



**UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA**

Faculty of Health Sciences
School of Health Care Sciences
Department (Nursing)

Moral distress of critical care nurses when initiating do-not-resuscitate orders for critical ill patients in a specific government hospital

by

Sarah Ntseke

submitted in fulfilment of the requirements for the degree

MASTER OF NURSING EDUCATION

November 2022

**Supervisor: Prof IM Coetzee-Prinsloo
Co-Supervisor: Prof T Heyns**

DECLARATION

I, **Sarah Ntseke**, Student number: 21293415 declare that **Moral distress of critical care nurses when initiating do-not-resuscitate orders for critical ill patients in a specific government hospital** is my own work and that all sources that have been used or quoted have been indicated and acknowledged by means of complete references and that this work has not been submitted for any other degree at any other institution.

Sarah Ntseke

Date

ACKNOWLEDGEMENT

I would like to thank almighty God for granting me the strength and wisdom to complete this research. Despite the hurdles posed by the COVID 19 I was able to cover most part of the work through the grace of God our way maker. Indeed, nothing is impossible with God.

This study would not be possible without the support of the following people who have contributed significantly to this research:

- ✓ I wish to thank my supervisor Prof I.M Coetzee and Prof T. Heyns for their patience, continuous guidance, support and encouragement during the course of this research.
- ✓ My two daughters Otsile and Lerato and my friend Audrey Mphokela for their support and encouragement.
- ✓ The CEO of the hospital and the ICU staff for their consent to participate in the research.
- ✓ To all my colleagues for the motivation and words of encouragement, this research would not have been possible without them.
- ✓ Finally, Ms lauma Cooper for editing this dissertation, her effort is highly appreciated.

ABSTRACT

Introduction: Patients who are critically ill or seriously injured are routinely admitted to critical care units. If the patient's condition deteriorates beyond a certain point, the medical practitioner may prescribe or decide on a do-not-resuscitate (DNR) order that must be executed by the professional nurse. Professional nurses may experience moral distress that manifests in poor teamwork, depression, and absenteeism.

Aim: To explore and describe factors contributing to moral distress of critical care nurse executing do-not-resuscitate orders.

Design: The explorative descriptive qualitative design was selected to answer the research questions posed.

Methods: Critical care nurses of a selected public hospital in Gauteng province were selected through purposive sampling to participate in the study.

Participants: The shift leader assisted with selection of participants who met the eligibility criteria. The mean age of the participants was 36 years and most of them had more than five years' critical care nursing experience.

Finding: The findings were classified under three main topics which are moral distress; communication and psychological impact of DNR orders.

Conclusion: Clearly defined national guidelines or legal framework are required to regulate DNR processes. The study further demonstrated the need for unit based ethical platforms and debriefing sessions for the critical care nurses.

Key Words: Critical Care Nurse, Critical Care Unit, Do-not-resuscitate order, Moral distress.

TABLE OF CONTENTS

TITLE		PAGE NUMBER
Front Page		
Declaration		i
Acknowledgement		ii
Abstracts		iii
Table of Contents		iv
CHAPTER 1 ORIENTATION TO THE STUDY		
NUMBER	TITLE	PAGE NUMBER
1.1	INTRODUCTION AND BACKGROUND	1
1.2	PROBLEM STATEMENT	4
1.3	PURPOSE OF THE STUDY	4
1.4	RESEARCH QUESTION	5
1.5	SETTING	5
1.6	PARADIGM	5
1.6.1	Ontological	6
1.6.2	Epistemological	6
1.6.3	Methodological	7
1.7	DELINEATION	7
1.8	SIGNIFICANCE	7
1.9	RESEARCH DESIGN	8
1.10	RESEARCH METHODOLOGY	8
1.10.1	Population	9
1.10.2	Sampling and sample	9
1.10.3	Data collection	9
1.10.4	Pilot study	10
1.10.5	Data analysis	10

1.11	RIGOUR	10
1.12	DEFINITIONS OF KEY TERMS	11
1.13	ETHICAL CONSIDERATIONS	12
1.14	LAYOUT OF THE STUDY	13
1.15	CONCLUSION	14

CHAPTER 2 LITERATURE REVIEW		
NUMBER	TITLE	PAGE NUMBER
2.1	INTRODUCTION	15
2.2	CONCEPTUAL FRAMEWORK	15
2.3.1	Patient care function of critical care nursing	16
2.3.2	The concept Nursing	17
2.4.1	Exposition of moral distress	18
2.4.2	Causes of moral distress in Professional Nurses	19
2.4.3	Historical origins of moral distress	19
2.4.4	Moral sensitivity	20
2.4.5	Moral distress within cultural and religious complexities	20
2.4.6	Moral distress and acuity of a nursing unit	21
2.4.7	Moral distress and level of experience	21
2.4.8	Moral distress in critical care nurses	22
2.4.9	The outcomes of moral distress	22
2.5	DO-NOT-RESUSCITATE (DNR) ORDERS	23
2.6.1	Global views related to moral distress of critical care nurses on initiating do-not-resuscitate orders: Italian's viewpoints	24
2.6.2	The Islamic viewpoints on moral distress and end of life care	25
2.6.3	Sub-Saharan viewpoints on moral distress and do-not resuscitate orders	26
2.6.4	South African view on moral distress and do-not resuscitate orders	27
2.7	CONCLUSION	29
2.8	REFERENCES	30

CHAPTER 3 RESEARCH METHODOLOGY		
NUMBER	TITLE	PAGE NUMBER
3.1	INTRODUCTION	33
3.2	PURPOSE OF THE STUDY	33
3.3	SETTING	34
3.4.	RESEARCH DESIGN	34
3.4.1	Qualitative	35
3.4.2	Explorative	35
3.4.3	Descriptive	35
3.5	RESEARCH METHODOLOGY	36
3.5.1	Population	36
3.5.2	Sampling and sample	37
3.5.3	Data collection	37
3.5.4	Interview guide	38
3.5.5	Data analysis	39
3.6	RIGOUR	40
3.6.1	Credibility	40
3.6.2	Confirmability	41
3.6.3	Transferability	41
3.6.4	Dependability	41
3.6.5	Authenticity	42
3.7	CONCLUSION	42

CHAPTER 4 ARTICLE		
NUMBER	TITLE	PAGE NUMBER
4.1	ARTICLE: MORAL DISTRESS AMONG CRITICAL CARE NURSES WHEN EXECUTING DO-NOT-RESUSCITATE ORDERS IN A CRITICAL CARE UNIT IN A PUBLIC HOSPITAL IN GAUTENG	43

	Sarah Ntseke ^a , Isabel Coetzee ^b , Tanya Heyns ^b a) Gauteng college of Nursing: Ga-Rankuwa Campus b) Department of Nursing Science, Faculty of Health Sciences, University of Pretoria, Pretoria, South Africa	
--	--	--

CHAPTER 5: CONCLUSIONS, IMPLICATIONS, FUTURE RESEARCH AND LIMITATIONS		
NUMBER	TITLE	PAGE NUMBER
5.1	INTRODUCTION	44
5.2	PURPOSE OF THE STUDY	44
5.3	Factors contributing to moral distress of critical care nurses on execution of do-not-resuscitate orders	44
5.3.1	Theme 1: Emotional distress	45
5.3.1.1	Values conflict	45
5.3.1.2	Poor quality patient care	45
5.3.1.3	Provision of futile care	45
5.3.2	Theme 2: Articulation of DNR orders	45
5.3.2.1	Unclear written orders	46
5.3.2.2	Meaning of DNR orders	46
5.3.3	Theme 3: Unavailability of psychological support for nurses	46
5.4	STRATEGIES TO ALLEVIATE MORAL DISTRESS OF CRITICAL CARE NURSES ON EXECUTION OF DO-NOT-RESUSCITATE ORDERS.	46
5.4.1	Communication and ongoing professional development	47
5.4.2	Regulation of do-not-resuscitate orders	47
5.4.3	Support structures	47
5.5	RECOMMENDATIONS	47
5.5.1	Nursing practice	48
5.5.2	Education	48
5.5.3	Further research	48
5.6	LIMITATIONS	49
5.7	SIGNIFICANCE	49
5.8	PERSONAL REFLECTION	50

5.9	CONCLUSION	50
-----	------------	----

TITLE	PAGE NUMBER
LIST OF REFERENCES	51

LIST OF FIGURES		
FIGURE	TITLE	PAGE NUMBER
Figure 2.1	Conceptual framework	16

LIST OF ANNEXURES		
ANNEXURE	TITLE	
Annexure A 1	Ethical approval: University of Pretoria	
Annexure A 2	Permission: The Hospital	
Annexure B 1	Informed Consent	
Annexure B 2	Interview Guide	
Annexure B 3	Example of Transcribed Interview	
Annexure B 4	Table with Raw Data	
Annexure C	Confirmation of Editing	

LIST OF ABBREVIATIONS	
ABBREVIATION	MEANING
DNR	Do-not-resuscitate

CHAPTER 1

ORIENTATION OF THE STUDY

1.1 INTRODUCTION AND BACKGROUND

The critical care unit admits patients who are critically ill or injured daily. Some patients' condition deteriorates to a point where the medical practitioners may prescribe or decide on a do-not-resuscitate (DNR) order which must be executed by the professional nurse. Do not resuscitate is the policy and practice of deliberately not attempting to resuscitate a person whose heart has stopped beating; that is, to withhold resuscitation (Petris, Cimpoescu, Costache & Rotariu 2011:99). The DNR decision does not imply abandoning the patient, but is rather part of the actions that favour the patient's wellbeing in order to make a peaceful death possible (Rudnik & Wada, 2011). Mealer and Moss (2016:1615) emphasise that the ICU is a stressful environment due to high patient mortality, and critical care professional nurses and physicians encounter ethical dilemmas on a daily basis associated with terminal care discussions and futile care, which may be morally distressful. Vanderspank-Wright, Efstathiou and Vandyk (2018:15) add that death and dying is a reality of the clinical context of the ICU. Death often follows a decision to withdraw life-sustaining treatments. Critical care nurses are the primary care providers to patients and families at the end of life in the ICU.

The DNR order may be against the professional nurses' cultural, religious and moral beliefs. Vincent (2018:24) describes moral distress as the psychological response to knowing the right action required by a healthcare professional, but being unable to act due to internal, external and institutional constraints. Internal constraints include lack of confidence, an inability to cope with perceived suffering, and conflicts with cultural and religious beliefs. External constraints include a lack of collegiality, inadequate communication, and hospital or unit policies that conflict with their cultural beliefs (Mealer & Moss 2016:1615). Moral distress is an important issue, particularly in the ICU where key decisions regarding patients' outcomes are made and must be executed.

Failure or delay in executing DNR orders may result in conflict with the doctor, leading to moral distress, poor teamwork, depression and absenteeism (Allen & Butler 2016:1).

Do-not-resuscitate orders may also be against the nurses' religious beliefs, which exacerbates moral distress. Cheraghi, Bahramnezhad, Mehrdad and Zendehtdel (2016:403) state that since decision making on DNR depends on moral, religious and legal issues, it is a complicated and difficult decision and largely depends on communities' religious beliefs and understanding of human dignity. The Jewish religion believes that life is extremely valuable and no one has the right to shorten it. The only exception is when physiologic resuscitation is not possible or the patient is an imminently dying or moribund person (Cheraghi, Bahramnezhad, Mehrdad & Zendehtdel 2016:403). The Orthodox Jewish tradition teaches that for patients who are terminally ill, treatments that are not potentially curative may be refused, especially when harm may result (Bressler, Hanna & Smith 2017:11). Qureschi (2019:1) states that although resuscitation is intended to preserve life and restore health, it is sometimes at the expense of increased suffering and disability of the patient. This may lead to a do-not-attempt-resuscitation (DNAR) order. Most Christians believe that patients have the right to reject trying to be revived (Cheraghi, Bahramnezhad, Mehrdad & Zendehtdel 2016:403). In Western or Christian societies, the patients have an option to opt out of CPR if they are in such a situation, and at times the medical team can make a clinical decision when the efforts are deemed futile. This is supported by the legislation of the countries. As the preservation of life is of paramount importance in Muslim countries due to religious reasons as well as cultures and traditions, this approach is rare. The most commonly cited Islamic law states that if three knowledgeable and trustworthy physicians agree that a patient's condition is hopeless, then the life-supporting machines can be withheld or withdrawn. The family members are not consulted. These empowered physicians in Saudi Arabia to make DNAR decisions for terminally ill patients and allow dignified death. Pakistan and other Muslim countries, however, lack such legislation (Qureschi 2019:1).

In Spain, Velarde-García, Luengo-González, González-Hervías, Cardenete-Reyes, Álvarez-Embarba, and Palacios-Ceña (2018:868) found that the adoption of measures such as limitation of therapeutic effort (LTE) in cases where patients had not benefitted from prolonged vital support caused emotional conflict and psychological anxiety to ICU nurses. The lack of nurses' participation in decision making generated discontent due to their almost constant presence with the patients and involvement with their families. Some nurses felt like executioners and responsible for the patient's death (Velarde-García, Luengo-González, González-Hervías et al 2018:875). In their review, Vanderspank-Wright, Efstathiou and Vandyk (2018:24) found that

critical care nurses found the withdrawal of treatment and change from curative to end-of-life care in the critical care setting complex and emotionally challenging. The findings emphasised the existence of moral distress associated with terminal care and the need for emotional support measures for critical care nurses and physicians (Vanderspank-Wright, Efstathiou & Vandyk 2018:26).

In Rwanda, a small country in East Africa, intensive care medicine or critical care services are poorly developed (Nankundwa & Brysiewicz 2017:19). In some low- and middle-income countries, like Rwanda, guidelines to support the DNR decision and end-of-life care do not exist or are still being developed. Rwandan people tend to deny death and believe that medical science can cure any patient. Death is, then, often regarded as a failure of the system rather than a natural part of life. This belief affects all healthcare professionals, including nurses, because in their view if a patient is in hospital, the purpose is to restore life and not allow them to die (Nankundwa & Brysiewicz 2017:20). In their study, Nankundwa and Brysiewicz (2017:21) found that the participant ICU nurses experienced emotional distress, felt that DNR orders negatively impacted care, and were not part of the decision-making. The study recommended training on DNR orders for all healthcare professionals and that policies to guide DNR orders in ICU be developed and implemented.

Viljoen (2017:1) studied the legal position of do not attempt to resuscitate (DNAR) orders for both patients and health care practitioners, especially emergency health care practitioners in the pre-hospital environment of South Africa. As there is no legislation governing DNAR orders in South Africa, emergency health care practitioners face uncertainty as to the medical treatment to be provided to a patient who has a DNAR order and is in cardiac arrest. Furthermore, emergency health care practitioners feel uncertain about the legal consequences for either adhering to the DNAR order or ignoring it. The study compared the situation in the USA and the UK which provided a possible solution for South Africa with which to address dilemmas proactively instead of reactively. The study found that there is a need to allow the use of DNAR orders and proposed legislation, and suggested that proper guidelines should be developed from the proposed legislation, to be approved by the Minister of Health, in order to provide clarity for health care practitioners, on the use and enforcement of DNAR orders (Viljoen, 2017).

According to Campbell, Ulrich and Grady (2016:6), the following are widely held to be defining elements of moral distress: It arises when one believes one knows the morally right thing to do (or avoid doing), but one's ability to do this is constrained by internal and/or external factors. It

comes in two phases. There is “initial distress” at the time of the potential action (or inaction); later there is “reactive distress” or “moral residue” that occurs in response to the initial episode of moral distress. It involves the compromising of one’s moral integrity or the violation of one’s core values. Moral distress affects the nurse’s performance in the workplace negatively (Allen & Butler 2016:1). Moreover, ignoring the occurrence of moral distress associated with end-of-life care and exposure to several morally distressful situations often led to psychological complications, including anxiety and depression, poor patient care, and increased turnover rate (Allen & Butler 2016:1).

1.2 PROBLEM STATEMENT

The intensive care unit (ICU) admits patients who are critically ill or injured. Some critically ill patients’ condition shows no or minimal improvement despite good medical support, resulting in the initiation of DNR status (Nichols 2020:4). The researcher noted during clinical facilitation that critical care nurses caring for patients with DNR orders experienced emotional distress. Furthermore, during informal discussions with the critical care nurses, the researcher found that the DNR orders contributed to their moral distress because of conflict with their moral, cultural and/or religious beliefs. Al-Masri and Mrayyan (2016:17) recommend that doctors, nurses, patients and their families or surrogate decision makers should have the same understanding of the concept DNR to enable its consistent application and execution.

This, in turn, led to conflict with doctors, colleagues, and the patients’ families as DNR orders were not executed as expected. Moral distress frequently results in absenteeism, burnout and increased turnover rate, which can interfere with the provision of quality patient care (Mealer & Moss 2016:1). Limited research pertaining to moral distress amongst critical care nurses on initiating DNR orders is available in South Africa. This motivated the researcher to explore and describe the moral distress experiences of critical care nurses and possible measures to address the distress to improve quality patient care.

1.3 PURPOSE OF THE STUDY

The purpose of the study was to

- Explore and describe the factors contributing to the moral distress experiences of critical care nurses on execution of do-not-resuscitate orders.
- Suggest strategies to alleviate the moral distress of critical care nurses on execution of do-not-resuscitate orders.

1.4 RESEARCH QUESTION

In order to achieve the purpose, the study wished to answer the following research question:

- What are the factors contributing to the moral distress experiences of critical care nurses on execution of do-not-resuscitate orders?

1.5 SETTING

The setting refers to the physical location in which data collection takes place in a study (Polit & Beck 2017:743). The study was conducted in one selected public hospital in the Tshwane region, Gauteng Province.

The hospital is an academic tertiary institution with a bed occupancy rate of 1 594 and serves a population of 92 900 as well as referrals from North West and Limpopo provinces for specialist care. The hospital has one 22-bed adult intensive care unit (ICU), with eighty-one (81) professional nurses and four high care units for medical, surgical and neurological cases with twenty (20) professional nurses each unit.

1.6 PARADIGM

Polit and Beck (2017:720) describe a paradigm as a world-view or “a way of looking at natural phenomena that encompasses a set of philosophical assumptions and that guides one’s approach to inquiry”. The research paradigm thus provides the researcher with a frame of reference to ask and answer the research questions. According to Botma, Greeff, Mulaudzi and Wright (2010:40), a paradigm “explains the phenomenon that the researcher intends to study; the questions to be asked; how to ask them, and the process to be followed in interpreting the answers. Research is underpinned by a paradigm or the researcher’s philosophical worldview and it is important to be aware of the underlying philosophical assumptions.”

The researcher selected constructivism as the paradigm for the study. The constructivist paradigm is also referred to as the naturalistic paradigm. Polit and Beck (2017:722) state that constructivism believes that multiple interpretations of reality exist, and the goal of research is to understand how individuals construct reality within their context. Botma, Greeff, Mulaudzi and Wright (2010:43) describe constructivism as the way individuals interpret or give meaning to the world around them.

A paradigm consists of assumptions and beliefs, which serve as a lens through which the researcher views the reality of the world. Assumptions are “principles that are accepted as true based on logic or reason, without proof” (Polit & Beck 2017:720). Philosophical assumptions are beliefs and theories that inform the research and are actively articulated throughout the study and the reports of the research (Creswell & Poth 2018:15). Constructivism is underpinned by ontological, epistemological and methodological assumptions.

1.6.1 Ontological

Ontology is the study of being or reality. Botma, Greeff, Mulaudzi and Wright (2010:40) describe ontology as the way individuals perceive life. In addition, multiple realities exist and the content and form depend on how individuals interpret them. Ontological assumptions are concerned with the reality that is being investigated. In this study the researcher investigated the participants’

views or their reality of how they experienced the phenomenon of moral distress on executing DNR orders.

1.6.2 Epistemological

Epistemology is concerned with the nature of knowledge, its possibility, scope and general basis. Epistemology refers to the way individuals understand reality from what they know and what is observed through interaction with the environment (Botma, Greeff, Mulaudzi & Wright 2010:40). Epistemological assumptions, then, are assumptions about the nature of knowledge and science or about the content of truth and related reality. In this study the researcher intends to explore the participants' understanding of their moral distress whilst caring for patients with DNR orders.

1.6.3 Methodological

Methodology is concerned with ways of knowing, how we know what we know, and focuses on how we can learn about reality and what forms the basis of our knowledge. Methodological assumptions are a particular way of knowing about reality, including how the researcher should obtain the knowledge (Brink, van der Walt & van Rensburg 2018:24; Creswell & Poth 2018:37). Methodological assumptions consider the best way to collect data (Creswell & Poth 2018:37). In this study the researcher used inductive reasoning in collecting and analyzing data.

1.7 DELINEATION

The study was conducted in one public hospital in Gauteng province and focused on one adult ICU unit where DNR orders were executed.

1.8 SIGNIFICANCE

A research study should be significant to the nursing profession and contribute to the body of knowledge (Brink, van der Walt & van Rensburg 2018:61). The findings of this study should assist nursing management to support the implementation of strategies to alleviate the effects of moral distress and improve ICU nurses' resilience in caring for critically ill patients with a do-not-resuscitate order. The findings should also provide a deeper understanding of moral distress pertaining to end-of-life care to improve interdisciplinary communication and collaboration to enhance quality patient care and family support.

Implementation of suggested strategies to address the effects of moral distress amongst ICU nurses can improve quality care rendered to patients and thus improve clinical practice. The findings should contribute to the body of knowledge on moral distress related to executing DNR orders and promote the inclusion of do-not-resuscitate orders and moral distress in nursing curricula at all levels.

1.9 RESEARCH DESIGN

Polit and Beck (2017:743) describe a research design as the overall plan for addressing a research question, including specifications for enhancing the integrity of the study. The research design is a blueprint for conducting a study and indicates the basic strategies a researcher will use to answer the research questions. In this study, the researcher selected a qualitative, explorative and descriptive research design to answer the research question.

Qualitative research examines the qualities, characteristics or properties of the phenomenon under study to better understand or explain them (Botma, Greeff, Mulaudzi & Wright 2015:182). Exploratory research investigates the full nature of the phenomenon, the manner in which it is manifested, and other factors related to it (Polit & Beck 2017:518; Terre'Blanche, Durrheim & Painter 2014:47). The researcher considered an explorative approach appropriate to explore and understand the participants' perceptions and experiences on execution of do-not-resuscitate orders. A descriptive design enables researchers to describe variables in order to answer

research questions with no attempt at establishing a cause-effect relationship (Brink, van der Walt & van Rensburg 2018:102) (see chapter 3).

1.10 RESEARCH METHODOLOGY

Polit and Beck (2017:510) describe research methodology as the “steps, procedures and strategies taken to investigate the problem being studied and to analyse the collected data”. Research methods are “the techniques researchers use to structure a study and to gather and analyse information relevant to the research question” (Polit & Beck 2017:517). Research methods are “the techniques researchers use to structure a study and to gather and analyse information relevant to the research question” (Polit & Beck 2017:517). The research methodology includes the population; sample and sampling; data collection and analysis, and validity and reliability. Chapter 3 discusses the research design and methodology in detail.

1.10.1 Population

According to Brink, van der Walt and van Rensburg (2018:116), the population is the entire set of elements or people in whom the researcher is interested. In this study, the population were the professional nurses with more than one-years’ experience as critical care nurses in the adult ICU of the selected public hospital in Gauteng province.

1.10.2 Sampling and sample

Polit and Beck (2017:510) refer to sampling as the process of selecting a portion of the population to represent the entire population. Brink, van der Walt and van Rensburg (2018:124) describe sampling as the “process of selecting the sample from a population in order to obtain information regarding the phenomenon in a way that represents the population of interest”. Polit and Beck (2017:510) add that sampling is “a process of selecting a portion of the population to represent

the entire population so that inferences can be made". In purposive sampling, each individual has an equal probability of being selected from the population, ensuring that the sample will be representative of the population (Creswell 2014:295). In this study, the researcher used purposive or non-probability sampling to select participants who were knowledgeable about the phenomenon being studied (Brink, van der Walt & van Rensburg 2018:124). The sample consisted of ten (10) participants based on saturation of the data.

1.10.3 Data collection

Data collection is the process of collecting information (data) related to the research question in a systematic way to address a research problem (Polit & Beck 2017:510). Qualitative researchers collect their data in a real-world naturalistic setting (Polit & Beck 2017:510). In this study, data was collected by means of semi-structured interviews.

1.10.4 Pilot study

Prior to the main study, the researcher conducted a pilot study with two participants. A pre-test or pilot study is a small-scale trial with participants who are not included in the final study (Polit & Beck 2017:740). The pilot study enabled the researcher to determine the clarity of the interview guide, and the time taken to conduct the interview.

1.10.5 Data analysis

Data analysis is the systematic organization and synthesis of data to establish order, structure and meaning to qualitative data collected (Polit & Beck 2017:725; Botma et al 2010:220). Data analysis entails categorising, ordering, manipulating, summarising and describing the data in meaningful terms (Brink et al 2018:170). The researcher used Tesch's eight-step method for data analysis (Creswell 2014:198).

1.11 RIGOUR

Rigour minimizes bias and ensures control over variables under study (Polit & Beck 2017:558). Researchers achieve rigour in qualitative studies by ensuring trustworthiness of the data collected (Polit & Beck 2017:558). Trustworthiness is “the degree of confidence that qualitative researchers have in their data, using the strategies of credibility, dependability, confirmability, transferability and authenticity” (Polit & Beck 2017:558). In this study, the researcher applied the strategies of credibility, dependability, transferability, and confirmability to ensure trustworthiness (see chapter 3).

1.12 DEFINITIONS OF KEY TERMS

For the purposes of this study, the following key terms were used as defined below:

- **Do-not-resuscitate (DNR)**

Do not resuscitate (DNR) is the policy and practice of deliberately not attempting to resuscitate a person whose heart has stopped beating; that is, to withhold resuscitation (Petris, Cimpoșu, Costache & Rotariu 2011:99). The DNR is a legal order written by a licensed physician in consultation with the patients or their surrogate decision makers, in which cardiopulmonary resuscitation (CPR) is withheld at the time of cardiac or respiratory arrest (Al-Masri & Mrayyan 2016:17).

- **Moral distress**

Moral distress is the psychological response to knowing the right action required by a healthcare professional, but being unable to act due to internal, external and institutional constraints (Vincent 2018:24). Internal constraints include lack of confidence, an inability to cope with perceived suffering, and conflicts with cultural and religious beliefs. External constraints include a lack of collegiality, inadequate communication, and hospital or unit policies that conflict with their cultural beliefs (Mealer & Moss 2016:1615). Moral distress refers to the emotional upheaval felt by health care providers when protocols and prescriptions

make it impossible for them to do what, according to their belief systems, is the right thing to do (Mullin & Bogetz 2018:1490). According to Campbell, Ulrich and Grady (2016:6), moral distress arises when one believes one knows the morally right thing to do (or avoid doing), but one's ability to do this is constrained by internal and/or external factors. It comes in two phases. There is "initial distress" at the time of the potential action (or inaction); later there is "reactive distress" or "moral residue" that occurs in response to the initial episode of moral distress. It involves the compromising of one's moral integrity or the violation of one's core values. In this study the experiences of critical care nurses on execution of do-not-resuscitate orders will be explored and described pertaining to moral distress.

- **Intensive care unit (ICU)**

Intensive care nursing (ICN) is a specialist area of nursing that involves caring for patients who are suffering from life-threatening illnesses or injuries, while at the same time offering comfort to their family members (De Beer, Brysiewicz & Bhengu, 2011). In South Africa, ICN falls within the district, provincial and national levels of the health service. Intensive care units (ICUs) are structured and graded from level I to level IV. Level I units are in the public sector and are located in tertiary referral hospitals, which are affiliated to universities and have sophisticated equipment able to manage a wide spectrum of critical illnesses. The ICU or critical care unit (CCU) is a unit within the hospital with specialised nursing staff monitoring and providing treatment for patients with life-threatening illnesses or injuries. The unit may be defined according to the population cared for, such as paediatric, neonatal or adult critical care unit. This study was limited to the adult intensive or critical care unit in one public tertiary hospital in Gauteng Province.

- **Critical care nurse**

The South African Nursing Council (SANC) defines a critical care nurse on the Competencies for Critical Care Nurses – Adult (2014:2) as "*a field of nursing where the focus is on the care of adult patients that are critically ill or unstable, in collaboration with members of the health care team. Care takes place in a continuum as set above, from the scene of the accident or initial sickness to the critical Care Unit where the nurse functions within a complex technological environment and displays a high level of knowledge, skill and competence in caring for the patient and family/support system to discharge to a safe place.*" In this study, critical care nurses referred to professional nurses, either critical care nursing trained or experienced and working within the selected critical care unit in the hospital.

1.13 ETHICAL CONSIDERATIONS

Ethics deals with matters of right and wrong. When humans are used as study participants, care must be taken to ensure that their wellbeing and rights are protected (Polit & Beck 2017:748). Accordingly, the researcher obtained permission to conduct the study and upheld the ethical principles of informed consent, anonymity and confidentiality, and non-maleficence. The participants were interviewed in a quiet room during their lunch break to avoid interference with workflow (Edwards & Holland, 2013:83-84).

- **Permission**

The researcher obtained permission to conduct the study from the Research Ethics Committee of the Faculty of Health Sciences, University of Pretoria (see Annexure C1) and from the Hospital Management to conduct the study at the hospital (see Annexure C2).

- **Informed consent**

The researcher informed the participants of the purpose and significance of the study, that participation was voluntary, and that they were free to withdraw from the study at any time should they so wish. The participants were allowed to ask any questions they might have regarding the study and participation.

- **Anonymity and confidentiality**

The researcher assured the participants of anonymity and confidentiality. The participants would be referred to by code and number, and no names provided. The researcher assured the participants that all information provided would be treated with strict confidentiality and would only be available to the researcher and her study supervisor. Anonymity ensured that no information could be linked or tracked to any individual participant.

- **Non-maleficence**

The researcher ensured that no harm came to the participants as a result of participating in the study. The researcher made provision for debriefing sessions and a standby counsellor in case of need however there was no need for referral.

Chapter 1: Orientation of the study

1.14 LAYOUT OF THE STUDY

The study consists of five chapters:

Chapter 1 Orientation to the study

Chapter 2 Literature review

Chapter 3 Research design and methodology

Chapter 4 Data analysis and interpretation, and results

Chapter 5 Findings, limitations and recommendations

1.15 CONCLUSION

This chapter described the research problem, purpose, paradigm and assumptions, research design and methodology, significance and ethical considerations of the study, and defined key terms.

Chapter 2 discusses the literature review conducted for the study.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

In chapter 1 an overview of the study was provided. Chapter 2 provides a discussion of the literature review conducted for the study. According to Polit and Beck (2021:82) a literature review is conducted to gather information on the available evidence related to the study.

The researcher critically reviews the available sources and provides a summary that details the body of knowledge on the phenomenon of interest.

2.2 THEORETICAL FRAMEWORK

According to Grove, Burns & Gray (2013:130) a researcher wishing to develop a conceptual framework can use one of the following three ways select an existing theory from nursing or another discipline to guide the process; utilize research findings to develop a conceptual framework or synthesize a framework from clinical practice.

The authors further explained that most researchers utilize a combination of the above-mentioned methods to construct a conceptual framework to guide their studies. In this study strategies will be developed to alleviate moral distress amongst critical care nurses initiating DNR.

The conceptual map below was adapted from Ramos, Barlem, Brito, Vargas, Schneider & Brehmer (2016:5) study of conceptual frameworks of moral distress.

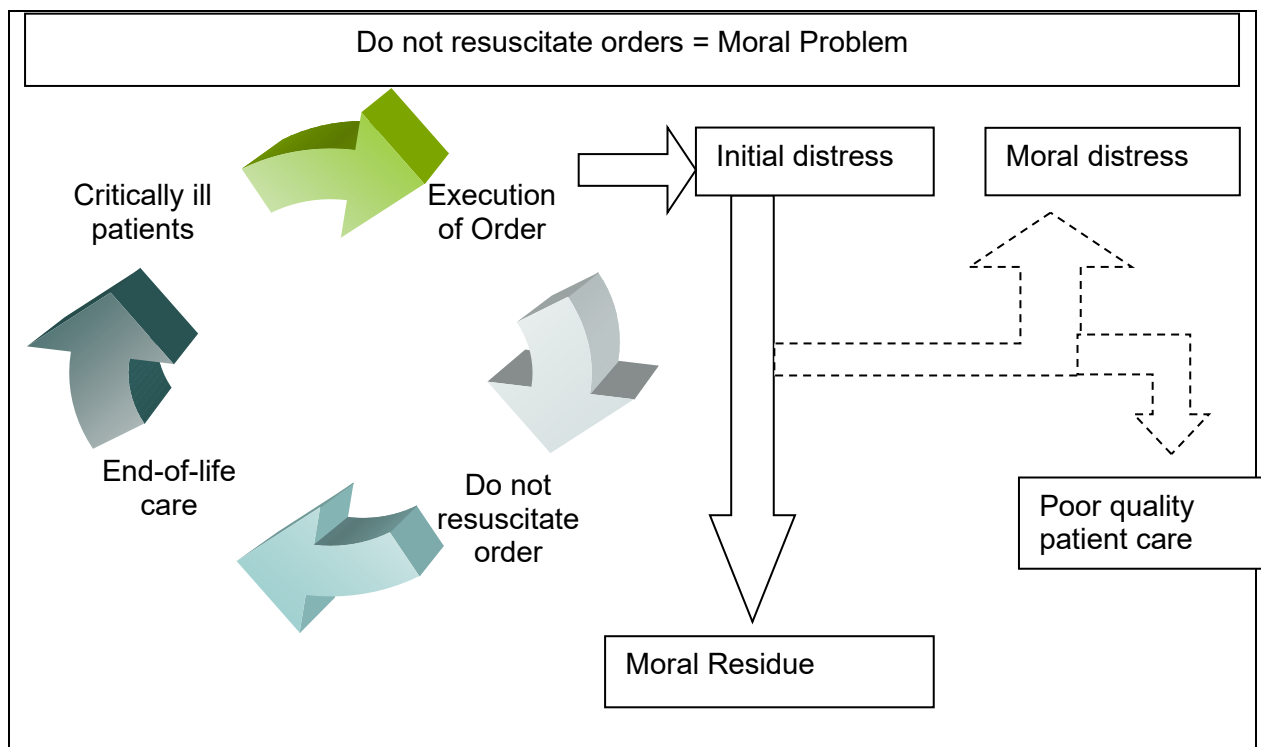


Figure 2.1: The conceptual framework adapted from Ramos et al (2016:5) study on conceptual frameworks of moral distress.

Grove et al (2013:132) further provide the steps for developing a conceptual framework as the following; identification and definition of concepts; outlining statements that clarify the relationship amongst the concepts; and then development of a conceptual map. The concepts were derived from the problem statement; defined under the terms and concepts and included the following; patients with do-not-resuscitate (DNR) orders; execution of the order; initial distress; moral residue and moral distress which may lead to poor quality patient care.

2.3.1 Patient care function of critical care nursing

Patient care forms an important part of nurses' daily function. This was explained by Pajnikihar, McKenna, Štiglic and Vrbnjak (2017:243) on analysis of Watson's theory of caring. The purpose of the analysis was to promote application of Watson's theory across the whole spectrum of nursing including patient care, education, administration and research. In that article holistic care was said to be the moral ideal of the nursing function.

2.3.2 The concept “Nursing”

On reviewing the link between occurrence of moral distress and the practice of professional nurses the researcher investigated the definition of the concept nursing. For clarity on analysis of this concept a systematic review conducted by Raiesifar, Parvizi, Bozorgzad, Poortaghi, Davoudi and Masoumi (2019:15) was referred to. The authors on that review emphasized consideration of the major aspects that characterizes the nursing profession, to develop a definition of nursing which includes the following concepts: nursing, environment, human and health.

Raiesifar et al (2019:15) developed an all-encompassing definition of nursing, acknowledging its origins from the biological and humanities sciences. The attributes of members of the profession were also explained by the author as comprising of critical thinking, clinical assessment as well as compliance with standards and moral values as part of their practice. The concept nursing was further described according to the evolutionary method developed by Rogers. This resulted in tracing of the evolution of nursing from care that is task orientated, to a patient centered holistic care. The authors also viewed provision of holistic care until at the end of life which encompasses initiation of do not resuscitate orders as an important aspect of nursing practice. According to the descriptions given above the authors supports the view that where death is unavoidable the nurse has a duty to uphold quality patient care throughout. (Raiesifar et al 2019:13)

The personal involvement of nurses in their practice was also noted by the abovementioned authors as resulting in nurses' requirement for information, training, emotional support and consideration of personal needs. In addition, the authors view was that an understanding of the concept nursing will enable practitioners of the profession to amend ethical codes, values and standards of practice including for example, the practice surrounding do not resuscitate orders. The amendment of ethical codes and standards of practice will according to the authors also decrease conflict of values which is a major source of anxiety, increased turnover and moral distress. (Raiesifar et al 2019:15)

The description of nursing from Raiesifar et al (2019:15) clarify Pajnkihar et al (2017:243) observation that Watson's theory of care may be difficult to apply where the biomedical model guides nursing practice. According to these authors Watson's theory of care emphasizes the humane type of practice, which is guided by the nursing models. Based on these models nursing is characterized by transpersonal caring which considers both the

patient and the nurse as participants. The theory of caring also considers health as a harmony that exists on the body, mind and soul for both the patient and the nurse and any occurrence of disharmony, leads to ill health which may manifest as moral distress. Pajnkihar et al (2017:250) further advocate for inclusion of Watson's theory of caring in the basic nursing curricula and continuous professional development programs to ensure promotion of this philosophy of caring throughout the nursing professional's career.

2.4.1 Exposition of moral distress

Sanderson, Sheahan, Kochovska, Lockett, Parker, Butow and Agar (2019: 207) did a systematic review on moral distress for the purpose of redefining the concept. The authors acknowledged that moral distress was initially described by Jameton in relation to nurses' behavior because of the nature of their profession, as well as the related medical and institutional constraints. The authors also noted end of life care as a contributory factor for moral distress. It was further interesting to note that the authors on reviewal of articles, observed that most writers focused on the effects rather than the cause of moral distress in their definition. Such definitions therefor excluded patient care issues which are usually the cause of moral distress. This resulted in the emphasis of moral distress as an occupational health and safety issue affecting nurses and thus requiring control or prevention.

Sanderson et al (2019: 207) went on to suggest a new definition of moral distress as being an ethical discomfort associated with nurses' participation in an action or failure to act, due to value conflict leading to harm to the patient or the community. The authors' argument is that although this definition exposes the discomfort felt by the nurse, it also places harm to the patient as a focal point. According to the authors, inclusion of the community on the definition of moral distress, demonstrate recognition of the patient's origin thus emphasizing relational issues. The authors in addition attributed the moral distress experienced by the nurses to their responsibility of holistic health care provision to the patient.

A conclusion to the definition of moral distress will not be complete without consideration of Campbell, Ulrich and Grady (2018:59) article which focussed on broadening the understanding of moral distress. In the study by the abovementioned authors, the defining characteristics for moral distress were identified as including, a situation where the nursing professional knows the morally right thing to do but internal or external factors constrains their ability. The second factor mentioned, is that moral distress occurs in two phases whereby the first phase termed the initial distress, is perceived whilst the nurse is doing the

morally conflicting action. The second phase described by the authors is reactive distress which has been termed moral residue and it occurs as a reaction to the initial distress. The third factor is the effect of the two phases which is said to violate the core value of the nurse and is harmful to the moral integrity.

2.4.2 Causes of moral distress in Professional Nurses

Dineen (2019:8) considered the occurrence of moral distress, its cause and effect on professional nurses under the topic of ethical and legal issues. The author noted that the occurrence of nurses' moral distress especially at the end of life, has been the subject of numerous studies worldwide. According to the author, nurses most commonly experience volitional ethical moral distress in their practice of patient care. Volitional moral distress occurs when the nurses know the right thing to do but act contrary to that because of constraints which include the medical care plan, organizational barriers or team authority dynamics.

Dineen (2019:8) further noted that where nurses ignore the set barriers, then they are said to have engaged in unethical behavior, because moral values are said to be the basis of ethical codes. In addition, workplace pressures were identified as causing nurses to act against their personal and professional values leading to moral distress. This result in nurses being involved in conflicts with coworkers, doctors and might even affect relationships with their families. (Dineen 2019:8)

2.4.3 Historical origins of moral distress

Ramos, Barlem, Brito, Vargas, Schneider, and Brehmer (2016:3) also looked into historical origins of moral distress in professional nurses and explained that the concept moral distress has been analyzed in several studies from the 1980's globally and the 2000's around Brazilian hospital environments, for the purpose of clarifying its effects. The authors identified several constructs associated with moral distress including, prohibition of nurses to exercise their advocacy role towards their patients. In addition, the authors acknowledged the difficulty of making conclusions regarding the concept moral distress particularly as their study was limited to their country Brazil. The recommendation was that further studies needs to be done to clarify moral anguish of nurses working in different contexts, countries and using different methods to improve theories on the concept. (Ramos et al 2016:8)

The study by Ramos, et al (2016:3) also included a definition of the concept moral distress emphasizing its major cause as the lack of authority to do what nurses believe to be morally acceptable. Although these authors focused on the concept in broad terms there was however exposition of moral distress as an object, and nurses as subjects that require some degree of moral sensitivity to perceive moral distress. The preceding description necessitates an investigation to determine whether the phenomena of moral distress is limited to certain individuals with moral sensitivity or most nurses working in different nursing care units.

2.4.4 Moral sensitivity

Moral sensitivity was described by Ozdemir, Gultekin, and Kavak, (2019: 1142) as the ability of the nurse to identify an ethical dilemma and respond appropriately. The authors further explained a moral sensitive person as one with high regard for the profession and thus advocating for provision of human sensitive and holistic care. The results of the study also coincided with previous studies that associated moral sensitivity with advancement in age and professional maturity resulting in improved professional reasoning capacity.

Taraz, Loghmani, Abbaszadeh, Ahmadi, Safavibiat and Borhani (2019: 4) further explained moral sensitivity in their article as a characteristic that promotes the propensity of nurses to provide care of a high standard with improved nurse patient relationships. Caring was identified as a most important component of nursing by these authors. They further explained a moral sensitive nurse as one with a clear understanding of ethical values, over and above the technical expertise of the profession and thus always ensuring provision of excellent patient care even at the end of life.

2.4.5 Moral distress within cultural and religious complexities

Bressler, Hanna and Smith (2017: 11) did a qualitative study in a densely Jewish populated regional hospice of New York to assess the moral distress of nurses caring for ventilator dependent patients. The aims of the study were to assess the factors contributing to moral distress of these nurses; evaluate the result of the distress and determine effectiveness of the coping mechanisms that nurses relied on. The authors explained on the background to the study that the Jewish principle is that of upholding the sanctity of life against all odds. This presented a conflict of value arising from religious and cultural perspectives as the nurses were not of Jewish origin.

On discussing the finding of the study above the authors applied the metaphor adopted from photography, based on difference of depth of field and focal point as a determinant of zone of clarity of a picture. Arising from the metaphor the nurses' worldview of avoidance of futile care differed with the patient and family's religious viewpoints of preservation of life. The authors noted from the nurses' responses; an emphasis of respect for different cultures and a willingness to learn more about the values and beliefs of their patient; to enable them to provide effective and culture sensitive care. The authors further noted that most studies on moral distress do not look into the influence of culture on occurrence moral distress. (Bressler et al 2017: 11)

The difference in values between nurses, patients and families was however identified by the authors as a factor contributing to the moral distress of these nurses. The findings of the study reflected nurses with inner conflict which decreased their self-worth because of conflicting views of their roles and the expectation of the patients and the families. The authors also investigated the coping mechanisms that nurses utilised and various mechanisms were discovered including the following; holding of discussions around their challenges to get listening and affirmation; engaging in extra mural activities and taking unplanned leave just for a change of scene from the unit. Other nurses mentioned engaging in religious activities or practicing emotional detachment from their situation to enable them to cope with their moral distress. Bressler et al (2017: 11)

2.4.6 Moral distress and acuity of a nursing unit

McMillan (2018:4) study on moral distress of registered nurses on the other hand aimed to compare the occurrence of moral distress in acute critical care nursing units and non-critical care units. According to the author the study results confirmed the prevalence of moral distress across all nursing units. The study further revealed a higher propensity of experiencing moral distress in critical care nurses than in other units. The author however considered this result as insignificant given the smaller sample size which was acknowledged as a study limitation. (McMillan 2018:21)

2.4.7 Moral distress and level of experience

McMillan (2018:22) also compared occurrence of moral distress in newly qualified Professional nurses with nurses having high levels of experience. The study results confirmed that the level of moral distress increased with years of experience. The author

linked this tendency to the occurrence of moral residue which was found to be the direct result of continued experiences of moral distress.

According to McMillan (2018:12) despite the close relationship between moral distress and moral residue, each concept is said to be unique and thus require analysis of its intensity and frequency of occurrence. The author focused on moral residue and its crescendo effect but concluded that further studies could be done to clarify this concept. Conclusive remarks on moral distress were also difficult to make as the concept was found to be a complicated problem that require further studies. Regarding acuity levels of nursing units, the study findings demonstrated the occurrence of moral distress at all nursing acuity levels. The critical care unit was however singled out as more stressful than other units and thus leading to increased nursing turnover.

2.4.8 Moral distress in critical care nurses

The critical care unit was also said to be a very stressful setting for professional nurses by Timberlake and Phillips (2019: 5) because of the dynamic nature of the unit and the critical illness of the patients. According to the authors critical care nurses are more predisposed to moral distress associated with end-of-life care situations. These may be associated with carrying out actions that are believed not to benefit the patient which has been termed futile care and initiating or withholding life sustaining treatment depending on the condition of the patient or the prescription of the physician.

The emotional response resulting from the action taken whether withholding or initiating life sustaining treatment may manifest as moral distress. The author's view is that the emotional turmoil is especially common in newly qualified nurses due to their minimal experience. The authors recommended establishment of an institutional committee for the purpose of periodical collective addressing of ethical issues as a measure that could reduce occurrence of moral distress. In addition, continuous communication and support of junior personnel by experienced nurses was also advised to improve their adjustment and limit the associated moral residue. (Timberlake, and Phillips 2019: 11)

2.4.9 The outcomes of moral distress

Whittaker, Gillum, and Kelly (2018:114) study on outcomes of moral distress identified that there is a cause-and-effect relationship between moral distress of critical care nurse's

burnout, and increased job turnover. The authors in this study interviewed participants from Michigan and Indiana on various factors contributing to moral distress and the related subsequent effects. On the issue of nurses' moral distress and patients' issues, participants raised end of life care as a contributory factor for moral distress especially where the care is viewed as futile by the critical care nurse. The nurses further raised inability to provide what they view as quality care to patients at end-of-life stage as being very stressful.

Kleinknecht-Dolf, Spichiger, Müller, Bartholomeyczik and Spirig (2017: 261) conducted a study aimed at developing a moral distress monitoring tool that will be fit for use in Germany's health care institutions. The envisaged tool was to be structured for assessment of the intensity and the outcome of frequent occurrences of moral distress. The authors listed several situations which were known to induce moral distress, although the items were not explicitly related to end of life care the study highlights the importance of nurses' moral integrity. The authors further noted physical and psychological impacts of moral distress which may result in avoidance of disturbing situations in the practice of nursing. The preceding effect was identified by the authors as an outcome that would have a negative impact on quality patient care.

The methodology implemented by Kleinknecht-Dolf et al (2017: 261) was a combination of results from qualitative and quantitative assessments to determine the intensity of moral distress experienced by nurses with different levels of moral resilience. The authors' findings were that the repeated occurrences of situations which are stressful may either increase or decrease the associated effect. This result was attributed to the moral courage or coping levels of individual nurses. The authors' conclusion was that implementation of the developed tool will not only assist nurse leaders to decrease the incidence of moral distress on individual nurses but will also improve quality of patient care. (Kleinknecht-Dolf et al 2017: 262)

2.5 Do-not-resuscitate (DNR) orders

The definition of do not resuscitate order was adopted from a study by Chen, Yih-Shang Chen, Tzong-Shinn Chu Lin and Wu (2016:5) as an order implying that cardiopulmonary arrest will not be initiated in the event of cardiac and or respiratory arrest. The view from the abovementioned study was adopted because the authors noted that, the order is occasionally extended to prevent implementation of life sustaining measures before the occurrence of cardiopulmonary arrest. The African perspective of the definition of DNR

which was also adopted for the current study was found in Nankundwa and Brysiewicz (2017: 19) where DNR was also defined as withholding cardiopulmonary resuscitation in the case of cardiac arrest.

The purpose of the study by Chen et al (2016:7) was to examine the impact of a DNR order and its outcomes to promote comfortable timing of DNR discussion with patients and relatives. An important finding of the abovementioned study was the reluctance of medical practitioners and nurses to provide optimal care for the patient with a DNR order. As a result, the authors concluded that consistent application of the DNR order will exclude a causal link between DNR and risk of death. The authors recommended that there should be further studies on the relationship between DNR and risk of death as well as around the literal meaning of DNR. (Chen et al 2016:7)

2.6.1 Global views related to moral distress of critical care nurses on initiating do-not-resuscitate orders: Italian's viewpoints

A study on the Italian views of health care professionals' moral distress at end-of-life care was conducted by Leuter, Petrucci, La Cerra, Dante, Franconi, Caponnetto, and Lancia (2020: 280). The purpose of that study was to compare the views of nurses and physicians on ethical issues arising during terminal care. There were conflicting conclusions on futile care from the respondents. According to the authors' analysis the medical professionals emphasized the fruitless outcomes of terminal care whilst the nursing side recognized the pain and suffering associated with futile care. The difference in attitudes was attributed to the nursing characteristics of continuous interaction and relationship with the patients. All the respondents of the study had consensus that some treatments prescribed for patients with poor prognosis were non-beneficial and thus contributing to the occurrence of moral distress. (Leuter et al 2020: 280)

Leuter et al (2020: 280) further noted a difference in opinions of physician and nurse regarding implementation of DNR orders particularly since physicians occupy authoritative position in some institutions thus shifting their focus to return on investment and consideration of institutional resource conservation factors. In addition, the authors attributed the differing views of the respondents to the absence of laws and guidelines regulating DNR orders at the time the study was conducted. The authors however, appreciated the introduction of advanced care directives in Italy.

Advance care directives were appreciated as measures that would improve communication and management of care at the end of life and decrease uncertainties which contribute to moral distress. The authors further acknowledged the nursing role which always advocates for provision of comprehensive patient care including psychological, emotional and social aspects. In addition, nurses were acknowledged as mediators between physicians, patients and their families which contributes to their moral distress. To decrease occurrence of moral distress the authors' view is that communication channels need to be strengthened between nurses, patients and physicians. (Leuter et al 2020: 280)

2.6.2 The Islamic viewpoint on moral distress and end of life care

In an earlier systematic review done in the Islamic region of Jordan, Al-Masri and Mrayyan (2016:18) explained a do not resuscitate (DNR) order as implying the withholding of cardiopulmonary resuscitation in the event of cardiac or respiratory arrest. According to the authors despite the use of DNR globally for the past 20 years there were still some controversies around implementation of this order. The authors reviewed several studies that were in favour of, or against DNR orders. Studies that were in favour of DNR recognised the pain and suffering that the patient will be exposed to, in the absence of such an order. These studies viewed certain treatments as unnecessary, futile and only resulting in an increase of the patient's discomfort and frustration for the nurses.

Treatment modalities including diagnostic tests, cardiopulmonary resuscitation, intubation and mechanical ventilation were viewed by Al-Masri and Mrayyan (2016:18) as measures that are of no benefit, especially where the patient's prognosis is known to be poor. The authors also referred to the stance taken by the Islamic administration of Saudi Arabia and the Islamic Medical Association of America that clinician may order DNR where death is said to be unavoidable such that the patient may die peacefully.

Studies that were against DNR promoted the preservation of life even in the presence of poor prognosis. Several reasons against DNR orders were cited from the review of studies including unclear processes related to the orders; poor timing of DNR discussion with patients and relatives and lack of training on the correct approach that can be used during such discussions. Al-Masri and Mrayyan (2016:19) noted that adoption of advanced care directives reduces some of the barriers towards DNR but however concluded their article by stating their negative value statement; that they consider DNR as being unethical because of religious reasons.

Use of DNR orders was again studied by Hassan and Ali (2018: 11) for the purpose of providing the Islamic standpoint on the issue as well as the psychological impact on the nurses. Initiation or withholding of life support was said to be a common occurrence in the critical care setting resulting in ethical and moral distress for the health care providers. The authors considered resuscitation as a measure used to prevent death from occurring prematurely. Implementation of resuscitation was however acknowledged as a measure that may predispose the patient to prolonged pain and suffering in some instances. The authors further acknowledged that DNR orders were introduced to prevent unnecessary harm to the patient especially in poor prognosis situations. (Hassan and Ali 2018: 9)

According to Hassan and Ali (2018: 11) advanced care directive where the patient is involved in the decision-making process are practised in other countries to decrease some of the irregularities occurring in Islamic countries where the DNR order sometimes occurs mainly verbally. The authors however explained that advance care directives are not yet approved for Arab and Middle Eastern Countries. This was said to be the reason behind the delay of discussions with the patient concerning DNR. The authors' observation was that health care providers in their country consider DNR when the patient's condition is critical causing the latter's inability to participate on the discussions.

Hassan and Ali (2018: 11) further confirmed that religious and cultural issues are some of the barriers to communication on DNR between health care providers and the patient's family in Islamic countries. In conclusion the article recommended that the ministry of health in Arab countries must engage in standardisation of a DNR policy to improve clarity on this matter. The authors further noted the unavailability of DNR policies in most parts of the world and thus also recommended global standardisation of such policies to promote acceptance by all health care providers including the nurses and reduce occurrences of value conflicts and moral distress

2.6.3 Sub-Saharan viewpoints on moral distress and do not resuscitate orders

Nankundwa and Brysiewicz (2017: 21) did a study for the purpose of providing the Rwandan perspective of DNR and moral distress. The concern raised from the Rwandan study was that patients with DNR orders tend to receive substandard care as a result of the order. The DNR order was viewed as a distressing and unsettling phenomenon for critical care nurses resulting in neglect of the patient. Moreover, the change from curative to terminal care was said to be distressful, because death was mostly regarded as an unexpected outcome of

hospitalization. According to the nurses, successful hospital care is supposed to be recovery and when the opposite occurs it becomes morally distressful.

The authors further noted with concern that DNR orders were delayed to a stage where the patient or family's participation in the process was virtually impossible. In addition, like in Hassan and Ali (2018: 11), Nankundwa and Brysiewicz (2017: 21) also found that DNR orders were not properly communicated and documented. This they attributed to the economically underdeveloped status of their country where DNR orders were still at an introductory stage. The authors therefore advocated for development of policies to protect patients and decrease uncertainties associated with end-of-life care.

The nurses further expressed their emotional turmoil and frustration associated with providing care for patients with DNR orders in Nankundwa and Brysiewicz' (2017: 21) study. The authors also noted the same impact of morally distressing situations on nurses like German perspective (Kleinknecht-Dolf et al 2017: 262) as compromising to quality patient care and thus requiring some interventions. The introduction of measures to enable nurses to deal with end-of-life situation in developing countries was said to be an urgent requirement. Ethical empowerment for the nurses was also encouraged as a measure that can improve end of life care. The other recommendation made by Nankundwa and Brysiewicz (2017: 22) was that the reason for making a DNR order should be clearly stated for the critical care nurses to understand, and to decrease the associated moral distress.

2.6.4 The South African view on moral distress and do not resuscitate orders

Vogets (2017:22) studied the South African perspective of moral distress and observed that generally nurses' training is focussed towards saving lives and thus when a contrary situation like a DNR is encountered emotional distress may be experienced. According to the author before being interviewed the study participants had no knowledge of the concept moral distress, despite the findings demonstrating the occurrence of the phenomenon. The findings of the study further demonstrated that the experience of moral distress was associated with provision of care that was viewed as substandard. (Vogets 2017:83)

According to Vogets (2017:83) any work-related emotional turmoil which was experienced, was either referred to as burnout or compassion fatigue. The author's concern was that such erroneous labelling of moral distress may result in management not recognising the

professional, social and personal impact of moral distress on the nurses. The author's view is that measures implemented to control the phenomenon will also be misguided.

As the author was researching the concept moral distress from a broad perspective, several situations which may be associated with the concept in the practice of nursing, were identified and explored. End of life care was identified as one of the morally distressing situations. (Vogets 2017:22) The author raised some concerns that frequent experiences of moral distress might lead nurses to lose their moral sensitivity. (Vogets 2017:83) The author identified two possible outcomes of desensitisation that is nurses will accept their experiences as a normal occurrence, or they might come up with some solutions to cope with the distressing situation. The author also alluded to the fact that one of the adverse effects of moral distress may be a growing intention to leave the profession thus leading to increased staff turnover. (Vogets 2017:84)

One other important finding from Vogets' study (2017:84) was that nurses do not have a supportive platform for raising their concerns or that adequate measures are not implemented to address such concerns in South Africa. The author further noted the difficulty experienced by participants on trying to comply with the South African regulation R.767 of the Nursing Act (33 of 2005) (SANC 2014) which determines the acts and omissions for professional nurses. The regulation expects professional nurses to assume the role of patients' advocates throughout the patient care function. (Vogets 2017:89)

Vogets (2017: 99) recommended that moral distress must be explained, and its manifestations clarified so that it is recognized as an abnormality that requires control. Secondly the author also recommended improvement of the ethical culture of South African health care institutions and recognition of the nurses' professional role. Another important recommendation that was noted from the study was that management should not only support the nurses but also refer them to the relevant professionals for psychological debriefing. (Vogets 2017: 98)

Vanderspank-Wright, B., Efstathiou, N. and Vandyk, A.D., 2018: 30 did a global systematic review including South African studies on perspectives of nurses regarding treatment withdrawal at the end of life and moral distress, to identify the severity associated with that period. Four themes were identified from the reviewed studies but, only two are applicable to the current study including the occasional satisfaction experienced by nurses where withdrawal of treatment was said to be in the best interest of the patient, resulting in peaceful

death. In most studies, however nurses experienced sadness, guilt and grief associated with the process as they were charged with ensuring patient's comfort and reassuring the relatives as well. The other problem raised by the nurses was that the Doctors are not present during the implementation of the DNR order. Vanderspank-Wright et al 2018: 27.

2.7 CONCLUSION

This chapter covered the literature review based on the on the key components from the conceptual framework in figure 2.1. The concept nursing was also explored and defined in relation to the occurrence of moral distress. The concept moral distress was also explored, the causes of the phenomena, moral distress and acuity of nursing unit, the occurrence of moral distress in critical care nurses, impact of nursing experience on moral distress, moral sensitivity and the outcomes of moral distress. The global viewpoints on moral distress were also explored. Chapter three will focus on the research methodology implemented to conduct the current study.

2.8 REFERENCES

Al-Masri, B. and Mrayyan, M., 2016. Do Not Resuscitate (DNR) order among terminally ill patients with cancer: A position statement. *Journal of Biology, Agriculture and Healthcare*, 6, pp.17-23.

Bressler, T., Hanna, D.R. and Smith, E., 2017. Making sense of moral distress within cultural complexity. *Journal of Hospice & Palliative Nursing*, 19(1), pp.7-14.

Campbell, S.M., Ulrich, C.M. and Grady, C., 2018. A broader understanding of moral distress. In *Moral distress in the health professions* (pp. 59-77). Springer, Cham.

Dineen, K.K., 2019. Ethical and Legal Issues. *Priorities in Critical Care Nursing-E-Book*, p.8.

Grove S.K, Burns N, Gray J (2013). *The Practice of Nursing Research Appraisal, Synthesis and Generation of Evidence*. Seventh Edition. Elsevier Saunders. Louis Missouri.

Hassan, C.P. and Ali, A.M., 2018. Do-Not-Resuscitate Orders: Islamic viewpoint. *International Journal of Human and Health Sciences (IJHHS)*, 2(1), pp.8-12.

Chen Y, Yih-Sharng Chen Y, Tzong-Shinn Chu T, Lin K & Wu C., 2016. *Further deliberating the relationship between do-not-resuscitate and the increased risk of death*.

[Online] Available at: www.nature.com/scientific-reports
[Accessed 27 March 2019].

Kleinknecht-Dolf, M., Spichiger, E., Müller, M., Bartholomeyczik, S. and Spirig, R., 2017. Advancement of the German version of the moral distress scale for acute care nurses - A mixed methods study. *Nursing open*, 4(4), pp.251-266.

Leuter, C., Petrucci, C., La Cerra, C., Dante, A., Franconi, I., Caponnetto, V. and Lancia, L., 2020. Nurses' and physicians' opinions on end-of-life: a secondary analysis from an Italian cross-sectional study. *Annali di Igiene: Medicina Preventiva e di Comunita*, 32(3), pp.274-284.

McMillan, D.N.P., 2018. *Moral Distress in Registered Nurses*.

Nankudwa E., Brysiewics P., 2017. Lived experiences of Rwandan ICU nurses caring for patients with do-not-resuscitate order. *South African Journal of Critical Care*, July, 33 (No 1), pp. 19-21.

Ozdemir, A., Gultekin, A. and Kavak, F., 2019. Determination of Moral Sensitivities of Healthcare Personnel. *International Journal of Caring Sciences*, 12(2), pp.1-5.

Pajnikihar, M., McKenna, H.P., Štiglic, G. and Vrbnjak, D., 2017. Fit for practice: analysis and evaluation of Watson's theory of human caring. *Nursing science quarterly*, 30(3), pp.243-252.

Polit, F.D. and Beck T.C., 2021. *Nursing Research: Generating and Assessing Evidence for Nursing Practice*. Tenth edition. Wolters Kluwer. Philadelphia London.

Raiesifar, A., Parvizy, S., Bozorgzad, P., Poortaghi, S., Davoudi, N. and Masoumi, M., 2019. Nursing: An evolutionary concept analysis. *Nursing Practice Today*.

Ramos, F.R.S., Barlem, E.L.D., Brito, M.J.M., Vargas, M.A., Schneider, D.G. and Brehmer, L.C.D.F., 2016. Conceptual framework for the study of moral distress in nurses. *Texto & Contexto-Enfermagem*, 25(2).

Sanderson, C., Sheahan, L., Kochovska, S., Lockett, T., Parker, D., Butow, P. and Agar, M., 2019. Re-defining moral distress: A systematic review and critical re-appraisal of the argument-based bioethics literature. *Clinical Ethics*, 14(4), pp.195-210.

Timberlake, M. and Phillips, N., 2019. Moral distress in critical care and emergency department nurses.

Taraz, Z., Loghmani, L., Abbaszadeh, A., Ahmadi, F., Safavibiat, Z. and Borhani, F., 2019. The relationship between ethical climate of hospital and moral courage of nursing staff. *Electronic Journal of General Medicine*, 16(2).

Whittaker, B.A., Gillum, D.R. and Kelly, J.M., 2018. Burnout, Moral Distress, and Job Turnover in Critical Care Nurses. *International Journal of Studies in Nursing*, 3(3), p.108.

Vanderspank-Wright, B., Efstathiou, N. and Vandyk, A.D., 2018. Critical care nurses' experiences of withdrawal of treatment: A systematic review of qualitative evidence. *International journal of nursing studies*, 77, pp.15-26.

Voget, U., 2017. *Professional nurses' lived experiences of moral distress at a district hospital* (Doctoral dissertation, Stellenbosch: Stellenbosch University).

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

Chapter 2 discussed the literature review conducted for the study. This chapter discusses the research design and methodology of the study.

3.2 PURPOSE OF THE STUDY

The purpose of the study was to

- Explore and describe the factors contributing to the moral distress experiences of critical care nurses on execution of do-not-resuscitate orders.
- Suggest strategies to alleviate the moral distress of critical care nurses on execution of do-not-resuscitate orders.

In order to achieve the purpose, the study wished to answer the following research question:

What are the factors contributing to the moral distress experiences of critical care nurses on execution of do-not-resuscitate orders?

3.3 SETTING

The setting refers to the physical location in which data collection takes place in a study (Polit & Beck 2017:743). The study was conducted in one selected public hospital in the Tshwane region, Gauteng Province. The hospital is an academic tertiary institution with a bed occupancy rate of 1 594 and serves a population of 92 900 as well as referrals from North West and Limpopo provinces for specialist care. The hospital has one 22-bed adult intensive care unit (ICU), with eighty-one (81) professional nurses and four high care units for medical, surgical and neurological cases with twenty (20) professional nurses each unit.

3.4 RESEARCH DESIGN

A paradigm is a world-view or “way of looking at natural phenomena that encompasses a set of philosophical assumptions and that guides one’s approach to inquiry” (Polit & Beck 2017:720). The research paradigm thus provides the researcher with a frame of reference to ask and answer the research questions. The researcher selected constructivism as the paradigm for the study. Constructivism believes that multiple interpretations of reality exist, and the goal of research is to understand how individuals construct reality within their context (Polit & Beck 2017:722).

Polit and Beck (2017:743) describe a research design as the overall plan for addressing a research question, including specifications for enhancing the integrity of the study. Research designs help researchers minimize bias and guide the whole process of answering the research questions (Polit & Beck 2017:743; Brink, van der Walt & van Rensburg 2018:104). Grove, Burns and Gray (2013:195) refer to a research design as a blueprint for conducting a study with maximum control over factors that may interfere with the validity of the findings. Terre’Blanche, Durrheim and Painter (2014:40) state that, in order to achieve the research aim, researchers should select a research design which fits with the paradigm for the study. According to Terre’Blanche, Durrheim and Painter (2014:40), the findings and conclusions of a study are greatly influenced by the coherence between the paradigm and research design.

In this study, the researcher selected a qualitative, explorative and descriptive research design to answer the research question.

3.4.1 Qualitative

Qualitative research examines the qualities, characteristics or properties of the phenomenon under study to better understand or explain them (Botma, Greeff, Mulaudzi & Wright 2015:182). According to Brink, van der Walt and van Rensburg (2018:104), qualitative research uses a real-life approach that seeks to understand the phenomenon under study through the individuals' life experiences. The main purpose of conducting qualitative research is to discover the nature of people's experiences and views of the phenomenon under study through exploring, describing and understanding (Brink et al 2018:104). Qualitative researchers explore the topic or problem area utilising diverse qualitative methods with the intention of describing the topic of interest and promoting understanding. The researcher selected the participants because of their unique experience.

3.4.2 Explorative

Explorative studies focus on gaining insight into a phenomenon or situation, the manner in which it is manifested, and other factors related to it (Polit & Beck 2017:518; Terre'Blanche, Durrheim & Painter 2014:47). The researcher considered an explorative approach appropriate to explore and understand the participants' perceptions and experiences. The researcher's aim was to investigate fully the nature of the phenomenon and the manner in which it manifested, together with factors related to it (Polit & Beck 2017:743).

3.4.3 Descriptive

A descriptive design enables researchers to describe variables in order to answer research questions with no attempt at establishing a cause-effect relationship (Brink et al 2018:102). Descriptive studies wish to observe, describe and portray accurately the characteristics of specific situations and phenomena as they occur naturally. A systematic description of a situation or phenomenon explains what individuals think, feel and perceive about what was seen and

remembered (Polit & Beck 2017:743). According to Grove, Burns and Gray (2013:195), descriptive designs provide researchers with a way to identify new meaning, define what exists, decide on the rate at which something occurs and classify information. The researcher considered a descriptive design appropriate in order to describe and portray the factors contributing to the participants' experiences of moral distress in the execution of do-not-resuscitate orders. According to Turale (2020:289), qualitative descriptive studies provide a clear explanation of the factors of a phenomenon based on the participants' perspectives.

3.5 RESEARCH METHODOLOGY

Polit and Beck (2017:510) describe research methodology as the “steps, procedures and strategies taken to investigate the problem being studied and to analyse the collected data”. Research methods are “the techniques researchers use to structure a study and to gather and analyse information relevant to the research question” (Polit & Beck 2017:517). The research methodology includes the population; sample and sampling; data collection and analysis, and validity and reliability.

3.5.1 Population

According to Brink, van der Walt and van Rensburg (2018:116), a population is the entire set of elements or people in which the researcher is interested. Polit and Beck (2017:719) describe a population as “the entire aggregate of cases in which a researcher is interested”. Polit and Beck (2017:719) distinguish between the target and the accessible population. The target population is the aggregate of cases about which the researcher would like to generalise. In this study, the target population consisted of the professional nurses with more than one-year's experience as critical care nurses in the adult ICU of the selected public hospital in Gauteng province.

The accessible population is the number of people that meet the inclusion criteria and are accessible for a particular study (Polit & Beck 2017:519; Brink et al 2018:116). In order to be included in the study, the participants had to be permanently employed professional nurses with

more than one-year's experience as critical care nurses in the adult ICU of the selected public hospital in Gauteng province and have nursed at least one patient with a do-not-resuscitate order. The participant nurses' perceptions and views were particular to the context, which was linked to the experience of moral distress after nursing a DNR patient (Polit & Beck 2017:543).

3.5.2 Sampling and sample

A sample is a group of people or elements that are selected for the study. Brink, van der Walt and van Rensburg (2018:124) describe sampling as the "process of selecting the sample from a population in order to obtain information regarding the phenomenon in a way that represents the population of interest". Polit and Beck (2017:742) add that sampling is the process of selecting a part of the population to represent the entire population so that inferences can be made. Purposeful or non-probability sampling is used in qualitative research to select study participants because they understand the research problem and phenomenon under study (Creswell & Poth 2017:46). Polit and Beck (2017:742) add that in purposive or non-probability sampling, the researcher selects participants based on personal judgement about which ones will be the most informative. Brink, van der Walt and van Rensburg (2018:145) state that a large sample does not guarantee the accuracy of the study results. Sampling is an integral part of the research process and should not be considered in isolation. When planning samples, the researcher should consider the sample in relation to the purpose and design as well as the practical reality (Brink et al 2018:145). In purposive sampling, each individual has an equal probability of being selected from the population, ensuring that the sample will be representative of the population (Creswell 2014:295). In this study, the researcher used purposive or non-probability sampling to select participants who were knowledgeable about the phenomenon being studied (Brink et al 2018:145). The sample consisted of ten (10) participants based on data saturation.

3.5.3 Data collection

Data collection is the precise, systematic collection of information relevant to the research purpose or objectives of the study (Polit & Beck 2017:510). Qualitative researchers collect their

data in a real-world naturalistic setting (Polit & Beck 2017:510). In qualitative studies, researchers conduct individual interviews with respondents to explore their perceptions and experience of a particular phenomenon or topic (Botma et al 2010:217). In this study, data was collected by means of face-to-face in-depth interviews, using an interview guide (questionnaire). Using semi-structured interviews enabled the researcher to:

- ✓ Explore and describe the factors contributing to the moral distress experiences of critical care nurses on execution of do-no-resuscitate orders..
- ✓ Capture each participant's individual experience, reflection and open expression (Taylor, Dihle, Hofsø & Steindal 2020:5)
- ✓ Obtain all the required information, illustrations and explanations (Polit & Beck 2017:514).

Prior to the main study, the researcher conducted a pilot study with two participants. A pre-test or pilot study is a small-scale trial with participants who are not included in the final study (Polit & Beck 2017:740). The pilot study enabled the researcher to determine the clarity of the interview guide, and the time taken to conduct the interview.

The researcher obtained permission from the respondents to audio record the interviews in order to ensure accuracy. In addition, the researcher took field notes during the interviews. Field notes describe as literally and accurately as possible what is observed in the setting (Polit & Beck 2017:748). According to DeVaney, Spangler, Lee and Delgadillo (2018:399), researchers take field notes during interviews to complement tape-recorded interviews. Field notes allow researchers to record or comment on impressions, environmental contexts, behaviours and non-verbal signs that may not be adequately captured by audio recordings. Field notes contribute to the context and interpretation of the audio-recorded information and assist researchers to recall situational factors that may be important during data analysis.

3.5.4 Interview guide

Qualitative researchers attempt to develop a complex picture of the problem or the phenomenon under study by recording various perspectives, identifying the factors involved in a situation, largely outlining the bigger picture that emerges, and describing the complex collaborations of

factors in any situation (Creswell & Poth 2017:44). Data-collection methods include questionnaires, interviews and observation.

In this study, the researcher used an interview guide consisting of three open-ended questions to collect data from the respondents (see Annexure B). The interview guide was developed in line with the guidelines provided in Polit & Beck 2021: 514 and Brink et al 2018:144. According to Polit & Beck 2021: 514 on preparing the interview guide the researcher should arrange questions in a logical order to enable the participants to provide adequate explanations on the research topic. The researcher is further encouraged to be attentive as participants may provide information that answers subsequent questions on the interview guide. The researcher asked probing questions to further encourage respondents to elaborate on their answers, as and when necessary (Brink et al 2018:144).

3.5.5 Data analysis

Data analysis is a process that reduces, organizes, and gives meaning to data (Grove, Burns & Gray 2013:196; Polit & Beck 2017:525). Data analysis is the systematic organization and synthesis of data to establish order, structure and meaning to qualitative data collected (Polit & Beck 2017:525; Botma et al 2010:220). Data analysis entails categorising, ordering, manipulating, summarising and describing the data in meaningful terms (Brink et al 2018:170).

During data analysis researchers formulate categories and themes from collected data (Creswell & Poth 2017:45). The themes and categories identified are analyzed and more supportive information added (Creswell & Poth 2017:45; Brink et al 2018:180). The researcher organized and prepared the data. First, the researcher transcribed the interviews verbatim and compared the transcriptions with the recordings. Then the researcher used Tesch's eight-step method for data analysis (Creswell 2014:198) as follows:

- ✓ Read all the transcriptions carefully to get sense of the whole; jot down ideas as they come to mind.
- ✓ Pick up and read one, examine the meaning and write down topics and ideas in the margin.
- ✓ Identify topics and themes after reading several transcriptions. Formulate topics from the data. Group similar topics together and form into themes.

- ✓ Write topics next to appropriate segments of text, checking to see whether new themes emerge.
- ✓ Find the most descriptive wording for the themes and turn them into codes. Abbreviate the themes as codes next to appropriate segments of the text.
- ✓ Find the most descriptive wording for the themes and turn them into categories.
- ✓ Reduce the total list of categories by grouping related topics together.
- ✓ Assemble the data for each category in one place and perform preliminary analysis.

The researcher's supervisor co-coded the data and reached consensus with the researcher on the final themes, sub-themes, and categories that emerged. Chapter 4 discusses the data analysis and interpretation, and results in detail.

3.6 RIGOUR

Rigour minimizes bias and ensures control over variables under study (Polit & Beck 2017:558). Researchers achieve rigour in qualitative studies by ensuring trustworthiness of the data collected (Polit & Beck 2017:558). Trustworthiness is "the degree of confidence that qualitative researchers have in their data, using the strategies of credibility, dependability, confirmability, transferability and authenticity" (Polit & Beck 2017:558). In this study, the researcher applied the strategies of credibility, dependability, transferability, and confirmability to ensure trustworthiness.

3.6.1 Credibility

Credibility is a criterion for evaluating integrity and quality in qualitative studies, referring to the confidence in the truth of the data and interpretations of them (Polit & Beck 2012:558). Credibility validates that there is a match between the participants' experiences and the researcher's reconstruction and representation of them (Brink et al 2018:119). In this study credibility was ensured by prolonged engagement with the participants and allowing the latter to review the researcher's interpretation of the data (Brink et al 2018:158).

3.6.2 Confirmability

Confirmability refers to the objectivity of the findings and the degree to which the data reflect the participants' view and that the researcher has not manipulated the interpretations of the data (Polit & Beck 2017:560). Moreover, the researcher remained objective throughout to ensure confirmability and no researcher bias through utilization of reflexivity.

3.6.3 Transferability

Transferability refers to the extent to which findings can be transferred to or have applicability in other settings or groups (Polit & Beck 2017:560). In this study, transferability was not intended, as the study was conducted in one selected hospital in one province of South Africa. However, the researcher provided thick descriptions of the research process to promote credibility, and allow other researchers to assess the degree to which the researcher's decisions are transferable to other settings, situations and populations (Brink et al 2018:159). In addition, the purposive selection of participants with sufficient knowledge of the phenomenon under study promoted transferability (Polit & Beck 2017:560).

3.6.4 Dependability

Dependability refers to the stability of data over time and conditions (Polit & Beck 2017:569). The research findings will remain unchanged should the study be repeated in different settings with different participants. Dependability will be ensure by allowing the participants to review the researcher's interpretation of the data (Brink et al 2018:158).

3.6.5 Authenticity

Authenticity refers to the degree to which researchers faithfully and fairly show a range of realities. Authenticity expresses the tone of the participants' lived experiences and fairly describes their experiences so that it is a truthful picture of their perceptions and experience (Polit & Beck 2017:570). Researchers strive to conduct research that is well designed in order to generate well-founded and trustworthy evidence (Brink et al 2018:157). In this study, the researcher was open and thorough, kept field notes, and included participants' direct responses.

3.7 CONCLUSION

This chapter described the research design and methodology, including the population, sampling and sample, data collection and analysis, and rigour.

Chapter 4 discusses the data analysis and interpretation, and findings.

CHAPTER 4

ARTICLE

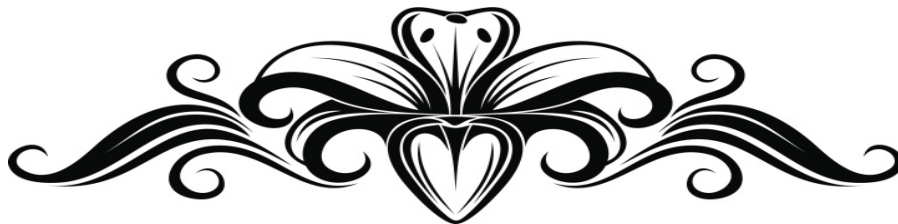
Moral distress among critical care nurses when executing do-not-resuscitate orders in a critical care unit in a public hospital in Gauteng

Sarah Ntseke ^a, Isabel Coetzee ^b, Tanya Heyns ^b

a) Gauteng college of Nursing: Ga-Rankuwa Campus

b) Department of Nursing Science, Faculty of Health Sciences, University of Pretoria, Pretoria, South Africa

Corresponding author: Isabel.coetzee@up.ac.za



Moral distress among critical care nurses when executing do-not-resuscitate orders in a critical care unit in a public hospital in Gauteng

Sarah Ntseke^a, Isabel Coetzee^b, Tanya Heyns^b

a) Gauteng college of Nursing: Ga-Rankuwa Campus

b) Department of Nursing Science, Faculty of Health Sciences, University of Pretoria, Pretoria, South Africa

Abstract

Introduction: Patients who are critically ill or seriously injured are routinely admitted to critical care units. If the patient's condition deteriorates beyond a certain point, the medical practitioner may prescribe or decide on a do-not-resuscitate (DNR) order that must be executed by the professional nurse. Professional nurses may experience moral distress that manifests in poor teamwork, depression, and absenteeism.

Objectives: We explore and describe factors contributing to moral distress of critical care nurses executing DNR orders.

Methods: This was an explorative descriptive qualitative study. Critical care nurses, involved in executing DNR orders in a critical care unit of a selected public hospital in Gauteng province were purposively sampled. The mean age of the participants was 36-years-old and most of them had more than five years critical care nursing experience.

Results: Three main themes emerged from the data, namely moral distress, communication, and psychological impact of DNR orders.

Conclusion: Clearly defined national guidelines or legal frameworks are needed to regulate DNR processes. The study further demonstrated a need for unit based ethical platforms and debriefing sessions for critical care nurses.

Keywords: Do not resuscitate (DNR) orders, Critical Care Nurse, Critical Care Unit, Moral distress.

1 **Background**

2 The critical care unit admits patients who are critically ill or seriously injured. Some of these patients
3 deteriorate to a point where the medical practitioner prescribes or decides on a do-not-resuscitate
4 (DNR) order, which must be executed by the critical care nurse. The DNR order may conflict with
5 the critical care nurse's cultural, religious, and moral beliefs resulting in moral distress.^[1, 2, 3]
6 Withdrawing treatment or prescribing DNR orders is also a major source of conflict for professional
7 teams, who often delay prescribing DNR orders while considering the patient's and family's
8 interests.^[4]

9
10 DNR orders are common in critical care units, where almost half of all deaths are preceded by DNR
11 orders.^[5, 6] In Africa, DNR is defined as withholding cardiopulmonary resuscitation in the case of
12 cardiac arrest.^[7] This definition does not exclude using life sustaining measures before cardiac arrest
13 occurs, which may complicate the execution of DNR orders. In this context, DNR orders may be
14 delayed to a stage where the patient or family's participation in the process is virtually impossible. In
15 the aggressive lifesaving environment of the critical care unit, DNR orders are rarely communicated
16 or documented properly.^[7, 8]

17
18 Viljoen ^[9] studied the legal and ethical outcomes of DNR and do not attempt resuscitation (DNAR)
19 orders in South Africa. Currently there are no laws nor policies regulating these processes in South
20 Africa, which creates much uncertainty when dealing with the end-of-life situations.^[9] The Health
21 Professionals Council of South Africa expects physicians to apply their minds to diagnosing and
22 treating patients, while acting in the best interests of the patient.^[6] The South African Nursing Council
23 expects nurses to demonstrate a high degree of respect for human life according to the nurses'
24 pledge of service, thus adding to the moral distress of this cadre of health care providers.^[9]

25
26 In South Africa, nurse training is generally focussed towards saving lives and encountering contrary
27 situations such as DNR orders may morally distress nurses.^[10] Voget ^[10] further noted that any work-
28 related emotional turmoil experienced by nurses was either referred to as burnout or compassion
29 fatigue. Such erroneous labelling of moral distress may denigrate the professional, social, and
30 personal impact of moral distress on nurses resulting in the misdirection of interventions to control
31 moral distress.

32
33 Moral distress negatively affects nurse's performance in the workplace. Allen and Butler ^[11, 12]
34 discussed the phases of moral distress and emphasised that ignoring moral distress associated with
35 end-of-life care may promote extensive moral residue. This moral residue may manifest as
36 psychological complications, including anxiety, depression, poor patient care, and increased
37 turnover rate.^[11, 12, 13] Nurses who experience moral distress may also become desensitised.^[10, 14]

38

39 **Methods**

40 **Design**

41 This explorative descriptive qualitative study^[15,16] was conducted in the Critical and High Care Units
42 aimed at exploring and describing the factors contributing to moral distress experienced by critical
43 care nurses on execution of DNR orders. We qualitatively explored the experiences of the
44 participants and allowed probing to clarify issues.

45 **Setting**

46 We conducted this study in one of the largest academic hospitals in Gauteng province, South Africa,
47 with patient referrals from the Gauteng province, North-West and Limpopo provinces for various
48 specialities. The hospital has a 22-bed adult critical care unit with 81 professional nurses. There are
49 also three high care units for medical, surgical, and neurological cases with twenty professional
50 nurses allocated to each unit.

51

52 **Participants**

53 We purposively selected ten (10) participants^[17] based on saturation of the data who had at least
54 one-year experience in the critical care unit, and who had nursed a critically ill or injured patient with
55 a DNR order. Using these eligibility criteria, we were able to select participants who could provide
56 rich data.^[18] The critical and high care units' shift leaders assisted with the selection of suitable
57 participants who met the eligibility criteria. The demographic data of the participants are presented
58 in Table 1. Participants were on average 36-years-old and mostly had more than five years of critical
59 care nursing experience.

60

61 **Ethical considerations**

62 This study was approved by Ethics Committee of the Faculty of Health Sciences of the University of
63 Pretoria with ethics reference 82/2021 and the Gauteng Department of Health. The ethics committee
64 of the hospital also gave permission, as did the managers of the respective units. We also complied
65 with the Nuremberg code and the declaration of Helsinki to protect the participants.^[11] The
66 participants also gave informed consent after the study had been explained to them, and they knew
67 about their right to withdraw from the study whenever they felt uncomfortable.^[18]

68

69 **Table 1: Demographic data of the critical care nurses who participated in this qualitative**
70 **study exploring their perceptions of do-not-resuscitate (DNR) orders**

No.	Gender	Age (years)	CCU experience (years)	Type of CCU	Basic qualification	Additional qualification	critical care
1	M	28	5	Main	Diploma	None	
2	F	36	7	Main	Diploma	Diploma Critical Care	

3	F	47	15	Main	Diploma	Diploma Critical Care
4	F	48	21	Surgical	Degree	Diploma Critical Care
5	F	36	5	Main	Degree	Diploma Critical Care
6	F	30	6	Main	Diploma	None
7	F	31	8	Main	Diploma	Diploma Critical Care
8	F	39	4	Surgical	Diploma	Diploma Critical Care
9	F	31	6	Main	Degree	Diploma Critical Care
10	F	30	3	Surgical	Degree	Diploma Critical Care
11	F	37	4	Medical	Diploma	None
12	F	48	13	Main	Degree	Diploma Critical Care
13	F	34	7	Main	Diploma	Diploma Critical Care
14	F	27	5	Main	Diploma	None

71

72 **Data collection**

73 We conducted individual semi-structured interviews over a period of two months. The duration of
74 interviews ranged from between 30 to 45 minutes. The interviews were audio-taped with the consent
75 of the participants and transcribed verbatim by the researcher.

76

77 **Data analysis**

78 Data were analysed using Tesch's eight-step method.^[19] Firstly, the researcher read all the
79 transcripts carefully to make sense of the whole. The transcripts were re-read to extract the
80 underlying meanings. Thoughts and main themes were noted in the margins. The main topics from
81 the data were listed. Similar topics were then grouped together to form themes. The themes were
82 abbreviated as codes next to the appropriate segments of the text. The most descriptive words for
83 the themes were found and turned into categories. The total list of categories were then reduced and
84 grouped into related topics in collaboration with a co-coder.

85

86 **Results**

87 The researcher initially interviewed 12 professional nurses who agreed to participate in the study,
88 and then two more participants were added to reach data saturation. The identified themes and
89 categories were reduced into three main themes that emerged as follows, 1) moral distress related
90 to executing the DNR order, 2) communication of the DNR order, and 3) psychological impact of
91 executing the DNR order.

92

93 ***Moral distress related to executing the DNR order***

94 All fourteen participants had nursed patients with DNR orders and, their predominant value was to
95 preserve life as far as possible. Participants described feeling depressed and morally distressed
96 when having to participate in execution of DNR orders:

97 *"You feel so stressed that you feel like you can do something, but nothing can be*
98 *done". (P 4)*

99 *"Moral distress it it's like, you leave your patient in danger you know, you feel guilty*
100 *as if something can be done because no one wants to die". (P 3)*

101 *"The stress actually began the moment when the doctor says, do not escalate the*
102 *treatment and a DNR is signed, it goes against my beliefs, my values". (P 9)*

103 **Communication of the DNR order**

104 Participants referred to the DNR order as confusing in terms of execution as there were no guiding
105 policies or standard operating procedures. Participants were also uncertain in terms of the
106 communication of the order. Participants stated that the DNR order is occasionally made verbally or
107 the written order is not always clear:

108 *"Sometimes the DNR order is verbalized but not written...this causes stress*
109 *because if I do it and someone ask where was it written...and if I don't do it the*
110 *doctor will shout at us". (P 6)*

111 *"It does not clear that when we do not resuscitate what exactly do, we do, must we*
112 *switch off the machine or must we wean off the ventilation and what?". (P 2)*

113 The doctors sometimes ignored their own DNR order for example one participant said:

114 *"The doctor complain that the blood pressure is 80/50. The doctor said give bolus.*
115 *So, you become so confused but, in the morning, he said, do not resuss, so now*
116 *he says I must give a bolus". (P 3)*

117 **Unavailability of psychological support for nurses**

118 Participants experienced DNR as emotionally draining and stressful. Participants felt that they had
119 to continue as normal, even after a patient with a DNR order had died:

120 *"Immediately after the patient died following the DNR order, I had to prepare for*
121 *another admission, even if I was crying for the patient who passed on, I had to*
122 *smile for the new relative". (P 10)*

123 *"We are given opportunity to maybe talk to a counsellor, but it doesn't happen.*
124 *Since the unit is always very busy, you suffer in silence". (P 6)*

125 *"You feel depressed and having conflict in yourself to do things that is against your*
126 *culture and beliefs". (P 5)*

127

128 **Discussion**

129 Nurses working in critical care units in public hospitals in South Africa experience moral distress when
130 having to execute DNR orders. Nurses in our study were unfamiliar with the term moral distress but
131 understood the values and the ethical considerations of the nursing profession.^[10] Nurses
132 experienced DNR orders to be in conflict with what they believed to be right, their pledges, and their
133 oaths. Moral distress is known to occur in two phases, with the initial phase being experienced whilst
134 nursing a patient with DNR whereas the second phase, termed moral residue, occurs later.^[11, 12, 13]
135

136 In our study, most nurses experienced the initial phase of moral distress, while caring for patients
137 with a DNR order. Participants felt that complying with the DNR was uncaring towards critically ill
138 patient even though it was clear that nothing could be done. DNR orders exposed the health care
139 providers to some form of ethical dilemma, especially when considering their caring attitude.^[20] In
140 our study, nurses mentioned that they were used to caring for their critically ill patients, and that a
141 DNR order sometimes came as a surprise. Pettersson, Hedström^[20] explained that nurses found it
142 easier to adhere to some values such as continuing to care for the patient and avoided directly
143 referring to the DNR order. Most nurses prefer to do their duty or follow a code of deontological ethics
144 of not doing harm, whilst upholding their patients' autonomy.^[20] Pettersson, Hedström^[20] also
145 advocate for replacing DNR orders with the term "allow for natural death", which may be less stressful
146 for nurses. The ethical dilemma caused by having to execute DNR orders further suggests that rules
147 and policies regulating DNR may not solve the problem.^[20] Healthcare providers need to be ethically
148 competent to implement these rules effectively.
149

150 In our study, nurses described instances of having to resuscitate patients with poor quality of life,
151 which they found to be morally distressing as it prolongs suffering and interferes with equitable
152 allocation and use of hospital resources.^[21] Akdeniz, Yardımcı^[22] analysed the ethical
153 considerations of end-of-life care and maintain that this care should relieve suffering for the patient
154 and family in all possible ways, in a respectful and dignified manner.
155

156 Nurses in our study also described situations where DNR orders restricted the implementation of
157 resuscitative measures, probably due to the manner in which the order was communicated. Nurses
158 in our study were particularly concerned with verbalised DNR orders, which is similar to other
159 studies.^[7, 8] Nurses felt that verbal DNR orders contributed to moral distress because they interfered
160 with quality patient care and were difficult to communicate with relatives. Verbal DNR orders also
161 lack clarity.^[23] Currently there are still no proper documentation guidelines globally, despite many
162 years of implementing these orders.
163

164 Articulating DNR orders is a challenge in South Africa because there are no legal and regulatory
165 mechanisms.^[9] In our study, nurses confirmed that some physicians would write DNR orders but in
166 different ways. Even in the United States of America, where advanced care directives are approved,

167 physicians still find it difficult to articulate DNR orders despite having approval of the patient and the
168 relatives' contribution in the decision-making process.^[24] Physicians have to carefully consider
169 institutional cultural norms, prioritise the patient's autonomy, and consider the principle of
170 beneficence when conceptualising DNR orders. The lack of communication guidelines between
171 physicians and nurses also creates confusion regarding the continued management of patients.^[25]
172 The absence of clear guidelines and legal provisions may also expose physicians to potential
173 litigation.^[25] Most physicians support the maintenance of life sustaining measures including feeding
174 and hydration as being morally right during end-of-life care.^[25] In our study, nurses were confused
175 about the actual execution of a DNR order and felt that DNR orders produced a reluctance to go the
176 extra mile when caring for critically ill patients. This reluctance may stem from widening the meaning
177 of DNR order beyond that of withholding cardiopulmonary resuscitation on the occurrence of cardiac
178 arrest.^[25, 26]

179
180 Evidently, nurses require significant support when dealing with patients with DNR orders. Nurses
181 who deal with such patients should be individually assessed to determine need for immediate
182 debriefing by the manager or referral for professional help.^[27, 28 29] If not properly managed, moral
183 distress may lead to moral residue and eventual burnout.^[30] Occasional end-of-life discussions by
184 nurses may help to develop best practices for dealing with DNR orders in critical care units.

186 **Limitations**

187 The study was limited to one hospital in Gauteng Province, which might affect the generalisability of
188 the findings. The researcher focused on the critical care nurses with more than one-year experience.
189 End-of-life care and DNR orders may have a greater impact on newly qualified critical care nurses.

191 **Conclusion**

192 Clearly defined guidelines and standard operating procedures pertaining to DNR processes should
193 be developed collaboratively. Open communication and clarifying the exact meaning of the DNR
194 order and the actual execution of the order needs to be clearly understood by all parties involved.
195 Our study further demonstrated the need for unit based ethical discussion platforms and debriefing
196 sessions to support critical care nurses involved in executing DNR orders.

198 **Author's contribution**

199 All three authors contributed to all parts of the planning, compilation and review of the manuscript.
200 Data collection and analysis was done by the researcher and co-coded by the research supervisors.

202 **Ethical approval**

203 Approval for the study was obtained from the ethics committee of the Faculty of Health Sciences of
204 the University of Pretoria and the Gauteng Department of Health. Permission was also sought from

205 the ethics committee of the hospital and from the managers of the respective units where the study
206 was conducted. Informed consent was obtained from the participants and they were also made
207 aware of their right to withdraw from the study whenever they felt uncomfortable.

208

209 **Declaration of competing evidence**

210 The authors declare that there was no competing evidence

211

212 **Acknowledgements**

213 Dr Cheryl Tosh (University of Pretoria) for editing.

214

215 **References**

216 1. Vincent HE. Relationships of moral distress among interprofessional healthcare providers in four
217 ICUs. 30th International Nursing Research Congress: Theory-to-Practice: Catalyzing collaborations
218 to connect globally; Alberta, Canada: Sigma Theta Tau International (Sigma); 2019.

219 2. Saifan AR, Alrimawi I, AbuAlruz ME, Abdelkader R. The perspective of Palestinian physicians and
220 nurses about the do-not-resuscitate order for terminally ill patients. *Health Science Journal*.
221 2016;10(3):0-.

222 3. Cheraghi MA, Bahramnezhad F, Mehrdad N, Zendehei K. View Of Main Religions of the World
223 On; Don't Attempt Resuscitation Order (DNR). *International Journal of Medical Reviews*. 2016 Mar
224 30;3(1):401-5.

225 4. Vanderspank-Wright B, Efstathiou N, Vandyk AD. Critical care nurses' experiences of withdrawal
226 of treatment: A systematic review of qualitative evidence. *International Journal of Nursing Studies*.
227 2018;77:15-26. <https://doi.org/10.1016/j.ijnurstu.2017.09.012>.

228 5. Velarde-García JF, Luengo-González R, González-Hervías R, et al. Limitation of therapeutic effort
229 experienced by intensive care nurses. *Nursing Ethics*. 2018;25(7):867-879.
230 <https://doi.org/10.1177/0969733016679471>.

231 6. Hatfield J, Fah M, Girden A, Mills B, Ohnuma T, Haines K, Cobert J, Komisarow J, Williamson T,
232 Bartz R, Vavilala M. Racial and Ethnic Differences in the Prevalence of Do-Not-Resuscitate Orders
233 among Older Adults with Severe Traumatic Brain Injury. *Journal of Intensive Care Medicine*. 2022
234 May 22:08850666221103780.

235 7. Brysiewicz P, Nankundwa E. Lived experiences of Rwandan ICU nurses caring for patients with
236 a do-not-resuscitate order. *Southern African Journal of Critical Care*. 2017;33(1):19-22.
237 <https://doi.org/10.7196/SAJCC.2017.v33i1.281>.

238 8. Hassan CP, Mohammed Ali A. Do-not-resuscitate orders: Islamic viewpoint. *International Journal*
239 *of Human and Health Sciences*. 2018;2(1):8-12.

240 9. Viljoen C. Pre-hospital care and do not attempt to resuscitate orders: The legal and ethical
241 consequences. Bloemfontein, South Africa: University of the Free State; 2017.

- 242 10. Voget U. Professional nurses' lived experiences of moral distress at a district hospital.
243 Stellenbosch, South Africa: Stellenbosch University; 2017.
- 244 11. Allen R, Butler E. Addressing moral distress in critical care nurses: a pilot study. *International*
245 *Journal of Critical Care and Emergency Medicine*. 2016;2(2):015.
- 246 12. McMillan DN. *Moral Distress in Registered Nurses*; 2018.
- 247 13 Reeder EE. *Moral Distress: Its Impact on Healthcare Professionals and Their Patients*.
- 248 14 Mealer M, Moss M. Moral distress in ICU nurses. *Intensive care medicine*. 2016 Oct;42(10):1615-
249 7.
- 250 15. Hunter D, McCallum J, Howes D. Defining exploratory-descriptive qualitative (EDQ) research
251 and considering its application to healthcare. *Journal of Nursing and Health Care*. 2019;4(1).
- 252 16. Turale S. A brief introduction to qualitative description: A research design worth using. *Pacific*
253 *Rim International Journal of Nursing Research*. 2020 Jul 9;24(3):289-91.
- 254 17. Brink H, Van der Walt C, Van Rensburg G. *Fundamentals of research methodology for health*
255 *care professionals*. 4 ed. Cape Town, South Africa: Juta and Company Ltd; 2006.
- 256 18. Polit DF, Beck CT. *Nursing research: Generating and assessing evidence for nursing practice*.
257 11 ed. Philadelphia: Wolters Kluwer; 2021.
- 258 19. Creswell JW. *Research design: Qualitative, quantitative and mixed methods approaches*. 4 ed.
259 Thousand Oaks, California: Sage; 2014.
- 260 20. Pettersson M, Hedström M, Höglund AT. The ethics of DNR-decisions in oncology and
261 hematology care: a qualitative study. *BMC Medical Ethics*. 2020;21(1):66.
262 <https://doi.org/10.1186/s12910-020-00508-z>.
- 263 21. Yekefallah L, Ashktorab T, Manoochchri H, Alavi Majd H. Dimensions of Futility at the End of
264 Life: Nurses' Experiences in Intensive Care Units. *International Journal of Epidemiologic Research*.
265 2017 Dec 28;5(1):14-8.
- 266 22. Akdeniz M, Yardımcı B, Kavukcu E. Ethical considerations at the end-of-life care. *SAGE Open*
267 *Medicine* [Internet]. 2021; 9. Available from:
268 <https://journals.sagepub.com/doi/abs/10.1177/20503121211000918>.
- 269 23. Vu B. *Ethical considerations of DNR orders from nursing perspective*. Finland: Lahti University
270 of Applied Sciences; 2019.
- 271 24. Dzung E, Curtis JR. Understanding ethical climate, moral distress, and burnout: A novel tool and
272 a conceptual framework. *BMJ Quality & Safety*. 2018;27(10):766-770. [https://doi.org/10.1136/bmjqs-](https://doi.org/10.1136/bmjqs-2018-007905)
273 [2018-007905](https://doi.org/10.1136/bmjqs-2018-007905).
- 274 25. Azab SMS, Abdul-Rahman SA, Esmat IM. Survey of End-of-Life Care in Intensive Care Units in
275 Ain Shams University Hospitals, Cairo, Egypt. *HEC Forum*. 2022;34(1):25-39.
276 <https://doi.org/10.1007/s10730-020-09423-7>.
- 277 26. Chen YY, Chen YS, Chu TS, Lin KH, Wu CC. Further deliberating the relationship between do-
278 not-resuscitate and the increased risk of death. *Scientific Reports*. 2016 Mar 18;6(1):1-8

- 279 27. Kelly PA, Baker KA, Hodges KM, et al. Nurses' perspectives on caring for patients with do-not-
280 resuscitate orders. *The American Journal of Nursing*. 2021;121(1):26-36.
281 <https://doi.org/10.1097/01.Naj.0000731652.86224.11>.
- 282 28. Taylor IH, Dihle A, Hofsø K, Steindal SA. Intensive care nurses' experiences of withdrawal of
283 life-sustaining treatments in intensive care patients: A qualitative study. *Intensive and Critical Care*
284 *Nursing*. 2020 Feb 1;56:102768.
- 285 29. Emmamally W, Chiyangwa O. Exploring moral distress among critical care nurses at a private
286 hospital in Kwa-Zulu Natal, South Africa. *Southern African Journal of Critical Care*. 2020 Nov
287 1;36(2):104-8.
- 288 30. Jensen HI, Halvorsen K, Jerpseth H, Fridh I, Lind R. Practice recommendations for end-of-life
289 care in the intensive care unit. *Critical Care Nurse*. 2020;40(3):14-22.
290 <https://doi.org/10.4037/ccn2020834>.

CHAPTER 5

FINDINGS, LIMITATIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

Chapter 4 presented the results of the study. This chapter briefly describes the findings, suggests strategies to alleviate the moral distress of critical care nurses on execution of do-not-resuscitate orders, describes the significance and limitations of the study, and makes recommendations for practice and education, and further research.

5.2 PURPOSE OF THE STUDY

The purpose of the study was to

- Explore and describe the factors contributing to the moral distress experiences of critical care nurses on execution of do-not-resuscitate orders.
- Suggest strategies to alleviate the moral distress of critical care nurses on execution of do-not-resuscitate orders.

In order to achieve the purpose, the study wished to answer the following research question:

- What are the factors contributing to the moral distress experiences of critical care nurses on execution of do-not-resuscitate orders?

5.3 FACTORS CONTRIBUTING TO MORAL DISTRESS OF CRITICAL CARE NURSES ON EXECUTION OF DO-NOT-RESUSCITATE ORDERS

Data was collected in interviews with ten (10) critical care nurses and three main themes emerged: moral distress related to executing the DNR order, communication of DNR orders, and unavailability of psychological support for nurses. The participant nurses' experiences and views were particular to the context, which was linked to the experience of moral distress after nursing a DNR patient (Polit & Beck 2017:543)

5.3.1.1 Theme 1: Moral distress related to executing the DNR order

The first theme was emotional distress and had three categories, namely values conflict resulting in feelings of helplessness; poor quality patient care, and provision of futile care.

5.3.1.2 Value conflict

The participants reported values conflict experienced due to the South African Nursing Council's pledge of service which advocates for respect for human life. The participants indicated feeling helpless as there was nothing that could be done for the patient. The participants reported experiences of initial moral distress as well as reactive distress after nursing DNR patients. The unavailability of platforms to address ethical issues increased the complexity of DNR orders.

5.3.1.3 Poor quality patient care

The participants felt that DNR orders produced reluctance in critical care nurses to provide optimal care for the patients. At the same time the participants noted the importance of providing nursing care that ensured a peaceful and dignified death. Some participants referred to moral distress associated with accompanying the physician when communicating with the relatives.

5.3.1.4 Provision of futile care

The participants recognised that do-not-resuscitate orders decreased prolonged suffering for patients especially with poor prognosis. Moreover, the participants also found the continuous provision of life-sustaining treatment with no benefit for the patient morally distressing.

5.3.2.1 Theme 2: Articulation of DNR orders

The second theme was articulation of DNR orders and had two categories: unclear written orders, meaning of DNR orders which affects the actual performance when executing the order. The participants raised concerns about verbalised DNR orders as there were problems when handing over the patient, in communicating with the relatives, and in execution of the order.

5.3.2.2 Unclear written orders

The participants referred to instances of orders that were misinterpreted as “do not treat” instead of “do not resuscitate” resulting in confusion in further patient management.

5.3.2.3 Meaning of DNR orders

There were some concerns related to the actual meaning of DNR orders as well as the actual action to be performed when executing DNR orders. The participants found the execution of DNR orders an ethical dilemma. The absence of rules and policies regulating DNR orders was noted as morally distressing.

5.3.3 Theme 3: Unavailability of psychological support for nurses

The participants raised concern regarding lack of psychological support for critical care nurses especially relating to the nursing care of patients with DNR. After a patient with a DNR died, the nurses were expected to continue working as if nothing had happened.

The participants referred to a contact number that was provided for professional help when the critical care nurses required debriefing. However, that service was underutilised due to the hectic nature of the critical care unit. The participants prioritised providing care to critically ill patients and did not go for psychological counselling as envisaged by the institution. Some of the participants noted that debriefing would have been effective if there were pre-planned unit- based debriefing sessions.

5.4 STRATEGIES TO ALLEVIATE MORAL DISTRESS OF CRITICAL CARE NURSES ON EXECUTION OF DO-NOT-RESUSCITATE ORDERS.

Based on the findings, the researcher suggests the following strategies to alleviate moral distress of critical care nurses on execution of do-not-resuscitate orders.

5.4.1 Communication and ongoing professional development

The SANC and academic public hospitals should:

- Develop and introduce interdisciplinary collaborative meetings and in-service education programs to address ethical issues and improve the ethical competence of critical care nurses.
- Provide continuing in-service professional development, including workshops, education sessions, webinars, or conferences, and ensure regular mandatory attendance.
- Develop and introduce open and participatory communication structures that will enable critical care nurses to raise their concerns.
- Encourage a team approach when discussing DNR initiation.

5.4.2 Regulation of do-not-resuscitate orders

The Department of Health should develop a legal framework and policy, standard operating procedures, and guidelines to address communication of DNR orders.

The SANC should regulate the implementation of unit-based meetings, discussions and conferences to address ethical issues that arise in the intensive/critical care unit.

5.4.3 Support structures

Academic public hospitals should implement:

- Critical care unit-based discussions on best practices for end-of-life care.
- Management-initiated debriefing sessions.
- Support groups to alleviate critical care nurses' feelings of guilt.

5.5 RECOMMENDATIONS

The study wished to improve the understanding of moral distress resulting from nursing care of patients with DNR orders. Based on the findings and their implications, the researcher makes the following recommendations for nursing practice, nursing education and further research.

5.5.1 Nursing practice

Regarding nursing practice, nursing management and clinical educators should:

- Be aware of the occurrence and effect of moral distress on critical care nurses' morale, productivity, and retention.
- Support the implementation of strategies to alleviate the effects of moral distress, including desensitization and burnout.
- Be aware of desensitisation of critical care nurses in order to avoid morally distressing situations that impact negatively on quality patient care.
- Encourage patient and family education on clarification of do-not-resuscitate orders in the management of critically ill patients.
- Encourage critical care nurses' attendance at continuing professional development activities to improve ethical reasoning and decision making to enhance their ethical competence.
- Make provision for ongoing in-service training on culture and spirituality as these impact on end-of-life care.

5.5.2 Education

Regarding nursing education, all nursing curricula should:

- Include end-of-life care and management of patients with do-not-resuscitate orders
- Include development of soft skills to improve comforting family members during end-of-life care
- Improve cultural and spiritual diversity to promote graduates' comprehension of the trajectory from curative to end-of-life care.
-

5.5.3 Further research

Further research should be conducted on the following topics:

- An investigation into the factors contributing to the moral distress experiences of critical care nurses on execution of do-not-resuscitate orders
- An assessment of the ethical competence of critical care nurses in handling ethical dilemmas in the critical care unit
- Development of a model to deal with moral distress of critical care nurses

- An exploration of the factors contributing to the moral distress of physicians on making DNR orders
- An examination of experienced critical care nurses' methods to cope with moral distress on execution of do-not-resuscitate orders

5.6 LIMITATIONS

The study was limited to one hospital in Gauteng Province, which might affect the generalisability of the findings. The researcher focused on the critical care nurses with more than one year's experience as critical care nurses in the adult ICU who had nursed at least one patient with a do-not-resuscitate order.

5.7 SIGNIFICANCE

A research study should be significant to the nursing profession and contribute to the body of knowledge (Brink, van der Walt & van Rensburg 2018:61).

The findings of this study should:

- Contribute to the body of knowledge on moral distress related to executing DNR orders and promote the inclusion of do-not-resuscitate orders and moral distress in nursing curricula at all levels.
- Assist nursing management to support the implementation of strategies to alleviate the effects of moral distress and improve ICU nurses' resilience in caring for critically ill patients with a do-not-resuscitate order.
- Facilitate and promote understanding and acceptance that a DNR decision does not imply abandoning the patient, but is rather part of the actions that favour the patient's wellbeing in order to make a peaceful death possible (Rudnik & Wada, 2011). A deeper understanding of moral distress pertaining to end-of-life care, in turn, should improve interdisciplinary communication and collaboration to enhance quality patient care and family support.

5.8 PERSONAL REFLECTION

The journey through my master's degree was long and interesting and I learned many lessons throughout the process. The critical care setting is a dynamic and challenging environment, with many opportunities for research. At times the participants' experiences were sad and depressing and during transcription I found myself reduced to tears on occasion as a critical care nurse. The Covid 19 pandemic presented a hurdle that delayed the progress of my studies, but I am thankful for having reached the end of the journey and hope to proceed to doctoral studies in the future.

I am deeply grateful to both my supervisors for their support and encouragement throughout my study as well as my colleagues, managers and family members for their support.

5.9 CONCLUSION

This chapter concluded the study, described the limitations, and made recommendations for nursing management and education, and further research.

LIST OF REFERENCES

Allen, R & Butler, E. 2016. Addressing moral distress in critical care nurses: a pilot study. *International Journal of Critical Care and Emergency Medicine*, 2(2):015.

Al-Masri, B & Mrayyan, M. 2016. Do not resuscitate (DNR) order among terminally ill patients with cancer: a position statement. *Journal of Biology, Agriculture and Healthcare*, 6:17-23.

Botma, Y, Greeff, M, Mulaudzi FM & Wright, SCD. 2010. *Research in health sciences*. Johannesburg: Heinemann.

Botma, Y, Greeff, M, Mulaudzi FM & Wright, SCD. 2015. *Research in health sciences*. 4th edition. Cape Town: Pearson.

Brink, H, van der Walt, C & van Rensburg, G. 2018. *Fundamentals of research methodology for healthcare professionals*. Fourth edition. Cape Town: Juta.

Bressler, T, Hanna, DR & Smith, E. 2017. Making sense of moral distress within cultural complexity. *Journal of Hospice & Palliative Nursing*, 19(1):7-14.

Campbell, SM, Ulrich, CM & Grady, C. 2016. A broader understanding of moral distress. *American Journal of Bioethics (AJOB)*, 16(12):2-9.

Campbell, SM, Ulrich, CM & Grady, C. 2018. A broader understanding of moral distress. In *Moral distress in the health professions* edited by CM Ulrich and C Grady. New York: Springer. pp 59-77

Chen, Y, Chen, YS, Chu, TS, Lin, KH & Wu, CC. 2016. Further deliberating the relationship between do-not-resuscitate and the increased risk of death. *Scientific Reports*, 6:23182. Available at: www.nature.com/scientificreports. (Accessed 27 March 2019)

References

Cheraghi, MA, Bahramnezhad, F, Mehrdad, N & Zendehtdel, K. 2016. View of main religions of the world on: Don't attempt resuscitation order. *International Journal of Medical Reviews*, 3(1):401-405.

Creswell, JW. 2014. *Research design: qualitative, quantitative and mixed method approaches*. 4th edition. Thousand Oaks, CA: Sage.

Creswell, JW & Poth, CN. 2018. *Qualitative inquiry and research design: choosing among five approaches*. Thousand Oaks, CA: Sage.

De Beer, J, Brysiewicz & Bhengu, BR. 2011. Intensive care nursing in South Africa. *Southern African Journal of Critical Care (SAJCC)*, 27(1):1.

DeVaney, S, Spangler, A, Lee, Y & Delgadillo, L. 2018. Tips from the experts on conducting and reviewing qualitative research. *Family and Consumer Sciences Research Journal*, 46(4):396-405.

Dineen, KK. 2019. Ethical and legal issues. In *Priorities in critical care nursing* by LD Urden, KM Stacy and ME Lough. 8th edition. New York: Elsevier.

Edwards, R & Holland, J. 2013. *What is qualitative interviewing?* London: Bloomsbury.

Grove, SK, Burns, N & Gray, J. 2013. *The practice of nursing research: appraisal, synthesis and generation of evidence*. Seventh edition. St Louis, MO: Elsevier Saunders.

Hassan, CP & Ali, AM. 2018. Do-not-resuscitate orders: Islamic viewpoint. *International Journal of Human and Health Sciences (IJHHS)*, 2(1):8-12.

Hunter, D, McCallum, J & Howes, D. 2019. Defining exploratory-descriptive qualitative (EDQ) research and considering its application to healthcare. *Journal of Nursing & Health Care*, 4(1):1-8.

Kleinknecht-Dolf, M, Spichiger, E, Müller, M, Bartholomeyczik, S & Spirig, R. 2017. Advancement of the German version of the moral distress scale for acute care nurses: a mixed methods study. *Nursing Open*, 4(4):251-266.

References

Leuter, C, Petrucci, C, La Cerra, C, Dante, A, Franconi, I, Caponnetto, V & Lancia, L. 2020. Nurses' and physicians' opinions on end-of-life: a secondary analysis from an Italian cross-sectional study. *Annali di Igiene: Medicina Preventiva e di Comunita*, 32(3):274-284.

McMillan, Y. (2018). Moral Distress in Registered Nurses., Retrieved from https://hsrc.himmelfarb.gwu.edu/son_dnp/17

Mealer, M & Moss, M. 2016. Moral distress in ICU nurses. *Intensive Care Medicine*, 42(10):1615-1617.

Mullin, J & Bogetz, J. 2018. Point: moral distress can indicate inappropriate care at end-of-life. *Psycho-oncology*, 27(6):1490-1492.

Nichols, J. 2020. Advance directives in the COVID-19 era. *Caring for the Ages*, 21(5):5.

Nankundwa, E & Brysiewicz, P. 2017. Lived experiences of Rwandan ICU nurses caring for patients with do-not-resuscitate order. *South African Journal of Critical Care*, July, 33(1):19-21.

Ozdemir, A, Gultekin, A & Kavak, F. 2019. Determination of moral sensitivities of healthcare personnel. *International Journal of Caring Sciences*, 12(2):1-5.

Pajnkihar, M, McKenna, HP, Štiglic, G & Vrbnjak, D. 2017. Fit for practice: analysis and evaluation of Watson's theory of human caring. *Nursing Science Quarterly*, 30(3):243-252.

Petris, A, Cimpoeșu, D, Costache, I & Rotariu, I. 2011. Do not resuscitate decision: ethical issues during cardiopulmonary resuscitation. *Rev Rom Bioet*, 9(2):99-108.

Polit, DF & Beck, CT. 2017. *Nursing research: generating and assessing evidence for nursing practice*. Tenth edition. Philadelphia: Wolters Kluwer.

Qureshi, IS. 2019. DNAR decisions in Pakistan, the Middle East and the United Kingdom: an emergency physician's perspective. *South Asian Journal of Emergency Medicine*, 2(1):1.

Raiesifar, A, Parvizy, S, Bozorgzad, P, Poortaghi, S, Davoudi, N & Masoumi, M. 2019. Nursing: an evolutionary concept analysis. *Nursing Practice Today*, 6(1)

References

Ramos, FRS, Barlem, ELD, Brito, MJM, Vargas, MA, Schneider, DG & Brehmer, L.CDF. 2016. Conceptual framework for the study of moral distress in nurses. *Texto & Contexto Enfermagem*, 25(2):e4460015.

Rudnik, A & Wada, K. 2011. Introduction to bioethics in the 21st century. In *Bioethics in the 21st century* edited by A Rudnik. London: InTech.

Rudnick, A. and Wada, K., 2011. Introduction to bioethics in the 21st century. *Edited by Abraham Rudnick*, p.1.

Saifan, AR, Alrimawi, I, AbuAlruz, ME & Abdelkader, R. 2016. The perspective of Palestinian physicians and nurses about the do-not-resuscitate order for terminally ill patients. *Health Science Journal*, 10(3):1-8.

Sanderson, C, Sheahan, L, Kochovska, S, Lockett, T, Parker, D, Butow, P & Agar, M. 2019. Re-defining moral distress: a systematic review and critical re-appraisal of the argument-based bioethics literature. *Clinical Ethics*, 14(4):195-210.

Council, S.A.N., 2014. Competencies for critical care nurse specialist (adult). *Pretoria, SA: SANC*. Retrieved from <http://www.sanc.co.za/pdf/Competencies/SANC%20Competencies-Critical%20Care%20Nurse%20Specialist,20>, pp.202014-05.

Taraz, Z, Loghmani, L, Abbaszadeh, A, Ahmadi, F, Safavibiat, Z & Borhani, F. 2019. The relationship between ethical climate of hospital and moral courage of nursing staff. *Electronic Journal of General Medicine*, 16(2): 1-6.

Taylor, IHF, Dihle, A, Hofsø, K & Steindal, SA. 2020. Intensive care nurses' experiences of withdrawal of life-sustaining treatments in intensive care patients: a qualitative study. *Intensive and Critical Care Nursing*, 56:102768.

Terre'Blanche, M, Durrheim, K & Painter, D. 2014. *Research in practice: applied methods for the social sciences*. 2nd edition. Lansdowne: Juta.

Timberlake, M & Phillips, N. 2019. *Moral distress in critical care and emergency department nurses*. Harrisonburg, VA: James Madison University.

References

Turale, S. 2020. A brief introduction to qualitative description: a research design worth using. *Pacific Rim International Journal of Nursing Research*, 24(3):289-291.

Urden, LD, Stacy, KM & Lough, ME. 2013. *Critical care nursing: diagnosis and management*. 7th edition. Maryland Heights, MO: Elsevier Mosby.

Vanderspank-Wright, B, Efstathiou, N & Vandyk, AD. 2018. Critical care nurses' experiences of withdrawal of treatment: a systematic review of qualitative evidence. *International Journal of Nursing Studies*, 77:15-26.

Velarde-García, JF, Luengo-González, R, González-Hervías, R, Cardenete-Reyes, C, Álvarez-Embarba, B & Palacios-Ceña, D. 2018. Limitation of therapeutic effort experienced by intensive care nurses. *Nursing Ethics*, 25(7):867-879.

Viljoen, C. 2017. *Pre-hospital care and do not attempt to resuscitate orders: the legal and ethical consequences*. Doctoral dissertation. Bloemfontein: University of the Free State.

Vincent, Heather, "Relationships of Moral Distress among Interprofessional ICU Teams" (2018). UT SON Dissertations (Open Access). 25.

https://digitalcommons.library.tmc.edu/uthson_etd/25

Voget, U. 2017. *Professional nurses' lived experiences of moral distress at a district hospital*. Doctoral dissertation. Stellenbosch: Stellenbosch University.

Whittaker, BA, Gillum, DR & Kelly, JM. 2018. Burnout, moral distress, and job turnover in critical care nurses. *International Journal of Studies in Nursing*, 3(3):108.

ANNEXURE A 1:

ETHICS APPROVAL:

UNIVERSITY OF PRETORIA





UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Health Sciences

Institution: The Research Ethics Committee, Faculty Health Sciences, University of Pretoria complies with ICH-GCP guidelines and has US Federal wide Assurance.

- FWA 00002567, Approved dd 22 May 2002 and Expires 03/20/2022.
- IORG #: IORG0001762 OMB No. 0990-0279 Approved for use through February 28, 2022 and Expires: 03/04/2023.

6 April 2021

**Approval Certificate
New Application**

Ethics Reference No.: 82/2021

Title: Moral distress of critical care nurses when initiating do-not-resuscitate orders for critical ill patients in a specific government hospital

Dear Ms S Ntseke

The **New Application** as supported by documents received between 2021-02-17 and 2021-03-31 for your research, was approved by the Faculty of Health Sciences Research Ethics Committee on 2021-03-31 as resolved by its quorate meeting.

Please note the following about your ethics approval:

- Ethics Approval is valid for 1 year and needs to be renewed annually by 2022-04-06.
- Please remember to use your protocol number (82/2021) on any documents or correspondence with the Research Ethics Committee regarding your research.
- Please note that the Research Ethics Committee may ask further questions, seek additional information, require further modification, monitor the conduct of your research, or suspend or withdraw ethics approval.

Ethics approval is subject to the following:

- The ethics approval is conditional on the research being conducted as stipulated by the details of all documents submitted to the Committee. In the event that a further need arises to change who the investigators are, the methods or any other aspect, such changes must be submitted as an Amendment for approval by the Committee.

We wish you the best with your research.

Yours sincerely

Professor Werdie (CW) Van Staden

MBChB MMed(Psych) MD FCPsych(SA) FTCL UPLM

Chairperson: Faculty of Health Sciences Research Ethics Committee

The Faculty of Health Sciences Research Ethics Committee complies with the SA National Act 61 of 2003 as it pertains to health research and the United States Code of Federal Regulations Title 45 and 46. This committee abides by the ethical norms and principles for research, established by the Declaration of Helsinki, the South African Medical Research Council Guidelines as well as the Guidelines for Ethical Research: Principles Structures and Processes, Second Edition 2015 (Department of Health)

ANNEXURE A 2:
PERMISSION LETTER:
THE HOSPITAL



ANNEXURE A 2

LETTER OF REQUEST TO CONDUCT RESEARCH IN THE SELECTED **HOSPITAL IN GAUTENG,**

Principal investigator:
Sarah Ntseke 421 Block
U Mabopane, 0190 April
2021

Dr [REDACTED] Academic Hospital
3111 Setlogelo drive, Ga-Rankuwa unit 2
Private bag x 422
Pretoria
001

Dear Sir/Madam

Request to contact a research study in the selected hospital in Gauteng.

TITLE OF THE STUDY: Moral distress of Critical Care Nurses when initiating do-not-resuscitate orders for critical ill patients in a specific government hospital.

We hereby request permission to conduct a research study at Dr [REDACTED] Academic Hospital. The study is for the purpose of fulfilling the requirements of the MNur degree at the University of Pretoria.

The selected units are the Intensive Care and High Care Units (Ward 36, 07 and 09). A qualitative, explorative and descriptive research design will be utilized in this study. The researchers will utilize in-depth interviews to explore and describe the factors contributing to moral distress of critical care nurses executing do-not-resuscitate orders in the critical care units. The researcher intends to develop strategies to alleviate moral distress and in turn improve teamwork, absences and quality patient care.

Informed consent will be obtained from all the participants, for both the agreement to participate in the study and for use of digital device during the interview. There will be no

use of participants' names in the recording, as the researcher will be using symbols to identify her participants.

This study has been approved by the University of Pretoria ethics committee and the reference number is: 82/2021 for the duration of 1 year ending December 2021. For further inquiries contact Ms. Deepeka Behari at Deepeka behari@up.ac.za /+271235 1577. My research supervisor is Prof. IM.Coetzee from the Department of Nursing Science, University of Pretoria. [Email: isabel.coetzee@up.ac.za](mailto:isabel.coetzee@up.ac.za). Cell: 0711 589 045.

We intend to publish the findings of the study in the professional journal and / or present them at symposia, congress and other meeting of that nature.

We hope that our request will be taken into consideration.

Yours sincerely

Ntseke S.

Email: [Sarah.Ntseke\(2\)aqauteng.gov.za](mailto:Sarah.Ntseke(2)aqauteng.gov.za)

Cellphone: 0728262854

Signature ?K¹

Date.

Time.....

PERMISSION TO DO RESEARCH STUDY AND ACCESS GRANTED

Name & Initialsprint

CS-71 ri

474

(CEO of Hospital)

Signature



Date

Time

Hospital official stamp

ciALITENG PROVINCIAL GOVERNMENT
OR. GEORGE MUKHARI ACADEMIC HOSPITAL.

2021 -05- 0 4

PRIVATE BAG X422 PRETORIA 0001
SENIOR CLINICAL nom rrive

ANNEXURE B 1:

INFORMED CONSENT



**PARTICIPANT'S INFORMATION &
INFORMED CONSENT DOCUMENT**

STUDY TITLE: MORAL DISTRESS OF CRITICAL CARE NURSES MANAGING PATIENTS WITH DO-NOT RESUSCITATE ORDERS

Principal Investigators: NTSEKE S

Institution: UNIVERSITY OF PRETORIA

DAYTIME AND AFTER-HOURS TELEPHONE NUMBER(S):

Daytime number/s: 012 354 1394

Afterhours number:

DATE AND TIME OF FIRST INFORMED CONSENT DISCUSSION:

			:
date	month	year	Time

Dear Prospective Participant

Dear Mr. / Mrs.

1) INTRODUCTION

You are invited to volunteer for a research study. I am doing research for a Clinical Master's degree purpose at the University of Pretoria. This information in this document is to help you to decide if you would like to participate. Before you agree to take part in this study you should fully understand what is involved. If you have any questions, which are not fully explained in this document, do not hesitate to ask the researcher. You should not agree to take part unless you are completely happy about all the procedures involved.

2) THE NATURE AND PURPOSE OF THIS STUDY

The aim of this study is to evaluate the effects of moral distress experienced by Critical Care Nurses managing patients with do-not-resuscitate orders (*specify type of disease*). By doing so we wish to learn more about severe illness or injury (*the cause of this disease*).

3) POSSIBLE RISKS AND DISCOMFORTS INVOLVED

There are no medical risks associated with the study. The only possible risk and discomfort involved is remembering an incident where you managed a patient with a do-not-resuscitate order.

4) POSSIBLE BENEFITS OF THIS STUDY

Although you may not benefit directly. The study results may help us to improve knowledge of quality patient care at end of life.

5) COMPENSATION

There are no costs involved for you to be part of the study.

6) YOUR RIGHTS AS A RESEARCH PARTICIPANT

Your participation in this trial is entirely voluntary and you can refuse to participate or stop at any time without stating any reason. Your withdrawal will not affect your access to other medical care.

7) ETHICS APPROVAL

This Protocol was submitted to the Faculty of Health Sciences Research Ethics Committee, University of Pretoria, telephone numbers 012 356 3084 / 012 356 3085 and written approval has been granted by that committee. The study has been structured in accordance with the Declaration of Helsinki (last update: October 2013), which deals with the recommendations guiding doctors in biomedical research involving human/subjects. A copy of the Declaration may be obtained from the investigator should you wish to review it.

8) INFORMATION

If I have any questions concerning this study, I should contact:

Prof IM Coetzee Tel: 012 356-3173 or cell: 071 158 9045

9) CONFIDENTIALITY

All information obtained during the course of this study will be regarded as confidential. Each participant that is taking part will be provided with an alphanumeric coded number e.g. A001. This will ensure confidentiality of information so collected. Only the researcher will be able to identify you as participant. Results will be published or presented in such a fashion that patients remain unidentifiable. The hard copies of all your records will be kept in a locked facility at locked facility, The University of Pretoria.

10) CONSENT TO PARTICIPATE IN THIS STUDY

- ✓ I confirm that the person requesting my consent for my child to take part in this study has told me about the nature and process, any risks or discomforts, and the benefits of the study.
- ✓ I have also received, read and understood the above written information about the study.
- ✓ I have had adequate time to ask questions and I have no objections to participate in this study.
- ✓ I am aware that the information obtained in the study, including personal details, will be anonymously processed and presented in the reporting of results.
- ✓ I understand that I will not be penalized in any way should I wish to discontinue with the study and that withdrawal will not affect my further treatments.
- ✓ I am participating willingly.
- ✓ I have received a signed copy of this informed consent agreement.

Participant's name (Please print)

Date

Participant's signature

Date

Researcher's name (Please print)

Date

Researcher's signature

Date

ANNEXURE B 2:

INTERVIEW GUIDE



ANNEXURE B 2: INTERVIEW GUIDE

1. What was your experience in managing a patient with a do-not resuscitate order?
2. How do you view your role regarding execution of do-not resuscitate orders?
3. What contributes to moral distress when you have to execute a do-not resuscitate orders?

Probing questions:

Tell me more about.....

What exactly do you mean by.....

Please explain.....

Thank you for your participation. Your inputs are appreciated.



ANNEXURE B 3:
**EXAMPLE OF TRANSCRIBED
INTERVIEW**



Annexure B 3: Example of Transcribed interview

Participant 10

Researcher: Ntseke, S.

Researcher: Good afternoon. I believe you have gone through the consent, and do you agree to participate?

Participant 10: Yes, I do agree to participate. I'

Researcher: How many years have you had in the critical care unit?

Participant 10: Three years.

Researcher: Okay, thank you. Have you ever nursed a patient with do not resuscitate orders?

Participant 10: Not in actual writing, but mostly the doctors will say not for escalation of treatment.

Researcher: Almost all the participants that I've seen, they explained it that way that the order is now written as not for escalation of treatment is, is not for resuscitation. And believe you me, even in the articles that I get from the internet, actually, we sound much better, as they have a way, a standardized way of stating it. But in some other countries, the professional nurses complain that it's just verbal, it is never reduced to writing. So, with us, it's actually much better. So, what was your experience in managing a patient with a do not resuscitate order?

Participant 10: My experiences when it comes to a patient with do not resuscitate orders? It was, it is not easy to nurse that kind of a patient. Because as a human being you become emotionally at point, when you nurse a patient, you get to be connected to the patient. So by the moment you see that those orders, emotionally, you get to be distressed in a way because of you know, you're working at a loss. Because, according to my thinking, and my experience and understanding is that when I nurse a patient, at the end of the day, the patient must get healed or rehabilitated, and get discharged and go home. But if I know that I'm working on a loss, they said do not resuscitate. It stresses me and it decreased my morals of working with that kind of a patient because I know it's a loss at the end of the day and the energy will be spent on the outcome that is not fruitful at all.

Researcher: What do you understand by that? Not for escalation of treatment or Do Not Resuscitate order? What does it mean to you?

Participant 10: What I understand is that, when the patient, let's say for instance, the patient is on inotropic support, when they; their condition starts to deteriorate. That means there's nothing we can add to the treatment that is being ordered at a given time. That means we are not going to add or change

anything, we are going to leave it as it is and wait for the provider of life which is God, to take over and the will of God will be done at a given time.

Researcher: How do you manage the patient? What do you do for the patient as a Professional Nurse?

Participant 10:

As a professional nurse, I give the patient a holistic nursing care. That means I'll continue giving treatment patient will remain on the ventilator and I'll continue doing my blood gases and correcting the abnormalities Of course Yes. So, the only thing that the doctors have explained to us is that, by that they mean that there is no active resus of CPR if the heart stops, that's the end.

Researcher: Professionally, or maybe personally what is your opinion of do not resuscitate? Do you think we need these orders?

Participant 10: Professionally, I will go professionally, first, then personally later. Professionally, if, as the clinical team and the nursing team, we sit and discuss the patient in full. Like we show each other that this and these investigations have been done on the patient, and the outcome or the results of the tests are looking like this. Like patients who have cancer, the carcinomas, if we discuss and the doctor sits down with me as a professional to say, this is the outcome of the scan that was done. The carcinoma has spread to most of the organs of the patients, in a professional manner I will accept do not resuscitate order. Then I understand that this patient is suffering and there's nothing that we can do for him because all the organs are already damaged. Yes. So I think there is a gap, there are doctors that will explain to you why they say not for escalation or Do Not Resuscitate, some, they just write and say sisters, for that patient, no active CPR. Some they do take their time to explain. I think if we communicate more with the clinical team, then professionally, we will take it as like this patient, you know that we're going to lose the patient because their organs are no longer there. So, what are we saving at the end of the day, we are saving nothing and then personally and that's the personal view I take it as it is, it is human nature to say this patient should at the end of the day walk out of the hospital being alive? But given the circumstances we just have to come to terms this is the end of life for this patient.

Researcher: Yes. So that is your personal perspective. The other question on the interview guide is how do you view your role regarding execution do not resuscitate orders?

Participant 10: My role as a professional, I feel within this manner that I must give that patient holistic care till the end of life, I must care for that patient, it doesn't matter even if they have given those orders. That means if that patient must get blood, I should give I shouldn't say but anyways this patient is going to pass on I should give treatment as prescribed. I should carry on the orders until the last day.

Researcher: So, providing sort of quality care that is if we have to put it that way.

Participant 10: Yes. Ensuring that the patient dies in a dignified manner as well.

Researcher: What contributes to moral distress when you have to execute a do not resuscitate order. I usually explain to the participants that moral distress is explained in two parts. There's the part which involves that day when nursing the patient. What do you think contributes to that moral distress?

Participant 10: What contribute to the moral distress of nurses when they are nursing that patient for the day, you'll find that the doctors have already taken a decision that whatever happens with the patient, they've already given the orders. So that means it's for the nurse alone to see how to finish with a patient. The doctors are just waiting to come and certify. So, it leaves a burden on the nurse to say, if I do blood gases and there is an abnormality that needs the doctor to come and prescribe some of the medication to correct those abnormalities, they'll say to you, but sister we said do not resuscitate. Why are you correcting the abnormality? You're gonna find it next time when you do the blood gas again? Yeah. So morally just distresses us, to say it seems like they don't care at all; that's our belief as nurses.
Pause

Participant 10: As I was saying that some of the doctors will tell you that when you do the blood gas and find abnormalities when you call them, they'll just say but sisters, we said do not resuscitate. Why are you bothering correcting the abnormalities? Because next time we need to take blood gases, we'll find the abnormality again. Yes, yeah. So morally, we become demoralized as nurses. Okay, like I said.

Researcher: So, the other part they say it's sort of a lingering feeling, which affects your outlook, like even your desire to come to work and your performance at work? Yeah, that's what they refer to as latent distress. Did you experience that?

Participant 10: As I said, when we started that we are human beings, the moment you see that do not resuscitate or not for escalation of treatment. Psychologically, it does affect us as nurses, even though we won't verbalize it. But it does, because of, we have those emotions of saying everyone has a right to life. It doesn't matter whether that person has a chronic illness, or whatever illnesses they might have or injuries, but they have a right to live. So the moment we see those written, there are times where it comes to the mind to say maybe the doctor, if they give this person, some time, the person the patient will recover. Yeah, it does affect us psychologically and emotionally as well.

Researcher: So, it doesn't affect your performance.

Participant 10: It does because of you become demoralized, What's the use of nursing this patient to the fullest if the doctor who's supposed to come and order treatment says to you, haai, man, I said to you do not resuscitate, why are you calling me to come and correct abnormalities? Yeah. So there, there are points whereby when you wake up in the morning, like now in COVID, you know that, okay, I have one ICU patient in the unit, and I'm the only ICU trained sister. So that means the patient's going to be mine then you come to work Monday, Tuesday you nurse the patient for two days in a sequence. And they say do not resuscitate. Then you came, nursed the patient on Monday, then coming to work on Tuesday, you become demoralized, to come to work to say I'm going to still nurse the very same patient that I'm waiting for the patient to demise what's the use of me going back and spend all my energy where I cannot save a life.

Researcher: Yeah, it does have an effect. So, do you think the hospital, supports you, in the management of these patients?

Participant 10: It does support us. We have a supporting structure we have a psychologist, a clinical psychologist for staff. Yeah, whereby you can go and find out whatever is stressing you, it's either personally or work related.

Researcher: When are they available? Can you describe?

Participant 10: Okay, we have the number we have we have their hash number. I don't know where I've put that, but we have this number. Just call them and make an appointment. They are stationed at staff clinic, then you make an appointment and they'll see you.

Researcher: You see the other people that I've seen also noted that you do have a number, which you can contact them, then make an appointment. But their problem was there is no time you would love to go there. But you don't really get a chance because of work related issues. Yeah. Is it true?

Participant 10: It is true because of the workload is too much to tell the honest truth. So, by the time you think of going to the psychologist, then you think of leaving this patient? for that time? It's either an hour or so you feel like no, you're neglecting this patient. So that's why most we don't go we just stay here and say, let me just nurse the patient. Maybe when I'm off. Mostly, I think when we call, we have to negotiate for days that we are off duty. Because when we are on duty, there's no time to tell the honest truth So, the service is underutilized. Yeah, even though it has been made available.

Researcher: Is there anything that you feel maybe I'm not addressing with all my questions that you feel you can add to this study?

Participant 10: No, I think it was interesting, and the questions were fair.

Researcher: Should it happened that I have some more questions can I always come back to you.

Participant 10: Yes.

Researcher: Thank you very much for your participation.

ANNEXURE B 4:

TABLE WITH RAW DATA



ANNEXURE B 4: TABLE WITH RAW DATA

Emerging themes	Illustrative quotes	Sub themes	Illustrative quotes	Unclassified	Illustrative quotes
Initial distress Emotionally draining	<p>Yoh! emotionally draining patient is no more then you go home with that thing thinking that maybe is you who kill the patient, though is not you</p> <p>So it affects us in such a way that the morale goes down.</p> <p>So things like that you become so stressed out.</p> <p>You start being frightened</p> <p>Yes it affects me psychologically</p> <p>Emotional distress a lot when you have to nurse those patients is draining emotionally is draining and then you feel so stressed that you feel like you can do something but nothing can be done.</p> <p>It's not nice at all. It's not.</p> <p>So sometimes its' depressing, most of the time its depressing.</p> <p>Your heart is so sore because you think so much has been lost.</p>	Nurses feels Helpless	<p>It feels a bit helpless as well you feel like you did not help the patient any much</p> <p>Nothing much you can do for the patient as much as you would have liked.</p> <p>We find that you're restricted to give the care. Because you feel like you failed the family, you failed the patient you fail to deliver quality care to the patient. It demoralize us as nurses as we nurse the patient</p> <p>A moral distress? It's like, you know, you leave a patient in danger. You are not doing anything, you just leave the patient to die</p> <p>You know, you feel guilty as if something can be done. I don't know what. Because no one wants to die.</p> <p>So you feel so stressed up like you become helpless, like you will feel like you're not doing enough.</p> <p>So when they say do Not Resuscitate you think and believe that it's like they are restraining you.</p>	Availability of psychological support debriefing for nurses	<p>One of the things that I feel that is not attended to is regular counselling sessions. Which I think might be helpful.</p> <p>As the staff members are the ones that have to always, you know initiate the process,</p> <p>so those departments to make regular visits to their workplaces or the wards or units.</p> <p>Then the nurse must also emotionally be prepared, though, on our sites we don't have enough emotional support. I think professional nurses we are human too. We have families too. We have kids too. So we need counselling support too.</p> <p>The hospital is not supportive at all because after that prescription and then it's executed and the patient dies there's no counselling or anything that you have to undergo.</p> <p>When you have execute especially after you have executed the Do Not Resuscitate order. I think the nurse needs to undergo counselling.</p> <p>Just to say that I think the ICU nurses needs counselling now and then</p>

			Yeah. Carrying this order out, it's very difficult. It's confusing. We do not have a straightforward protocols that tells us what is expected.		because patients die in front of them and sometimes some feel drained And we are given opportunity to maybe talk to a counsellor but it doesn't happen. Since we are busy. There is no time. The unit is busy; you cannot even go and see that counsellor for debriefing
Latent distress Professionally demoralizing	Not having that edge to come to work. Maybe end-result I'd say might be late coming to work it demoralize us as nurses as we nurse the patient So you become demoralized, because each and every patient that dies, it affect you, because it's a loss of some to somebody. It does affect because that they had looked at you with that eye. You did not take care of the patient until they come to that chart and verify, and then then they say oh, that was expected. You remember those patients vividly like it was yesterday. So its stays with you and then it makes you... What am I going to work for? Its like you are demoralized because you know the end product of that, so when they say that's wat is I think it affect me	Written order	Not for escalation of any of treatment and then eventually written as do not resuscitate. But it was not clear eh because no one want to attach their signature on that. It does not clearly explain that when we do not resuscitate what exactly do we do; to who must switch off the machine; who must wean off the ventilation and what? Eh they will just write that you must not escalate the treatment No, they only tell us verbally they don't write it on the chart. I don't know why I've never seen it written do not resuscitate. Yes, the order was written clearly in the file. Yeah, usually they write it clearly in black and white that do not resuscitate the patient. Because it's not written anywhere? So it's a very difficult order. Most of the time, it's verbalized, not written.	Nurses suffer alone	But the support, we don't have you alone, you will have to just to reassure yourself that was the patient was not doing well, at the end of the day the patient was going to die. I came to nursing not expecting what I got. So I had to tolerate, accept and push because of life circumstances. Yeah, there is one thing I've learned in nursing: you become tough. But during all this prayer session and everything I ended up crying. Yes Because I even ended up crying I was not even nursing that patient.

	<p>professionally so that we work for the end result that we didn't want to work for</p> <p>Would you have an opportunity to choose a profession? Will you still choose to be a nurse and work in ICU?</p> <p>Then what is it like I even think why didn't I start another profession.</p> <p>And that's why even some of the youngsters, they stay here, they don't stay here for more than two years.</p> <p>So they become traumatized, that is why most of them they don't last. They become demoralized.</p>		<p>In some cases, they do write it down, that do not escalate treatment. In some cases, they don't write it down, they just say it verbally.</p> <p>And sometimes it's verbalized, but not written. . Because you would think if I don't do this, it still comes back to me to say you didn't do your work. And it would later be said, But where was it written that? 'Don't do this?'</p> <p>At first the doctor will say verbally, this patient is not for resuscitation, without writing down on the chart anything.</p>		
Poor quality patient care	<p>Reluctance in some instances when you have to go an extra mile you know. Yeah.</p> <p>So you don't have that eh eh positive attitude towards nursing the patient.</p> <p>You feel like you are not doing any help to the patient, you feel like you're you're increasing the harm instead of reducing the harm to the patient.</p> <p>I take it I go slow if I can put it that way. I just become a bit lazy for that day it's like I'm waiting for it to happen.</p>	Meaning of do not resuscitate	<p>The patient is to fall into asystole for example, you are not as the attending as you are not to act. Be it mechanically or otherwise.</p> <p>It means don't take any action should the patient crash or go into cardiac arrest. You just leave the patient to die peacefully.</p> <p>You get cardiac arrest, you don't do cardiac compressions. The heart stopped pumping, we do not do the active resuscitation like cardiopulmonary resuscitation.</p> <p>I cannot give CPR, like active resuscitation and then yeah, then by</p>	Interference with Patient's advocacy role	<p>And as a as the nurse you have to advocate for your patient, but in such state it You find out is difficult to advocate for the patient, because that's what is happening at that time.</p> <p>My role as a nurse is to be an advocate of the patient.</p> <p>And as a nurse, I must be an advocate for the patient. So if I cannot advocate for the patient, who will.</p>

	So, it actually affects your performance. You are going to perform poor. And say ahh either way they are going to say not for escalation.		so doing it means that's do not resuscitate for me. But the patient is not for CPR, so, the confusion is sometimes whether we actively do CPR or we stop everything at all		
Do not resuscitate orders decreases patient's suffering	To avoid delaying the patient and then making the family suffer plus the patient and the nurse emotionally. But, we take into account again, the quality of life because, we cannot resuscitate someone who is brain dead. Because he is going to be a burden to the family, financially and emotionally. The positive part I was talking it in connection with the relatives of the patient to alleviate the suffering, the prolonged suffering of putting patient on inotropes or mechanical ventilator for long while we know exactly that the prognosis won't be successful. Especially the resources and find that even the staff, we just nursing patient that we know that it's not going to recover in any way. do not resuss in some patients it shortens the suffering because you can see that this patient is suffering	Nursing care that ensures that the patient die peacefully	Making sure that, the patient is comfortable leading to eventual end of life. The nurse is with a patient when he is born and when he dies, so that the patient can die in dignity, not afraid of death. Do everything you know, hundred percent so that at the end of the day you become satisfied that at least but I have done this one two three for him. Yeah, but I failed and maybe that was the time to end. So I think my role is to let the patient die in a dignified manner	Develop resilience after nursing a patient with DNR order	So it makes you become, myself personally, it made me to become that competent someone; who can say when you nurse a patient in ICU, I make sure that, that patient survives if he has the chance to survive I make sure that the patients survive. When I nurse a patient, I put my all of my energy. Yeah, there is one thing I've learned in nursing: you become tough. That's the one thing because honestly if you were to become emotional about every do not resuss orders and then me being here for six years. I think eh it even makes you even more determined to nurse the patients in totality.

		Preventative Critical Care	<p>And the fact that maybe they might have been avoided or prevented if ever healthcare would have been sought earlier on, or accessed earlier on.</p> <p>Sometimes it's quite young people and like I'm saying the causative factor could possibly have been prevented if ever healthcare was accessed earlier on.</p> <p>So this thing needs to start at a primary level people need to be educated about their illnesses. So when they come to hospital at least, they will still have chances of survival</p> <p>So I think to prevent such kind of things, we need to educate our people to get early diagnosis so that at least it might control do not resus. So that we prevent it from occurring.</p>		
--	--	-------------------------------	--	--	--

ANNEXURE C:

CONFIRMATION OF EDITING



Cell/Mobile: 073-782-3923

53 Glover Avenue
Doringkloof
0157
Centurion

21 November 2022

TO WHOM IT MAY CONCERN

I hereby certify that I have edited Sarah Ntseke master's dissertation, **MORAL DISTRESS OF CRITICAL CARE NURSES MANAGING PATIENTS WITH DO-NOT RESUSCITATE ORDERS** for language and content.

lauma M Cooper

lauma M Cooper

192-290-4