSD related feelings and emotional effects after experiencing an MD and FSB. The psychological effects were deemed positive and negative, but the adverse effects impacted the work environment and created a non-conducive working environment.

- Emotional and problem-focused coping mechanism.

Midwives established various emotional coping mechanisms such as seeking social support, escape-avoidance, distancing, and self-control to deal with the effects of MDs and FSBs. These mechanisms are regarded as negative and maladaptive in the long term as they do not solve the problem.

A few midwives in the study also used the problem-focused coping mechanism strategy. This included approaches such as positive reappraisal and acceptance as well as seeking professional counselling. The coping mechanism is regarded highly since it yields positive health outcomes and addresses the problem at hand.

### 8.3.2 Objective 2 (phase 1): Determine the midwives' level of occupational exposure to maternal death and stillbirth

Findings from this objective indicated that midwives experience various challenges after experiencing MDs and FSBs. These challenges include:

- Inadequate preparation on how to professionally deal with MD and FSB events in the workplace that stood at 48.6% (n= 68), a mean of 1.8 and standard deviation of 1.02;
- High exposure to MDs and FSBs at 31.4% (n= 44);
- Regular witnessing of deaths with the majority of respondents (34.3%, n=48) having either witnessed 2-3 deaths or 4-5 deaths (31.4%, n= 44) in their professional life;
- Poor quality of care given to women during labour with FSBs being more common than MDs (25%, n=35);
- Inadequate professional support systems at work 4.3%. (n=6);
- Antenatal Ward (45%) did not receive professional support after the death event for both hospitals
- Lack of significant relationships between wards with type of support received ($r = 0.283$, $p < 0.01$) and the extent of professional preparedness to handle deaths ($r = 0.253$, $p < 0.01$).

Conclusion made from the above challenges is that the health care system especially the MoHSS through hospital management need to improve the wellbeing of the midwives who are highly exposed adverse events. This can be done through proper planning, training and provision of support to the midwives so that they can be able to render quality health care to women in their care. Exposure to FSB is both an indicator and a starting point of the self-reported level of stress and impact of death distress among midwives.

### 8.3.3 Objective 3 (Phase1): Evaluate the self-reported level of stress among midwives due to exposure to maternal death and stillbirth

The following conclusions were established from an analysis of data linked to this objective:

- High levels of distress related to death anxiety among midwives 26.4%;
- High death depression among midwives in Postnatal and Neonatal wards;

- Working in maternity negatively associated with death obsession ($r = -0.186, p < 0.05$);
- Midwives get increasingly death anxious when the number of deaths they were in charge of increases over time ($r = 0.180, p < 0.05$);
- An increase in depression incidents among midwives due to exposure to maternal death;
- Death obsession in midwives range from mild distress at 62.9% (88) to moderate distress at 30% (42);
- Death obsession had a negative association ($r = - 0.239, p < 0.01$) with the extent of midwives' professional preparedness to deal with a death event (1 = poorly prepared, 2 = well prepared);
- Hospital wards negatively associated with death obsession ($r = -0.186, p < 0.05$) and positively associated with death depression ($r = 0.177, p < 0.05$);
- Death obsession had a negative association ($r = - 0.239, p < 0.01$) with the extent of the midwives' professional preparedness to deal with a death event;
- Death anxiety was associated with recent death-in-charge exposure and a significant positive relation with number of deaths in charge ($r = 0.172, p < 0.05$) and the last time an FSB death was witnessed ($r = 0.180, p < 0.05$);
- All maternity wards were negatively associated with death obsession ($r = -0.186, p < 0.05$) and positively associated with death depression ($r = 0.177, p < 0.05$);
- Age was associated with marital status ($r = 0.318, p < 0.01$), level of education ($r = -0.171, p < 0.05$), experience as a registered midwife ($r = 0.559, p < 0.01$), period in the ward ($r = 0.474, p < 0.01$), number of deaths witnessed ($r = 0.308, p < 0.01$) and the number of deaths in charge ($r = 0.373, p< 0.01$).
- A strong positive relationship between Occupational exposure to FSB and MD (beta = 0.55) and between death obsession and depression (beta = 0.38).

It thus concluded that midwives work in distressing situations after witnessing MDs and FSB.

#### 8.3.4 Objective 4 (Phase 1): Determine the coping mechanism used by midwives to cope with the effect of maternal death and stillbirth in the absence of an EAP

An analysis of data related to this objective yielded the conclusion that midwives used negative coping strategies the most such as self-blame, religion, self-destruction, denial, behavior disengagement, substance abuse and emotional support. Nonetheless, a limited positive coping

mechanisms, such as positive reframing, acceptance, planning, active coping, venting, and instrumental support were also used by the midwives in order to cope after an MD and FSB. The study therefore found the 4 main coping methods that are used by midwives such as support anchors, negative stressors, adjustment and suppression.

### 8.3.5 Objective 5 (Phase 2): Develop a conceptual framework that will guide the study

The outcome from the situational analysis phase formed the basis of Phase 2 of the study. The conceptual framework was developed drawing on the Practice Theory by Dickoff et al. (1968).[54] The Dickoff et al. (1968)[54] survey list was used to establish the foundation of the development of the EAP in Phase 3 of the study. The study's survey list included the following: the agent (researcher, counsellor, psychologist, psychiatrist and hospital management), recipient (midwives), context (Maternity wards at public referral hospitals in the Khomas Region), dynamics (challenges encountered by midwives that may hinder the activity from realising the endpoint.), procedures (development of an EAP and the implementation of strategies for midwives affected by MDs and FSBs) and terminus (the ability of midwives to cope with MDs and FSBs). Thus, the development of a conceptual framework would assist in establishing the connection between practice and theory.

### 8.3.6 Objective 6 (Phase 3): Develop an Employee Assistance Programme that will support midwives in coping with effects of maternal deaths and stillbirths

The last phase of the study (Phase 3) consisted of two objectives. The first objective sought to develop an EAP that supports midwives affected by MDs and FSBs in the Khomas Region. This programme was informed by the findings from the situational analysis of the study. The EAP was based on the Lokanadha et al. (2010)[56] QWL model, and it was aimed to support midwives in coping with the effects of the MDs and FSBs and improve their quality of work life. The initial step in developing the EAP was to develop the basic principles on which the EAP was based, such as voluntarism and privacy, confidentiality, treating all clients equally, and timeous intervention. This was followed by the development of objectives and the content of the programme. The activities of the EAP included individual assessment and referral, critical incident intervention and

planning, debriefing services, short term counselling intervention, referral and treatment, monitoring, follow-up and training.

#### 8.3.7 Objective 7 (Phase 3): Develop implementation strategies for the Employee Assistance Programme to support midwives that are affected by maternal deaths and stillbirths

The second objective in phase 3 of the study was to develop the implementation strategies of the EAP. Following the EAP development, the implementation strategies were developed using the findings from Phase 1 of the study. The process used to develop these strategies was based on Howe's (2011)[57] Compass C@PS. This model includes six components: strategic objectives, critical success factors, key performance indicators, values, and vision. The following four strategies were developed: provision of support services to midwives through an EAP at the workplace, training midwives on how to deal with MDs and FSBs, motivation of midwives through a visible support system from management, and training supervisors on the EAP and how to make referrals. Experts validated the EAP and implementation strategies, and their inputs were incorporated into the final document.

### 8.4 CONTRIBUTION TO THE BODY OF KNOWLEDGE

The findings from this study produced valuable information about the challenges experienced by the midwives at the health facilities where the study was conducted. As a result, this study contributed to the scientific body of knowledge in the following ways:

#### 8.4.1 Identification of the midwives' challenges in terms of MD and FSB in Khomas Region

Firstly, this study contributed to the new knowledge on EAP for midwives, which has limited knowledge in the country. This was done by identifying midwives' challenges concerning MDs and FSBs in the Khomas Region in phase 1 of the study. Secondly, the study s identified the challenges experienced by midwives after an MD and FSB. These challenges were noted as the provision of support services to midwives through EAP at the workplace, training of midwives on

how to deal with MDs and FSBs, motivation of midwives through a visible support system from management and training of supervisors on the EAP, and challenges on how to make referrals.

### 8.4.2 Conceptualisation basis of the Employee Assistance Programme and implementation strategies

A conceptual framework was developed, and it formed the foundation for the study. This will further be used as a reference document by future researchers.

### 8.4.3 Employee Assistance Programme for midwives in the Khomas Region

Another key contribution is the EAP developed to support midwives that would have been affected by witnessing MDs and SBs in the Khomas Region. Once implemented, it is anticipated that this programme will become an effective platform where the midwives could be offered support once they have experienced an MD and FSB.

### 8.4.4 Employee Assistance Programme implementation strategies in Khomas Region

For easy execution of the EAP, the implementation strategies that have not been available in the country were developed. These strategies will ensure that the identified challenges are addressed during the EAP.

## 8.5 LIMITATIONS OF THE STUDY

Even though the study was successful, some limitations were experienced during its execution. The limitations related to the methodological, testing and implementation, literature availability and validation of the limitations.

### 8.5.1 Methodological limitations

The methodological limitations identified during this study were based on data collection, testing and implementation and literature availability limitations.

- Use of a self-administered questionnaire

The use of self-administered questionnaires carried a risk of self-preservation bias where the participant could have given professionally accepted responses. However, the researcher utilised FGDs as a way of validating questionnaire responses.

### 8.5.2 Testing and implementation limitations

The study sought to test and implement the developed product of the study, the EAP. The researcher encountered some testing and implementation limitations, as explained below.

- Testing limitations

Even though the EAP was developed, it could not be tested due to lack of time and unavailability of funds to hire personnel. This could, however, not reduce the quality of the programme that was developed as it was validated by a team of experts from various areas who were knowledgeable on the subject. Moreover, the implementation strategies were designed to be used in the future.

- Implementation limitations

The developed EAP and implementation strategies were not implemented in the clinical context; therefore, the success of their use is not yet known. However, the programme and strategies are verified by experts.

- Literature availability

There were also some limitations on the availability of literature encountered. The limited literature on EAP for midwives in Africa, especially SADC and Namibia, was encountered. This led to problems with the validation of literature. The lack of local guidelines on EAP was not available, so the researcher used foreign guidelines.

## 8.6 RECOMMENDATIONS

Various recommendations were made from the findings of the study. These include recommendations for practice (MoHSS), education and future research.

### 8.6.1 Recommendations for Practice

The study revealed that midwives are affected by MDs and FSBs in many ways and hence:

- The researcher recommends that the MoHSS creates a conducive environment for midwives to practice to provide support and retain midwives in their careers.
- The MoHSS should also consider implementing non-monetary incentive strategies to encourage and appreciate midwives.
- Moreover, in-service education on coping with MD and FSBs should also be promoted in the maternity departments. This empowers midwives on what to do when such cases happen.
- The developed EAP and implementation strategies need to be implemented in the clinical practice. The programme will be submitted to the MoHSS for possible implementation by their training department while the researcher is looking for funding.

### 8.6.2 Recommendations for Education

It was noted in the study that midwives want to leave the profession and were their curricula did not prepare them fully on how to deal with MDs and FSBs. Therefore, the following recommendations are suggested:

- Education institutions should include, in their curriculums, a component on how to deal with MDs and FSBs so that midwives are equipped with the right skills when they start work.
- Education institutions should admit students who are interested in the profession and not just anyone who needs employment to reduce staff turnover.

### 8.6.3 Recommendations for further research

Future research is recommended on the following points: stakeholders, systematic review or scoping review, implementation and evaluation, the impact of training, the rollout of the EAP, and general recommendations.

### 8.6.4 Research on stakeholders

This study only included the midwives; future research can therefore be conducted among other health care workers such as nurses, doctors and radiographers. This will subsequently lead to the establishment of a national EAP for all health care professionals.

- Research on systematic reviews/ scoping review

This research did not cover the systematic/scoping review. Therefore, there is a need for research this kind in future.

- Research on implementation and evaluation of an EAP

This study was not implemented and evaluated; it is thus recommended to conduct research on the implementation and evaluation of an EAP that supports affected midwives after MDs and FSBs in Namibia in future:

- Research on the impact of training

Since the impact of the EAP training is not conducted, it is recommended to do the following studies:

- The impact that training on how to deal with MD and FSB will have on midwives;

- Research on the rollout of an EAP.

The EAP is only developed for the Khomas Region and public hospitals; it is thus recommended to roll out the same research to other regions and private hospitals in the country to make comparisons.

### 8.6.5 General recommendations

- It was found that there is a need for social groups where midwives can socialise and talk to one another. The formation of such social groups where midwives can informally speak on issues affecting them is thus recommended.
- The need for professional bodies to support midwives and provide Continuing Professional Development (CPD) activities related to the wellbeing of midwives and not simply on how to care for women is recommended.
- An official national EAP policy should be developed and implemented.

## 8.7 WAY FORWARD

After this study, the researcher shall disseminate the findings of the study in the following ways:

### 8.7.1 Proposed publication papers

The following manuscripts are proposed for publication:

- Personal effects of MDs and SBs on midwives (qualitative);
- Midwives coping mechanisms after MDs and FSBs (qualitative);
- Midwives level of occupational exposure to MD and Fresh SBs (quantitative);
- Self-reported levels of stress among midwives due to MDs and FSBs (quantitative);
- Midwives response on the death distress scale (quantitative);
- Coping mechanisms used by midwives to deal with MDs and FSBs (quantitative);
- Development of an EAP for midwives affected by MDs and SBs;
- Implementation strategies for an EAP;
- The conceptual and theoretical basis of EAP development.

The following are some of the journals that will be considered for publications of the papers:

- Midwifery
- African Journal of Nursing and Midwifery
- Women and Birth Journal
- International Journal of Nursing and Midwifery.
- Journal of Midwifery and Women's Health.
- Other journals are yet to be determined.

### 8.7.2 Paper presentation

The following papers are proposed for presentation at national and international platforms:

- The necessity of EAP for midwives in Namibia;
- Midwives' experiences of MDs and SBs.

### 8.7.3 Chapters and Information Education and Communication material

It is proposed that this dissertation will be converted into a book with the chapter contents focusing on the following:

- Background of an EAP (National and international);
- Paradigms and perspectives that guided the development of an EAP;
- MDs and SBs (Worldwide, Africa and Namibia);
- Good practice and models for an EAP;
- Effectiveness of an EAP;
- Occupational exposure to MDs and SBs level of stress;
- Coping strategies used by midwives after MDs and SBs.

## 8.8 SUMMARY

This chapter outlined the purpose and conclusions of the study. The conclusions were based on the seven objectives of the study as indicated above. The purpose and objectives of the study were also achieved. In addition, the chapter further discussed the limitations that were encountered during the study. These limitations included limited sample size, data collection process challenges and limited literature on EAPs in the SADC. The chapter also explained the study's contributions to the body of knowledge. The main contributions noted here included the development of a conceptual framework, an EAP, and the implementation strategies for the programme. The recommendations that were made from the study were further described in the chapter. The recommendations focused on midwifery practice, education, further research and general recommendations. Finally, the researcher is optimistic that should the developed programme and recommendations be implemented, it will effectively promote the quality of life of the midwives in the Khomas Region.

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ANNEXURES

ANNEXURE A: PERMISSION LETTER FROM UNAM CENTER FOR POSTGRADUATE STUDIES

CENTRE FOR POSTGRADUATE STUDIES

University of Namibia, Private Bag 13301, Windhoek, Namibia
340 Mandume Ndemufayo Avenue, Pioneers Park
☎ +264 61 206 3275/4662; Fax +264 61 206 3290; URL.: http//www.unam.edu.na

**RESEARCH PERMISSION LETTER**

**Student Name:** T Endjala
**Student number:** 9964924
**Programme:** PHD in Public Health

**Approved research title:** Development of an employee assistance programme (EAP) to support midwives affected by maternal deaths and stillbirths in Khomas region, Namibia

**TO WHOM IT MAY CONCERN**

I hereby confirm that the above mentioned student is registered at the University of Namibia for the programme indicated. The proposed study met all the requirements as stipulated in the University guidelines and has been approved by the relevant committees.

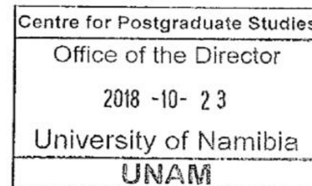
The proposal adheres to ethical principles as per attached Ethical Clearance Certificate. Permission is hereby granted to carry out the research as described in the approved proposal.

Best Regards

23 Oct 18

**Prof Marius Hedimbi**
**Director: Centre for Postgraduate Studies**
**Tel:** +264 61 2063275
**E-mail:** directorpgs@unam.na

**Date**



ANNEXURE B: ETHICAL CLEARANCE CERTIFICATE FROM UNAM

ETHICAL CLEARANCE CERTIFICATE

**Ethical Clearance Reference Number:** OSHC /484/2018 **Date:** 19 August, 2018

This Ethical Clearance Certificate is issued by the University of Namibia Research Ethics Committee (HREC) in accordance with the University of Namibia's Research Ethics Policy and Guidelines. Ethical approval is given in respect of undertakings contained in the Research Project outlined below. This Certificate is issued on the recommendations of the ethical evaluation done by the Faculty/Centre/Campus Research & Publications Committee sitting with the Postgraduate Studies Committee.

**Title of Project:** Development of an employee assistance programme (EAP) to support midwives affected by maternal deaths and stillbirths in Khomas region, Namibia.

**Student:** TUWILIKA ENDJALA

**Student Number:** 9964924

**Supervisors:** *Dr Hans Justus Amukugo (Main) Dr Emma Maano Nghitanwa (Co)*

**Campus:** Oshakati Campus

Take note of the following:

(a) Any significant changes in the conditions or undertakings outlined in the approved Proposal must be communicated to the HREC. An application to make amendments may be necessary.

(b) Any breaches of ethical undertakings or practices that have an impact on ethical conduct of the research must be reported to the HREC.

(c) The Principal Researcher must report issues of ethical compliance to the UREC (through the Chairperson of the Faculty/Centre/Campus Research & Publications Committee) at the end of the Project or as may be requested by HREC.

(d) The HREC retains the right to:

(i) Withdraw or amend this Ethical Clearance if any unethical practices (as outlined in the Research Ethics Policy) have been detected or suspected,

(ii) Request for an ethical compliance report at any point during the course of the research;

HREC wishes you the best in your research.

Dr. J.E de Villiers: HREC Chairperson

Ms. P. Claassen: HREC Secretary

ANNEXURE C: ETHICAL CLEARANCE FROM MoHSS

**REPUBLIC OF NAMIBIA**

*Ministry of Health and Social Services*

| Private Bag 13198 | Ministerial Building | Tel: 061 – 203 2537 |
|---|---|---|
| Windhoek | Harvey Street | Fax: 061 – 222558 |
| Namibia | Windhoek | E-mail: btjivambi@mhss.gov.na |

**OFFICE OF THE PERMANENT SECRETARY**

**Ref:** 17/3/3 **TE**
**Enquiries:** Mr. B. Tjivambi

**Date:** 12 November 2018

**Ms. Tuwilika Endjala**
**PO Box 50597**
**Bachbrecht**
**Windhoek**

Dear Ms. Tuwilika

***Re: Development of an employee assistance programme (EAP) to support Midwives affected by Maternal deaths and Stillbirths in Khomas region, Namibia***

1. Reference is made to your application to conduct the above-mentioned study.

2. The proposal has been evaluated and found to have merit.

3. **Kindly be informed that permission to conduct the study has been granted under the following conditions:**

3.1 The data to be collected must only be used for academic purpose;

3.2 No other data should be collected other than the data stated in the proposal;

3.3 Stipulated ethical considerations in the protocol related to the protection of Human Subjects should be observed and adhered to, any violation thereof will lead to termination of the study at any stage;

3.4 A quarterly report to be submitted to the Ministry's Research Unit;

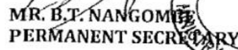
3.5 Preliminary findings to be submitted upon completion of the study;

3.6 Final report to be submitted upon completion of the study;

3.7 Separate permission should be sought from the Ministry for the publication of the findings.

4. All the cost implications that will result from this study will be the responsibility of the applicant and **not** of the MoHSS.

Yours sincerely,



**MR. B.T. NANGOMBE**
**PERMANENT SECRETARY**

*"Health for All"*

ANNEXURE D: PERMISSION LETER FROM MEDICAL SUPERITENDENT AT INTERMEDIATE HOSPITAL OSHAKATI

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Not on air

**_REPUBLIC OF NAMIBIA_**

**_Ministry of Health and Social Services_**

Private Bag X5501
OSHAKATI

Tel: + 264 65 2233000
Fax: + 264 65 221390/224564

INTERMEDIATE HOSPITAL OSHAKATI

Enq: Dr A Kibandwa

2 January 2019

TO: Ms Tuwilika Endjala
Cell: +264 81 1246900
Email: tkakili18@gmail.com

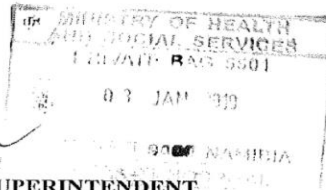
**AUTHORIZATION TO CONDUCT RESEARCH STUDY.**

This is to inform you that your request to conduct a research study in Oshakati State Hospital have been approved.

Kindly be informed that confidentiality of the patient information seen during your research must be observed, in case of breach of confidentiality you will be charged by the Medical and Dental Council of Namibia Regulation Act.

We wish you all the best during your research.

Yours Sincerely



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**DR K V AMUTENYA**
**ACTING MEDICAL SUPERINTENDENT**

*"Your Health, Our Concern"*

ANNEXURE E: PERMISSION LETER FROM CHIEF MEDICAL SUPERITENDENT AT INTERMEDIATE HOSPITAL KATUTURA

*Republic of Namibia*

**Ministry of Health and Social Services**

Private Bag 13215
WINDHOEK
Namibia

Intermediate Hospital Katutura
Independence Avenue
WINDHOEK

Telephone (061) 203 4004/5
Telefax (061) 222706

Enquiries: Sr. Hamwaanyena

Date: 30/11/2018

**OFFICE OF THE CHIEF MEDICAL OFFICER**

**Ms. Tuwilika Endjala**
**PO Box 50597**
**Bachbrecht**
**Windhoek**

**Dear Ms. Tuwilika**

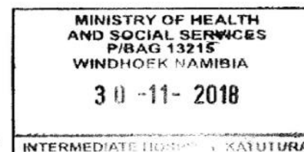
**RE: DEVELOPMENT OF AN EMPLOYEE ASSISTANCE PROGRAMME (EAP) TO SUPPORT MIDWIVES AFFECTED BY MATERNAL DEATHS AND STILLBIRTHS IN KHOMAS REGION, NAMIBIA**

The above mentioned subject refers:

This office hereby grants you permission to do an academic investigation on development of an employee assistance programme (EAP) to support midwives affected by maternal deaths and stillbirths in Khomas region, Namibia at Katutura State Hospital, Khomas Region and MoHSS.

Thank you

Yours in health,




**SR. H. HAMWANEEYNA**
**CONTROL REGISTERED NURSE**
**INTERMEDIATE HOSPITAL KATUTURA**

ANNEXURE F: PERMISSION LETER FROM CHIEF MEDICAL SUPERITENDENT AT WINDHOEKK CENTRAL HOSPITAL

9 - 0/0001

REPUBLIC OF NAMIBIA

Ministry of Health and Social Services

Private Bag 13215
Windhoek
Namibia

Harvey Street
Windhoek

Tel. No: (061) 2033024
Fax No: (061) 222886

Enquiries: Ms. S.Iipinge

Date: 03 December 2018

OFFICE OF THE CHIEF MEDICAL SUPERINTENDENT

WINDHOEK CENTRAL HOSPITAL

Ms. Tuwilika Endjala
University of Namibia
Windhoek
~~0812740226~~ 0811246900

Dear Ms.Endjala

**SUBJECT: PERMISSION TO CONDUCT A STUDY ON THE DEVELOPMENT OF AN EMPLOYEE ASSISTANCE (EAP) TO SUPPORT MIDWIVES AFFECTED BY MATERNAL AND STILL BIRTHS AT WINDHOEK CENTRAL HOSPITAL, NAMIBIA**

1. Reference is made to your application to conduct the above-mentioned study.

2. This letter serves to inform you that permission has been granted for you to conduct a research on the above mentioned subject as per you request.

3. Patients/Clients information should be kept confidential at all times.

4. Copy of report to be submitted at Chief Medical Superintendent and Customer care office, Windhoek Central Hospital upon completion of the study.

Thank you.

Yours sincerely

DR. K.H.NAKANGOMBE
ACTING MEDICAL SUPERINTENDENT

"Health for All"

ANNEXURE G: DATA COLLETION TOOL (QUESTIONNAIRE)

THE DATA COLLECTION INSTRUMENT: QUESTIONNAIRE

Study tittle: Development of an Employee Assistance programme (EAP) to support midwives affected by maternal deaths and stillbirths in Khomas Region, Namibia

QUESTIONNAIRE NUMBER

| | | |
|---|---|---|
| | | |

INSTRUCTIONS TO RESPONDENTS:

- Confidentiality and anonymity is guaranteed.
- Please answer by marking with an X in the empty box next to the corresponding answer.
- Some questions will require more than one response.
- Answer all questions.

SECTION A: DEMOGRAPHIC INFORMATION

1. At which hospital do you work?

| | | |
|---|---|---|
| Windhoek Central Hospital | 1 | |
| Intermediate Hospital Katutura | 2 | |

2. What is your gender?

| | | |
|---|---|---|
| Female | 1 | |
| Male | 2 | |

3. Age at last birthday

   …………………………………………

4. What is your marital status?

| | | |
|---|---|---|
| Single (Never married) | 1 | |
| Live-in partner (Cohabitating) | 2 | |
| Married | 3 | |
| Separated | 4 | |
| Divorced | 5 | |
| Widowed | 6 | |

5. What is your highest level of education?

| | | |
|---|---|---|
| Certificate | 1 | |
| Diploma | 2 | |
| Bachelor’s degree | 3 | |
| Honors degree | 4 | |
| Postgraduate Diploma | 5 | |
| Master’s degree | 6 | |
| PhD | 7 | |

6. What is your current rank at work?

| | | |
|---|---|---|
| 5.1 Registered nurse midwife | 1 | |
| 5.2 Enrolled nurse midwife | 2 | |

7. How many years have you been a registered/enrolled as a midwife?

| | | |
|---|---|---|
| Less than 2 years | 1 | |
| 2-3 | 2 | |
| 4-5 | 3 | |
| 6-7 | 4 | |
| 8 years and longer | 5 | |

8. In which ward are you currently working?

| | | |
|---|---|---|
| Antenatal Clinic | 1 | |
| Antenatal ward | 2 | |
| Postnatal ward | 3 | |
| Neonatal unit | 4 | |

9. How long have you been working in the ward you selected in Question 6 above?

| | | |
|---|---|---|
| Less than 6 months | 1 | |
| 6– -11 months | 2 | |
| 1-2 years | 3 | |
| 3-4 years | 4 | |
| 5 -6years | 5 | |
| 7 years and longer | 6 | |

SECTION B: EXPOSURE TO MATERNAL DEATH AND FRESH STILLBIRTH

10. How many maternal death or fresh stillbirth have you witnessed?

| | | |
|---|---|---|
| 1 death | 1 | |
| 2-3 deaths | 2 | |
| 4-5 deaths | 3 | |
| 6 deaths and above | 4 | |

11. For how many of these deaths were you in charge of?

| | | |
|---|---|---|
| None | 1 | |
| One case | 2 | |
| Two cases | 3 | |
| Three cases | 4 | |
| Four cases | 5 | |
| Five cases and above | 6 | |

12. What were the reasons for the fresh stillbirth?
(NB: More than one answer can be chosen)

| Stillbirth | | |
|---|---|---|
| Placenta Abruptio | 1 | |
| Cord around the neck | 2 | |
| Antepartum haemorrhage | 3 | |
| Shoulder dystocia | 4 | |
| Ruptured uterus | 5 | |
| Hypertensive disorders | 6 | |
| Others (Please specify) ……………………………………. | 7 | |
| Not applicable | 8 | |

13. What were the reasons for the mother's death?
(NB: More than one answer can be chosen)

| Maternal Death | | |
|---|---|---|
| Postpartum Haemorrhage | 1 | |
| Hypertensive disorders | 2 | |
| Infection | 3 | |
| Unsafe abortion | 4 | |
| Obstructed labour | 5 | |
| Ruptured uterus | 6 | |
| Others (Please specify)……………………………………. | 7 | |
| Not applicable | 8 | |

14. What were your obligations after the maternal death or fresh stillbirth?
(NB: More than one answer can be chosen)

| | | |
|---|---|---|
| Inform the relatives (in case of maternal death) | 1 | |
| Support the relatives (in case of maternal death) | 2 | |
| Take care of the baby (in case of maternal death) | 3 | |
| Inform the mother (in case of fresh stillbirth) | 4 | |
| Support the mother (in case of fresh stillbirth) | 5 | |
| Prepare the corpse for mortuary | 6 | |
| Write an incident report | 7 | |
| Others (Please specify) ……………………………… | 8 | |

15. Did you receive any necessary support after experiencing a maternal death or stillbirth?

| Yes | | 1 |
|---|---|---|
| No | | 2 → If no, Skip Q16 and move to Q17 |

16. If your answer to Q16 is yes, what kind of support did you receive?
(NB: More than one answer can be chosen)

| Debriefing session after the incident with the whole team that was involved | 1 | |
|---|---|---|
| Clinical supervision (had a one on one talk with the supervisor about the incident) | 2 | |
| Counseling from a professional counselor | 3 | |
| Psychological support from colleagues | 4 | |
| Others (Please specify the kind of support you received) ………….……………………………………………………………………… | 5 | |

17. If Employee Assistance Programme was available, how likely will you access the Programme

| More likely to access | 1 | |
|---|---|---|
| Likely to access | 2 | |
| Less likely to access | 3 | |
| Unlikely to access | 4 | |

18. When was the last time did you experienced a maternal death?

| Less than a week ago | 1 | |
|---|---|---|
| 1 - 3 weeks ago | 2 | |
| 1 – 3 months ago | 3 | |
| 4 – 6 months ago | 4 | |
| 7 - 12 months ago | 5 | |
| More than a year ago and longer | 6 | |
| Not applicable | 7 | |

19. When was the last time did you experienced a fresh stillbirth?

| Less than a week ago | 1 | |
|---|---|---|
| 1 - 3 weeks ago | 2 | |
| 1 – 3 months ago | 3 | |
| 4 – 6 months ago | 4 | |
| 7 - 12 months ago | 5 | |
| More than a year ago and longer | 6 | |
| Not applicable | 7 | |

20. How often do you experience fresh stillbirth in your current practice?

| | | |
|---|---|---|
| One death every 2 weeks | 1 | |
| One death per month | 2 | |
| One death every 3 months | 3 | |
| One death every 4-5 months | 4 | |
| One death every 6 months | 5 | |
| One death per year | 6 | |
| Not applicable | 7 | |

21. Do you think your profession prepared you well enough to handle maternal death and fresh stillbirth incidents?

| | | | |
|---|---|---|---|
| Yes | 1 | | 1 |
| No | 2 | | 2 → If no, Skip Q 23 and move to Section C |

22. If yes to Question 23 above, to what extent does your professional training prepared you to handle death incidents?

| | | Response |
|---|---|---|
| Very Well prepared | 1 | |
| Well prepared | 2 | |
| Not so well prepared | 3 | |
| Not prepared at all | 4 | |

SECTION C: DEATH DISTRESS SCALE

This Likert scale section deals with your self- reported level of stress due to maternal death and fresh stillbirth.

Read the following statements and choose a corresponding answer that best describes your feelings, behavior and opinions. Use an X in the appropriate box.

1-NO (N)
2-Little (L)
3-Moderate (MO)
4-Much (MU)
5-Very Much (VMU)

| | | | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|---|
| 23. | C-because of experiencing maternal death and stillbirth at work | | N | L | MO | MU | VMU |
| | C.1 | The idea that I will die dominates me. | | | | | |
| | C.2 | I fail to dismiss the notion of death from my mind. | | | | | |
| | C.3 | Thinking about death pre-occupies me. | | | | | |
| | C.4 | I find it greatly difficult to get rid of thoughts about death. | | | | | |
| | C.5 | The idea of death overwhelms me. | | | | | |
| | C.6 | I exaggerate concern with the idea of death. | | | | | |
| | C.7 | I find myself rushing to think about death. | | | | | |
| | C.8 | I think about death continuously. | | | | | |
| | C.9 | I am very much afraid to die | | | | | |
| | C.10 | It does not make me nervous when people talk about death. | | | | | |
| | C.11 | I am not afraid at all to die. | | | | | |
| | C.12 | I am not particularly afraid to die during childbirth or to have a stillbirth. | | | | | |
| | C.13 | The thought of death never bothers me. | | | | | |
| | C.14 | I fear dying a painful death | | | | | |
| | C.15 | I am really afraid of having a heart attack. | | | | | |
| | C.16 | The sight of a dead body is horrifying to me. | | | | | |
| | C.17 | When I think about death I lose interest in activities of life | | | | | |
| | C.18 | I lose interest in caring for myself when I think about death. | | | | | |
| | C.19 | When death is on my mind, my body seems to lose energy. | | | | | |
| | C.20 | The thought of death strengthens my energy. | | | | | |
| | C.21 | It is hard to concentrate when death is on my mind. | | | | | |
| | C.22 | When I think about death, even the easiest of task becomes difficult. | | | | | |
| | C.23 | Death makes me discouraged about the future. | | | | | |
| | C.24 | Death makes me feel hopeless. | | | | | |

SECTION D: BRIEF COPE SCALE

This Likert scale measures how you have been coping with maternal death and stillbirth.

By rating yourself personally, use an X to rate each choice separately.

1. I have NOT been doing this at all…..(N)
2. I have been doing this a little bit…….(L)
3. I have been doing this moderately……(MO)
4. I have been doing this a lot……. (A LOT)

| | | | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|---|
| 24. | D. Coping methods | | N | L | MO | A LOT |
| | D.1 | I've been turning to work or other activities to take my mind off things | | | | |
| | D.2 | I've been concentrating my efforts on doing something about the situation I am in | | | | |
| | D.3 | I've been saying to myself "this isn't real" | | | | |
| | D.4 | I've been using alcohol or other drugs to make myself better. | | | | |
| | D.5 | I've been getting emotional support from others. | | | | |
| | D.6 | I've given up trying to deal with the problem | | | | |
| | D.7 | I've been taking action to try and make the situation better. | | | | |
| | D.8 | I've been refusing to believe that it happened. | | | | |
| | D.9 | I've been saying things to let my unpleasant feelings escape. | | | | |
| | D.10 | I have been getting help from other people | | | | |
| | D.11 | I've been using alcohol or other drugs to help me through it. | | | | |
| | D.12 | I've been trying to see it in a different light, to make it seem more positive. | | | | |
| | D.13 | I've been criticizing myself. | | | | |
| | D.14 | I've been trying to come up with a strategy about what to do. | | | | |
| | D.15 | I've been getting comfort and understanding from someone else. | | | | |
| | D.16 | I've given up the attempt to cope. | | | | |
| | D.17 | I've been looking for something good in what happened. | | | | |
| | D.18 | I've been doing other things to think about it less, such as watching TV, reading and sleeping. | | | | |

| | | | | | |
|---|---|---|---|---|---|
| D.19 | I've been accepting the reality of the fact that it happened. | | | | |
| D.20 | I've been expressing my negative feelings. | | | | |
| D.21 | I've been trying to get relief in my religion or spiritual beliefs. | | | | |
| D.22 | I've been trying to get advice or help from other people on what to do. | | | | |
| D.23 | I've been learning to live with it. | | | | |
| D.24 | I've been thinking hard about what steps to take. | | | | |
| D.25 | I've been blaming myself on what happened. | | | | |
| D.26 | I've been praying and meditating. | | | | |

## ANNEXURE H: FOCUS GROUP DISCUSSION GUIDE

FOCUS GROUP DISCUSSION FOR MIDWIVES WHO EXPERIENCED MATERNAL DEATH AND FRESH STILLBIRTH IN KHOMAS REGION.

1. Welcome

Thanks for agreeing to participate in the focus group discussion. I appreciate your willingness to participate. I am very much interested to hear your valuable opinion on your experiences on maternal death and fresh stillbirth.

2. Introduction

I am Tuwilika Endjala, a doctoral student at the University of Namibia. I will be facilitating the focus group discussion.

3. Purpose of the focus group

The purpose of this discussion is to have a discussion on your experiences on maternal death and fresh stillbirths.

4. Ground rules

- Everyone should participate. I may point to you if I haven't heard from you in a while.
- You name will not be identified in the report. You will remain anonymous. However, you will be identified by number e.g. 1, 2, 3 during our discussion and I will refer to you by such numbers.
- There are no right or wrong answers
- Every person's experiences and opinions are important.
- Information provided in the focus group must be kept confidential
- Please don’t have side conversations
- Speak up whether you agree or disagree.
- What is said in this room stays here.

- Our discussion will be audio recorded so that I can capture everything that you have to say.
- Put your cell phones.

5. Main question:

- What is your experience with maternal death and fresh stillbirth?
- How does it affect you (personal and professional life)?

6. Probing Questions:

  - Tell me more!
  - Please elaborate on this!
  - And what happened after that?
  - What did you do?
  - What was the outcome?
  - How did you feel afterwards?
  - What does that mean to you?
  - What were your expectations?

7. Conclusion

That concludes our focus group. Thank you so much for coming and sharing your thoughts and opinions with us. There is a questionnaire that I would like you to complete and I can collect it any time once you are done with it.

## ANNEXURE I: INDIVIDUAL INTERVIEW GUIDE

## INTERVIEW GUIDE FOR MIDWIVES WHO EXPERIENCED MATERNAL DEATH AND FRESH STILLBIRTH IN KHOMAS REGION.

### 1. Welcome

Thanks for agreeing to participate in the individual interview. I appreciate your willingness to participate. I am very much interested to hear your valuable opinion on your experiences on maternal death and fresh stillbirth.

### 2. Introduction

I am Tuwilika Endjala, a doctoral student at the University of Namibia. I will be facilitating the interview.

### 3. Purpose of the focus group

The purpose of this interview is to have a discussion on your experiences on maternal death and fresh stillbirths.

### 4. Ground rules

- During our interview, I will refer to you as participant and not by your name.
- There are no right or wrong answers
- Information provided during this interview must be kept confidential
- Our discussion will be audio recorded so that I can capture everything that you have to say.
- Put your cell phones.

### 5. Main question:

- What is your experience with maternal death and fresh stillbirth?
- How does it affect you (personal and professional life)?

6. Probing Questions:

- Tell me more!
- Please elaborate on this!
- And what happened after that?
- What did you do?
- What was the outcome?
- How did you feel afterwards?
- What does that mean to you?
- What were your expectations?

7. Conclusion

That concludes our interview. Thank you so much for coming and sharing your thoughts and opinions with us. There is a questionnaire that I would like you to complete and I can collect it any time once you are done with it.

## ANNEXURE J: CONSENT FORM FOR QUANTITATIVE PART OF THE STUDY (QUESTIONNAIRES)

Consent form for midwives' participation in questionnaires

Dear Participant

My name is Tuwilika Endjala, a doctoral Student at the University of Namibia and I am currently conducting a research project among midwives who are affected by maternal death and fresh stillbirth in Khomas Region in order to development an Employee Assistance Programme that support midwives in Khomas Region.

You are kindly requested to participate in the study by completing a questionnaire at the time which is more convenient to you. There will be no risk or harm to your participation in this study. You are expected to respond to the questions in the questionnaire in your free time. The questionnaire will take about 20 minutes to complete. Your participation in this study is voluntary and you are under no obligation to participate. You have the right to withdraw at any time; however, your participation is highly appreciated. You are not required to include any identifying information on the questionnaire such as a name and name of the hospital where you are working. Your identity will not be revealed during the study, during reporting or in the publishing of the research findings.

If you have any questions about the study itself, please contact Tuwilika Endjala on +264 811246900 or tkakili18@gmail.com. Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

The study coordinator: Dr Hans Amukugo
Contact details: +264-(061) – 206 4617 or: hamukugo@unam.na
University of Namibia

I have read this form and voluntarily consent to participate in this study.

……………………………..                                        ……………………..
Participants' signature                                        Date

ANNEXURE K: CONSENT FORM FOR QUALITATIVE PART OF THE STUDY

Consent form for midwives focus group discussion and interviews

Dear Participant

My name is Tuwilika Endjala, a doctoral Student at the University of Namibia and I am currently conducting a research project among midwives who are affected by maternal death and fresh stillbirth in Khomas Region in order to development an Employee Assistance Programme that support midwives in Khomas Region.

You are kindly requested to participate in the study through an interviews or focus group discussion at the time which is more convenient to you. There will be no risk or harm to your participation in this study. You are expected to share your experiences and respond to the questions during the interview or discussion. The interview will take about 30-45 minutes to complete. Your participation in this study is voluntary and you are under no obligation to participate. You have the right to withdraw at any time; however, your participation is highly appreciated. You are not required to share any identifying information during the interview or focus group discussion such as a name and name of the hospital where you are working. Your identity will not be revealed during the study, during reporting or in the publishing of the research findings.

If you have any questions about the study itself, please contact Tuwilika Endjala on +264 811246900 or tkakili18@gmail.com. Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

The study coordinator: Dr Hans Amukugo
Contact details: +264-(061) – 206 4617 or: hamukugo@unam.na
University of Namibia

I have read this form and voluntarily consent to participate in this study.

…………………………….. ……………………..

Participants' signature Date

ANNEXURE L: ATTENDANCE REGISTER FOR VALIDATION OF RESULTS WITH MIDWIVES AND MIDWIVES EDUCATORS

**Attendance registers for dissemination of results and support of an employee assistance programme for midwives affected by Maternal Death and Fresh stillbirth.**

| Name | Hospital | Position | Signature |
|---|---|---|---|
| 1. Ainau Funtua | IHK - ANW | RNM | [illegible] |
| 2. Precious Matie | WCH - ANC | RN/M | [illegible] |
| 3. Benvenuta Nsogie | WCH - ANC | EN/m | [illegible] |
| 4. Veripuruka Katjatenja | IHK - Maternity | SRN | [illegible] |
| 5. Michele B Kaupeke | WCH - ANW | RN/M. | [illegible] |
| 6. Hilde Ndeungama | WCH - ANC | RN/M | [illegible] |
| 7. Esperanca Vd Meulen | Family Health Division | Senior Programme Officer | [illegible] |
| 8. Theresia Bock | WCH ANW | SRN | [illegible] |
| 9. | | | |
| 10. | | | |

**Attendance registers for dissemination of results to midwives educators and validation of the developed Employee Assistance Programme and implementation strategies.**

| Name | Position | Signature |
|---|---|---|
| 1. H Nashedi | Lecturer | [illegible] |
| 2. K. Runore | Clinical instructor | Runore. |
| 3. C. Mbapaha | Lecturer | [illegible] |
| 4. A J. Nazimbu | Lecturer | AJKazimbo |
| 5. | | |
| 6. | | |
| 7. | | |
| 8. | | |
| 9. | | |
| 10. | | |

# ANNEXURE M: VALIDATION REPORTS FROM EXPERTS

Dr Emma Leonard
Email: eleonard@unam.na
Windhoek
Namibia

12 August 2020

Dear Tuwilika,

**VALIDATION OF THE DEVELOPMENT OF AN EMPLOYEE ASSISTANCE PROGRAMME (EAP) AND IMPLEMENTATION STRATEGIES**

I had a pleasure of reviewing the EAP and accompanying implementation strategies you have developed as part of your doctoral studies. The study is timely and of significance during this period when the country is faced with the challenges of Covid-19 and could be useful in providing healthcare providers an avenue for psychosocial support in a broad range of areas.

The documents present good information in a scantly research area in the country. However, since there are international protocols concerning EAP development, I would suggest the use of the Employee Assistance Programme Association - South Africa (EAPA-SA) Standards document which is aligned to the international EAPA Standards. The EAPA-SA document is appropriate for benchmarking because of the similarities of the socio-political and policy environments between Namibia and South Africa. My comments on the EAP that was developed was therefore more on the chronology of activities as outlined in the EAPA-SA, a copy of which was provide to you.

On the implementation strategies, which ones again should be guided by the EAP Standards, I have made some minor comments/inputs as follows:

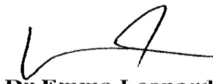
- The three activities below should be clearly outlined/discussed/presented:
  - (i) Creation of awareness of the EAP amongst staff i.e. marketing and promotion of the programme to ensure optimal utilization,
  - (ii) Training of supervisors on the EAP and how to make referrals, and
  - (iii) Monitoring and evaluation of the EAP to assess its utilization.

- Strategy 2 and 3 in the document are similar, consider merging them.
- Some questions/concerns relating to Strategy 4 in the document:
  - Did your study establish staff exodus due to MD & FSB?
  - It is not the EAP's responsibility to establish mechanisms; the EAP through its feedback will alert management about that and it is then the duty of management to develop the mechanisms.
  - The EAP aims to reduce the incidence of staff exodus through the provision of services to address personal & work-related issues that leads to the exodus.

This is a synopsis; detailed inputs on the draft EAP and implementation strategies are provided in the attached full/main document.

I am indeed humbled by the opportunity to comment on this very interesting study and wish you the very best with its completion.

Yours sincerely,



**Dr Emma Leonard**
**EAP Expert**

Namoonga. B. Chiwalo-Masule
Social worker
Cellphone number: 085346909
Windhoek, Namibia

Date: 09 August 2020

Dear Tuwilika,

**RE: Validation of the EAP and Implementation Strategies**

I have reviewed the EAP and implementation strategies document that you sent to me. You have presented good work and I found the EAP to be concise and realistic. Below find my inputs:

On the EAP training content you may want to consider the following:

**Training for midwives**

- Add cognitive behaviour therapy since the midwives are leaning more on negative coping mechanisms.
- You may want to consider changing health working relationship to team work
- It will be ideal to add emotional intelligence/emotional focused therapy as it will aid in midwives learn to rule their emotions and engage in productive emotional processing.

**Training for supervisors**

- Combine respectful workplace and building a healthy workplace
- Change supervisor training to supervision

**Strategies**

On the strategies, look at the five-year time frame instead of one year (2021)

Strategy no 1: Training of midwives' manager, on the indicator, rather put the number of trained managers

Add more indicators on strategy no 1 e.g. Productivity and performance instead of only job satisfaction

**Strategy no 2:** Add designing training programme for midwives

For the indicator under that critical factor, at least use percentage or numbers of trained midwives per facility or per ward.

Training programme for midwives deigned by when? (Indicate the period)

**Strategy no 3:** Indicate the implementation date of the indicators e.g. 2025

For the indicator under provision of counselling, relook at the year 2021.

**Strategy no 4:** Specify the types of incentive at the strategic objective.

Incentive strategy presented by when? Specify for all indicators in this strategy.

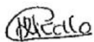
On situational analysis for retention indicate the percentage of staff turnover.

On strategic objective under this strategy, maintain resilience once the midwives have resilience they will be able to persevere. (If possible develop a resilience plan for midwives in the work place)

You may want to add: develop and implement a reflection plan of success stories in midwifery care.

All the best in your studies

Kind regards



Namoonga

ANNEXURE N: FOCUS GROUP DISCUSSION TRANSCRITPION

**FOCUS GROUP DISCUSSION**

Place: IHK

Date: 16.03.2019

Start time: 12h00 End time: 12:50 Duration: 50 Minutes

Interviewer: What are your experiences of maternal deaths and fresh still births? Anybody?

Participant 3: So far I have only witnessed one and it was a cardiac.

Interviewer: So what happened?

Participant 3: What happened was a patient was out of the ward for like 2 hours, like she went to the service station without permission. We were busy somewhere until one of the patients; one of the patients there show shared a room with her come and inform one of the student that there is someone who is not feeling well having difficulty in breathing. For her to go there the patient was not well and we went there.

Interviewer: And then what happened?

Participant 3: We acted but we lost her but we managed to save the baby though.

Interviewer: Tell me after that incident, how did that make you feel?

Participant 3: eish, it was traumatizing [participant talking very soft]

Interviewer: Can you please elaborate more on what you mean by traumatizing?

Participant 3: Because it was my first time seeing somebody dying like that since I was talking to her hours ago before she left the ward and she was very fine and out of nowhere the person is gasping and dead [participant crying]. It was really painful.

Interviewer: Ok, thank you very much participant 3. Anybody else to share their experiences?

Participant 5: Yes I would want to share

Interviewer: Ok, thank you participant 5 you can go ahead.

Participant 5: Thank you so much, aah I would want to share my experiences of maternal death. There was this patient, she was a referral and on arrival after a few hours with me the patient was dead in high care. It was quite traumatizing and I was sympathizing with my colleague who was with me because she was newly qualified.

Interviewer: How about yourself?

Participant 5: Of course It was traumatizing to me and seeing the baby lying there with no mother, I could feel it as a health practitioner.

Interviewer: Ok, is that all?

Participant 5: I was very sad as well.

Interviewer: Ok, anybody else? Thank you participant no 2.

Participant 2: I would like to share my experiences on the stillbirth. There was a mother who came in and to examine here it was a cord prolapse and since she was fully dilated she was rushed to delivery room within few minutes but the baby was delivered as a fresh stillbirth.

Interviewer: Ok

Participant 2: For me I was feeling guilty like maybe we could have done more to keep a close eye on her and also give her health education to call us on time. It was so sad for me to look at the mother and lifeless baby.

Interviewer: Now as a midwife, you said you felt sad and traumatized. Is there anything else that was in your mind at that particular time?

Participant 2: I was thinking that maybe if the mother have known then it could be prevented. I was feeling so guilty that maybe the mother was not advised well at ANC.

Interviewer: Thank you very much participant no 2. Anybody else? Yes participant no 1.

Participant 1: [participant no 1 coughs] Ok, for me it was a mother, she was also a nurse who was involved in a car accident and all along the baby was moving and when the baby was delivered it was a fresh stillbirth.

Interviewer: So how did that make you feel as a midwife?

Participant 1: It made me so sad, it make me feel emotionally disturbed because she was also my colleague.

Interviewer: Ok, alright, thank you very much participant 1.

Participant 6: Can you kindly rephrase the question for me?

Interviewer: Ok, the question is can you share with us or the group the experience that you have gone through either on maternal death or fresh stillbirth?

Participant 6: Ok, I have 2 and half things. The first thing for me is maternal death. It's by a lot of things as we know as midwives but I have witnessed that most of the pulmonary oedema and cardiac patient tend not to survive.

Interviewer: So how does such death make you feel?

Participant 6: I feel like quitting whenever there is a death. We take incidents differently according to our personalities. To me after an incident of one patient who died on the table in theater I suppose to console the husband but I couldn't hold my tears. I started crying. It hurts, do you understand? It hurts. This person was never sick; this person just came from home and then all of the sudden she just died. And this husband is asking you all these questions where you don't know even what to answer. What are you going to say to this person? It like being a midwife yes sometimes it hurts. Sometimes it surprises you. You get surprised kutya mbakutya vii [local word for "I mean"]. Gravida 6 and you are still pregnant after all the C-sections. Will you get all the question of, sometimes it make you want to kill someone. You are 13 and you are pregnant and father is your family member. Look, the person who brought that patient is the one telling you she was staying with uncle blah blah blah. At time you want to be a police officer and lock someone up. Being a midwife you have all the feelings.

Interviewer: Ok

Participant 6: Anger is part of it because sometimes you are so angry were the senior sister [referring to midwife] will come to you and say mbae nu [a local term meaning you know] relax, my sister just breath in and out, these are human beings and you cannot deal with human beings and not angry.

Interviewer: Ok, participant no 6 can we talk about your own feelings after a death event and not general topics

Participant 6: Ok, after maternal death I felt like I killed someone. I was agitated by everyone. I was angry to the point that I want to explode. Sometimes I cry. Sometimes you become a mother or even sister because this person who is coming into the ward has lost a baby and there in no family member what are going to do. You become the shoulder to cry on. So it's a lot of feelings mixed up. Those incidents inflict fear in me and I was not at peace. I started judging my own competency also.

Interviewer: Thank you very much participant 6 that was quite a very emotional experience that you have gone through. Anybody else? Yes participant no 4

Participant 4: Ok for me I just wanted to share my experience. There was a day this mother, she was a private patient, 30 weeks of gestation and had a placenta abruptio. She was

bleeding profusely and for the Dr to come here it took time. So the C-section was done and it was a fresh stillbirth. I was so sad and traumatizing to have a patient gravida 3 and no alive baby at all. To make matters worse I was also pregnant and I was thinking of myself that maybe one day I will also go through those things. Yaah it was really bad. Since I was also pregnant that time, I started having dreams of my baby dying during the birth process.

Interviewer: Ok, this is an open discussion let's feel free. Who want to add something? Ok participant no 1 wants to add something.

Participant 1: Ok, for me this patient was done C-section and went to PNW nicely and baby was in baby room. The mother was in the room waiting for the baby to come and that day and when we took the baby to the mother the mother was communicating well and all the Obs were fine. There was nothing that was out of range that could tell you that the mother need more attention than others. And then just during the rounds the mother just collapsed. We run in and we started to do all the CRP.

Participant 3: [laughs]

Participant 1: I mean CPR but then the mother could not make it. No one could explain what happened. For me it was very very, it was my first time and I was like oh my God this is not happening [participant move her hands and show a shocking sign on her face]. When I went home, I was just thinking what happened. It touched me so bad, I couldn't sleep for days and every time I come to work and go in that room I was getting the whole recollection of the event and the face of the mother was always in my mind. I felt like I owe the family members an explanation since I was allocated at that area.

Interviewer: Ok, how did that affect you professionally?

Participant 1: It changed me completely that every time I am receiving a patient, it doesn't matter in what state, C/S or NVD I always double check my work. Sometimes I even get the 2nd person to re-check if I am doubting something because I feel like that that I missed something that I could have picked up early.

Interviewer: Am I correct to say that I make you to be extra cautious?

Participant 1: Yes, Mmmmh.

Interviewer: Ok, participant no 5.

Participant 5: When you asked her it's as if you mean what make her to be a good midwife to be on top of her game.

Interviewer: No, that's not actually what I meant. Those can be recommendations that can come at the end of our discussion.

Participant 5: What I am saying is that like she was saying it make her double check

Interviewer: Ummh

Participant 5: With all these things that they have mentioned I actually noticed that at time you are asking us how we feel as midwives. This Programme supposed to protect us or to help us manage as midwives. I think as midwives in these situations that we are all in or we encourage us or it teaches us or it enable us to try and learn as much as you can from such incident You understand? Because like if you don't know how to act when students for example comes to you to report you will be more alert and act fast if you have witnessed a maternal death or fresh stillbirth.

Interviewer: Ok, thank you very much participant 5. Yes participant 4.

Participant 4: For me I just want to add, ok there are certain case whereby you try your best.

Interviewer: Yes

Participant 4: Whereby you really say ok here I have tried and then I failed.

Interviewer: When that happens now, how does it make you feel?

Participant 4: Yaah like a maternal death or fresh stillbirth after you have tried your level best it will really sometimes it sometimes you just want to quit. It really affects you. You feel like why do I have to blame myself if I have tried all I could but if you know a case has happened and then you think you didn't try that much there you really feel guilty even a year especially if it is a maternal death. It really affect you negatively.

Interviewer: Ok. When you mentioned that sometime you get feelings of you just want to quit, what happens when you get such feelings?

Participant 4: Aah, you are kind of emotional, you feel like you are not doing enough so you will have negative energy and feeling that aah I am just killing people and I am suppose to be saving their lives. [participant shook's her head].

Interviewer: Thank you participant no 4. Yes participant no 7.

Participant 7: I want to add to what participant no 4 talked about. I would say sometimes when we go through such incidences as midwives; you get to be kind of depressed. I do not sleep well; I find myself waking up in the middle of the night.

Interviewer: Ok.

Participant 7: Especially when you do something and it fails. You will be like you get depresses to think of what has happened, what you did, what you didn't do. So at the end of it you are like I need to get out of this place as much as I would wanted to have done. And also the whole thing is our our management according to our set up, sometimes in such incidences were you have to write an incident, you will write an incident of what happened. You will submit it and once they go through they will tell you no you have to write it this way while it's not what happened. So the pressure from our supervisors sometimes tend to make us depressed. And at times you feel like I am in a wrong profession and you want to quit despite the fact that you as a midwife you have played your role, you have done your best that you could.

Interviewer: In other words you sometimes feel pressurized by your supervisors?

Participant 7: Exactly.

Interviewer: Ok, Thank you P 7. Any other views on experiences before we move on to coping mechanism? [silence]. Alright, if there are no other views the next points is on the coping mechanisms. After all the experiences that you have witnessed, how did you cope or how are you coping with such experiences?

Participant 5: In these incidences like in my case, the senior sisters [referring to senior midwives] helps a lot. You can go to them and say this is what happened and staffs like that but at times it becomes difficult like what P 7 said because there some midwives that just want to find blame on you though you tried everything that you could. You understand?

Interviewer: Ok.

Participant 5: Yaah there is some that are like that, some will not show any interest in how you feel. Sometimes they will just tell you to cope with it. So yaah, it's difficult especially if you are new say as in couple of months because this is something new and you are just human. By the time you get let's say 2 years in the profession it becomes a little bit lighter. Like me I think I have cried so much when it happened for the first time. People like me just cry, I am a cry baby, so a person will find me in the tea room crying but they don't care. They will just pass by you and they start eating their food.

All participants: Laughs.

Participant 5: Fine she must deal with her issues, what I care. And sometimes they will even make it worse.

Interviewer: How?

Participant 5: They will say you have done this and that. You know such things, like shifting blame on you and there are really some of us that are vulnerable, who are not talkative like me. Some colleagues are just not supportive.

Participant 3: Judgmental

Interviewer: Ok

Participant 5: Yes, judgmental and just want you feel sad. With my very first case I did not cope well. I was booked off the whole week and I ended up at the Psychiatrist[47] because I kept on replaying that incident in my head. Up until today it hunts me and if I lose another mother or baby that I monitored properly I will quit this job. To me it's depressing; I started drinking after that incident. I drank for three days consecutive because every time I think of this baby I just feel it was unfair. And you know what the other thing is, i started crying 3 Am and I didnt do further observations. The sisters [referring to midwives] that were on duty wanted me to go and explain to the family of what happened. Imagine I am already in that state. I didn't have energy for that.

Interviewer: Alright, thank you so much P5. Any other one who wants to add? Yes P2

Participant 2: On my side I didn't seek for assistance like Psychologist or something. So it's like I got use to it. I might be hurt the time of the incident but like they say time heal all wounds. My colleagues were also telling me that at least in your case the causes were clearly known unlike in some of our case.

Interviewer: Does it make you cope better when the cause of death is known?

Participant 2: Knowing the cause of death made me feel better but the main thing is hearing my colleagues explaining their situations. It enlightened my situation and helped me to cope better.

Interviewer: Ok, any person? Participant 6

Participant 6: I would say sometime it's quite difficult. Sometime you take the deep breaths. When you do that at least it relieves you. You sit down and you meditate, you get to think of what happened, what you have done better, what you would do, you know you mediate and think about the situation so that next time you don't repeat the same mistake. I would say meditation is key.

Interviewer: Thank you P5. Yes P4

Participant 4: Ok for me the coping mechanism, I cannot really say it's an easy thing when you don't have support from your colleagues. We are different, I feel much better when I talk to my colleagues and they tell ok in this profession you are expecting A and

B to happen although it's not supposed to be like that. If they give you positive advices you feel much better but if there is too much criticism you will not cope at all coz you will feel like that thing that has happened is still fresh in your mind and it really not good. I think maternity is one of those wards were I think if patients have a counselor why are we not having one in incidence like maternal deaths and fresh stillbirth. We are supposed to be referred to a professional that we can talk to.

Interviewer: Thank you very much participant 4.

Participant 4: Me I just want to kind of summarize. When there is lack of support or a lot of criticizing or people are judgmental too much, this will cause a lot of lack of self-confidence, lack of self-esteem and then at the end of the day its poor performance. That's what I wanted to add on the experiences.

Participant 5: And it will even create lack of interest in your job, ne, because at the end of the day you keep asking people what am I supposed to do. I developed lack of interest and I started running away from critical patients. This will lead to lack of experience because how am I supposed to learn to act if I am running away. I am telling you, I once resigned because of a maternal death that happened during the delivery. I went to private sector because I felt it will be better there because midwives do not deliveries it's done by the Dr. But they ended up putting me at the maternity ward again. I got stressed there and decided to come back to this maternity because here more people who are helpful.

Interviewer: Ok, thank you. Any final additions to the coping? [silence]. In the absence of any additions we have come to the end of our Focus Group Discussion and let me thank you all for your active participation and valuable contributions. This information will be kept confidential and the findings from this study will be shared with you. Should I need further information or clarification I might come back to you. Thank you very much and have a splendid day.

ANNEXURE O: INDIVIDUAL INTERVIEW TRANSCRIPTION

**INDIVIDUAL INTERVIEW**

Place: WCH

Date: 26.03.2019

Time: 15H36 – 16H18 Duration: 42 Minutes

Interviewer: The first thing is what is your experience with maternal death and fresh stillbirth?

Participant: I have experienced only one maternal death but the fresh stillbirths are countless.

Interviewer: Can we first go to maternal death experience.

Participant: Uuumh, she was referral from the regions and she demise just a few hours roughly 4 hours after arrival. Losing a mother, you know or any person, it can be a child, it's a sad event, and she just delivered so the baby was left to be now raised without a mother. Imagine now the child will have that knowledge that the mother died just after you were born

Interviewer: Ok

Participant: I was very traumatized especially when the sister of the deceased mother came, I had to be the one to inform them of the event that their sister is no more. It was very emotional; you are only human you know.

Interviewer: When you say emotional, what do you mean by emotional?

Participant: Aaahm, to remember that for that specific case we had to call them aside first because she was coming from the region and they were here and they were just informed that she will be coming here so they came to meet her this side. So I had to them to a separate room, put two chairs immediately when she came in she could just sense that why would I be called in another room. Something is wrong. Immediately she was on the edge, what is wrong? Why are you calling us on the corner like this? What is wrong? How is she? Is she fine? You know? You as a midwife who is trying to calm the situation to get it out of control had to sit. Luckily I had a social worker; I had to call her to accompany me as well.

Interviewer: Aright

Participant: We set them in and oh the whole break down, you. Me myself I was so traumatized. I couldn't think properly and I just wanted to go home. But what stood out of the sister was that she requested to see her deceased sister. I told her that you can if are strong

enough but I told her that we haven't prepared the body yet. When I took her in, she was literally saying good bye to her sister. I started getting goose bumps and I couldn't help it but also cry.

Interviewer: Ok

Participant: The speech she gave to her sister, she was like don't worry, continue your journey, go well, your baby is here we are going to look after the child. Don't even turn back and look behind you, move forward. It was so sad. You know you who is listening to someone like you know saying her final good byes.

Interviewer: From there now, to you as a midwife, how did it make you feel?

Participant: Aah, [participant gave a shocking signal on her face] it's only that I am a midwife but even now as I speak about it it gives me goose bumps. So it affects you, it not an easy thing to experience you know. And aah, the effects also after wards until now, it has been some years close to five years but I still remember it at if it was yesterday.

Interviewer: Ok

Participant: So it it it stays with you. It haunts you you know. It becomes part of an experience that you will live with. You can try, you can't forget it. You can't re-undo its part of you now. It's a memory that you will carry for as long as I shall live.

Interviewer: Ok

Participant: It's pretty emotional, uh, aya ya, [participant shakes her head, and then laughs].

Interviewer: Ok, alright. You were about to get the fresh stillbirths. Can you perhaps share with us your experiences of fresh stillbirths?

Participant: Mmh, what? On top of my head there is just certain things that the memory, the first that you talk about is you think about. It was a, i remember a woman was a gravida 8 para 7. She was was a very tall woman. You would expect and tall but not obese things to go well. She come in labour. I took her to the delivery room. That baby was just, aaah [participant signals of surprise on her face] you could say the head took long to descent and it was a shoulder dystocia.

Interviewer: Ok

Participant: Its one of those emergency were you need to act immediately. We struggled with that baby. Other sister [referring to midwives] came to assist me; we could not get that baby out. A doctor was called to help with that we could not get that out. It was so traumatic; you know it took if I could remember more than 20 minutes so so much that when the baby came out there was no life. It was a huge baby until now I

remember the weight, it was 4.7kg baby. It was a big baby; I have delivered that throughout my midwifery profession. Since that date I have never seen a baby that big and there was just nothing we could do. The baby was just literally stuck because the baby was very big.

Interviewer: Ok, so now after the event, as a midwife what happened to yourself?

Participant: It's very saddening to come and tell someone who carried for 9 months that the baby did not made it. So it's it's you know, because you are a midwife it doesn't mean you don't have emotions. So it's emotionally tormenting. You go home that evening and you are re-living, is there something I could have done better? If I had seen some signs could I have saved this baby? You know, it's a memory, you carry it, you are re re re what re-living the whole experience especially for the next couple of days. You are re-living thinking that maybe there is something that could we have done better had we done this could this child still be alive. The fact that its now, as the case maybe that baby has passed away and there is nothing you could do to bring that baby back. Its its [participant shake her head].

Interviewer: Am I correct to say that you had some sort of self-blame?

Participant: You you you always have to think about all the possibilities.

Interviewer: Ok

Participant: Have you tried enough? Did you miss a sign? Maybe we could not have delivered this baby vaginally; maybe we could have gone for an emergency C-section. It's just things that you have to, you can't just, you know after an event like that and you go home and nothing has happened. You will always retrospective you know about every action you have done. I was even pregnant that time and I started having dreams of my baby dying during the birth process. I was affected and I was always freaking out when I do not get fetal kicks after sometime. I was asking the fetal monitoring with a CTG from my colleagues and I ended up up delivering pre-maturely, 2 weeks before time but I demanded a C-section as I was really afraid of delivering vaginally. Mmmh, the that case had to be reviewed so that we also learn to avoid mistakes next time on another person. So yes there are serious effects.

Interviewer: Am I correct to say that after that event there were also positive effects?

Participant: Yes, I really learnt something positive to prepare me for next event not to happen again or for me to be ready for the next case.

Interviewer: Any other experience that you want to share?

Participant: On fresh stillbirth we get a lot.

Interviewer: Roughly how many per month or per quarter?

Participant: uuh, they could be 2-3 depending, usually not more than 5.

Interviewer: In a month?

Participant: Yaah and around 15 in a quarter, more or less.

Interviewer: Ok, you were just getting into sharing other experience of fresh stillbirth.

Participant: I had this mother, came from home having something hanging in her vagina. When I checked I saw that the membranes have prolapsed. There was some pulsation on the cord but by the time we took her to theater and deliver the baby there was no more fetal heart rate. When something is not preventable there is a difference with when you were monitoring the woman in labour and you lose the baby. But to the mother it is the same, you go home empty handed. I believe no mother should live that experience.

Interviewer: Can perhaps remember or share any experience that happened after you have closely monitored the mother while in labour.

Participant: I had that one and it so amazing the family came they made a case. A woman was in labour, she was induced and until the minute that the baby started with fetal distress she was on a CTG.

Interviewer: Ok

Participant: So that CTG, when the bradycardia started it was nicely evident on the CTG and I remember the Dr was present and we rushed her to theater within probably 10 minutes but we could not save the baby.

Interviewer: Ok

Participant: You know in most cases fingers have to be pointed at someone. We had evidence, until now we couldn't understand what has happened. It was not an abruption, the heart just stopped. I was now asked so many questions as the one who was delegated with the patient. I couldn't sleep for days. I was afraid of going to hearing even though I knew that I did my observations as they should be and I picked up the problem on time. Just the fact that the baby died kept hunting me·

Interviewer: Ok

Participant: The drs requested for postmortem that took really sometime to get the results. When the results came we were told that they found some heart problems with the baby. I was relieved to hear that there was something wrong with the baby.

Interviewer: Does it mean that it made you feel better after you had the results?

Participant: Yes, most definitely because at least even I could go for the hearing there was some evidence of the cause of death which was not due to negligence from my side. It make a big difference. It's all about what you can prove.

Interviewer: Ok

Participant: My dear with all these experiences that I have gone though they have really changed me.

Interviewer: Can you elaborate more on that?

Participant: Not only because I have experienced the events themselves just because in my line work now I got to be exposed to evaluating files now and see what had gone wrong. This is how we learn we are auditing file. So it makes you want to improve the care. I really learnt a lot through hose experiences and they have changed me for the better. We do trainings to the junior staff, we have a lot of junior staff who need a lot of guidance we come back and give feedback and train and practice, we are doing drills, I do now. I would shout that there is a woman who is bleeding PPH so that I see do they know; do they carry out what is the first thing that they supposed to do. So we are trying our outmost best to do as much training as possible.

Interviewer: Alright, tell me, toward your own profession as a midwife, having gone through these experience did it affect you as a midwife?

Participant: It's an eye opener, you know, some of the things you don't see until you get such experiences. You mature professionally as well. It improves what you were carrying before and your knowledge.

Interviewer: Can we go to the coping mechanism. After you have experience maternal death, how did you cope?

Participant: Aah currently now, it's it's there is nothing that you go and somebody talk to you, how are you feeling? Did you sleep the previous night; you just go on, whether you had sleeps night whether it torments you for days, years or whatever.

Interviewer: Ok

Participant: Nothing, there is no coping mechanism in place, it's just you yourself, like it has not happened you know. Hopefully the next day you wake up and you come to work but there isn't something that is dedicated to say this is come coping mechanism that is set up for you to talk to somebody. It would help I think, you know somebody just to walk you through. You also need that because it has affected you, you just human. That my personal opinion.

Interviewer: Ok, alright, and also for the fresh stillbirths how did you cope with them?

Participant: Mmmmmh [participant laughs]: Eish, you will just, you accept it, it's part of the profession I guess, talk to your colleagues, not that you will come home hoping to feel better. When the deaths happen to you, you just accept that they have happened and move on.

Interviewer: Anything else that you want to add on the coping?

Participant: uuummmh, at some point we were also thinking that it's needed. Imagine for someone who is just a new graduate. I have matured and I take things better and I vent a lot.

Interviewer: What is needed?

Participant: Something that there should be coping, someone who have gone through an event, you need to vent somewhere.

Interviewer: Ok

Participant: Maybe not venting, just to express yourself you know. Sometimes you just need to air out. Imagine you are a new graduate fresh from school and it your first week at work. You know how you you will probably want a change in your career because you are experiencing this. But if one talked with you, you know, maybe some counseling of some sort you through and helped you cope or maybe some psychological support. Ok it's a necessity.

Interviewer: Ummmmh, tell me, you have mentioned earlier of others wanting to leave the profession you know. To you as a midwife have it ever crossed your mind that you want to quit the profession?

Participant: There are days when you see it happening or seeing it happening to other midwives and there is such a thing that have to be taken about someone in case of negligence or whatever the case maybe. It crosses your mind and the other time I am thinking uuh, let me just go to another wards were I don't have to face this. Like maternity is a very sensitive department and out of the cases that are taken up to hearing or the nursing council the majority are always maternity cases.

Interviewer: Ok

Participant: So when you have that at the back of your mind, you are even thinking oh no maybe I should be somewhere else where I am a little bit out of the profession that is always ending up into problems. We are forever in the newspapers. The community has perspective of how the nurses and midwives and how badly we are. Nobody really sees the good things we are doing.

Interviewer: Ok

Participant: So those negative things sometimes you look at it and you are thinking perhaps I should be thinking about even someone has to say I need to motivate someone to become a midwife you are thinking maybe I need to tell this person what to expect that there are some days it will be like that so that they make informed decisions.

Interviewer: Alright, as an in charge of labour ward, uuhm whenever you get new staff or if someone get in such a problem what is in place that you do as a supervisor?

Participant: Uuhm, not that I can think of only statements that are required from midwives or everybody who was involved.

Interview: And how do your subordinates take that?

Participant: Aaahh, every time when they hear of incident report everybody think I am in trouble, what have I done. The last time we had to make training to make them understand the need of writing an incident report and why it's important.

Interview: Ok, I just want to make sure that I have captured the recommendations you have made. You said that venting is needed and also debriefing after an incident, so as counseling were people can get some psychological support. Anything else that I missed?

Participant: Uum, that what I think need to be in place as much as we are taking care of the people there should also be something or someone to take care of us and our wellbeing. It will also motivate us, also help them cope and make them to come back happier the next day.

Interview: Ok, any other last words that you want to add?

Participant: I just want to say that this is a good study that someone at least is concerned about the wellbeing of midwives. I applaud you having chosen such a tittle.

Interview: Alright, thank you very much for the valuable information and your time and be rest assured that the information and your time and be rest assured that the information is strictly for study purposes.

Participant: Alright

Interview: Have a good day

# ANNEXURE P: PERMISSION TO USE DEATH DISTRESS AND BRIEF COPE SCALES

## TUWILIKA ENDJAL APPROVAL TO USE THE Brief COPE SCALE

**Approval to use THE Brief COPE scale**

Re: Request to use the Brief COPE Scale

Carver, Charles S. <ccarver@miami.edu>
Sun 9/30/2018 4:23 PM
To: Endjala, Tuwilika <tendjala@unam.na>;

I apologize for this automated reply. All measures I have developed are available for research and teaching applications without charge and without need to request permission; we ask only that you cite their source in any report that results. This also means please do not ask me to send you a letter authorizing the use of a scale, because this message is all I am going to send.

Information concerning the measure you are asking about can be found at the website below. I think most of your questions will be answered there. If I know for sure that there is a translation of a scale published in a language other than English, that information can be found there. If no information is there about the language of your interest, that means I do not know of a published translation. You are free to do your own.

If questions remain, do not hesitate to contact me. Good luck in your work.

http://www.psy.miami.edu/faculty/ccarver/CCscales.html

Charles S. Carver
Department of Psychology
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Coral Gables FL 33124

305-284-2817
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http://www.psy.miami.edu/faculty/ccarver/

On Sep 19, 2018, at 3:58 PM, Endjala, Tuwilika <tendjala@unam.na> wrote:

Dear Prof. Carver

Re: REQUEST TO USE THE Brief COPE Scale in my doctoral research.

1

APPROVAL TO USE THE DEATH DISTRESS SCALE _TUWILIKA ENDJALA

**Approval to use the Death Distress Scale in my study**

**From:** Ahmed Abdel-Khalek< aabdel-khalek@hotmail.com>
**Sent:** Wednesday, September 19, 2018 9:11 PM
**To:** Endjala, Tuwilika
**Subject:** Re: Request to use the Death Distress Scale

Dear Tuwilika
Thanks for your email and the interest in my Scale.
You have the full permission to use the Death Distress Scale in your Thesis and all your research.

My papers regarding this scale are available in Research Gate under my name: Ahmed M. Abdel-Khalek. Please refer to my family name as Abdel-Khalek and not as Abdel.

Best wishes
Ahmed

Sent from my iPad

On Sep 19, 2018, at 10:02 PM, Endjala, Tuwilika <tendjala@unam.na> wrote:

Dear Prof. Abdel

Re: REQUEST TO USE THE DEATH DISTRESS SCALE

My Name is Tuwilika Endjala, a registered doctoral student - Public Health candidate at the University of Namibia (student no: 9964924). I am intending to conduct a study in Windhoek, Namibia as part of my doctoral studies titled: Development of an Employee Assistance Programme to support midwives affected by maternal death and stillbirth in Khomas region, Namibia.

The purpose of this email is to seek permission to use the death distress scale to collect data for the research. The questionnaire is only intended for the collection of data and this research and not anything else.

Thanking you in advance.

Tuwilika

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## ANNEXURE Q: CRONBACH ALPHA TESTING OF DEATH DISTRESS AND BRIEF COPE SCALES

**Reliability scores of the Scales**

| **Scale** | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Squared Multiple Correlation | Cronbach's Alpha if Item Deleted | Cronbach's Alpha |
|---|---|---|---|---|---|---|
| **Death Depression Scale** | | | | | **0.725** | |
| Death Obsession Subscale | 64.96 | 139.42 | 0.37 | 0.29 | 0.775 | **0.781** |
| Death Anxiety Subscale | 64.14 | 143.27 | 0.17 | 0.16 | 0.782 | |
| Death Depression Subscale | 64.74 | 139.36 | 0.39 | 0.36 | 0.775 | |
| **Brief COPE Scale** | | | | | **0.796** | |
| Self-destruction Subscale | 60.55 | 128.31 | 0.45 | 0.28 | 0.765 | |
| Active coping Subscale | 62.23 | 120.67 | 0.49 | 0.36 | 0.759 | |
| Denial Subscale | 60.61 | 130.90 | 0.31 | 0.19 | 0.775 | |
| Substance abuse Subscale | 63.90 | 141.08 | 0.11 | 0.18 | 0.785 | |
| Emotional support Subscale | 62.62 | 121.27 | 0.49 | 0.38 | 0.759 | |
| Instrumental support Subscale | 62.32 | 116.13 | 0.61 | 0.44 | 0.747 | |
| Behavioural disengagement Subscale | 61.06 | 139.36 | 0.10 | 0.22 | 0.790 | |
| Venting Subscale | 62.44 | 125.39 | 0.57 | 0.40 | 0.756 | |
| Planning Subscale | 61.96 | 118.21 | 0.51 | 0.43 | 0.758 | |
| Acceptance Subscale | 61.79 | 124.96 | 0.45 | 0.38 | 0.764 | |
| Religion Subscale | 60.44 | 132.05 | 0.24 | 0.14 | 0.782 | |
| Self-Blame Subscale | 60.36 | 131.23 | 0.30 | 0.31 | 0.776 | |
| Positive reframing Subscale | 61.87 | 122.21 | 0.52 | 0.43 | 0.757 | |

ANNEXURE R: LETTER OF PROOF EDITING THE DISSERTATION

From : I. Manase (PhD UKZN)

10 Laramie

Nienaber Street

Langenhovenpark

Bloemfontein

Date : 10 March 2021

| Confirmation of proofreading and language editing of Ms. Tuwilika Endjala's dissertation for a Doctor of Philosophy in Public Health degree titled, "An Employee Assistance Programme (EAP) to Support Midwives Affected by Maternal Deaths and Stillbirths in Khomas Region, Namibia" |
| --- |

This serves to confirm that I have proofread and edited Ms. Tuwilika Endjala's above-noted dissertation for a Doctor of Philosophy in Public Health degree. The suggested sentence and language construction changes have been attended to, and as such, the dissertation can now be submitted for examination.

Sincerely,

Email: irimanase@gmail.com / Manasel@ufs.ac.za