UNIVERSITY OF
KWAZULU-NATAL

Critical care nurses' perceptions of caring for patients at a selected hospital in

KwaZulu-Natal

By

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Research dissertation submitted in partial fulfilment of the

Master's Degree in Nursing

to

School of Nursing and Public Health, College of Health Sciences at the University of KwaZulu-Natal.

2022

Declaration

I, Merashni Jugroop, declare that this dissertation entitled "Critical care nurses' perceptions of caring for patients at a selected hospital in Kwa-Zulu Natal," is my own original work and there has been no submission for any degree or examination in any other university other than the University of Kwa-Zulu-Natal. I have given complete acknowledgement to the sources referred to in the study.

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Dedication

I dedicate this dissertation to my wonderful parents for their unconditional love, patience, understanding, untiring support, motivation, and encouragement throughout the research study.

Acknowledgements

I wish to acknowledge the following individuals for their support, guidance, academic mentoring, and encouragement for the duration of this research process and its journey:

- My sincere appreciation goes to Dr. Waheedha Emmamally, for her excellent supervision, immense guidance, unwavering support, inspiration, perseverance, and encouragement throughout the study. Not forgetting the countless hours she spent during her busy schedules to review and comment on many drafts, steering me academically into the right path prior to the completion of this final product, without her guidance and dedicated involvement in every step of the research process this would have not been accomplished.
- Thank you to the Kwa-Zulu Natal Department of Heath for the opportunity to conduct the study.
- Thank you to Inkosi Albert Luthuli Central Hospital management and nursing staff for the opportunity to conduct the study and their cooperation.
- Thank you to all participants for their willingness to participate. Your valuable input resulted in the success of this study. This research represents your perceptions and feelings.
- Thank you to Dr Ebenezer Ogunsakin for statistical advice and assistance.
- Most of all, I would like to thank God for His endless blessings, knowledge, wisdom, strength, and direction without His divine grace this study would not have been possible. He is the source of my dream.

Abstract

Background: Caring in a critical care setting requires a holistic process of individualised, patient-focused, and specialised care within a work intensive and technologically focused environment. These are what have an impact on how caring unfolds within a critical care environment. The COVID-19 pandemic has further altered the care relationship between critical care nurses, critically ill patients and their families.

Aim: To determine critical care nurse's perceptions of caring for patients at a selected hospital in KwaZulu-Natal

Methods: A quantitative, descriptive, cross-sectional study was conducted on 139 participants in a tertiary quaternary hospital. Data collection used the Caring Assessment for Caregivers questionnaire, and analysis was with descriptive statistics.

Results: Results revealed that most of the participants were females above 30 years, holding a Diploma in Nursing and had > 10 years of work experience. Participants had an overall high perception of caring, with a total mean score of 116.01 (range of 25-125). Of the five subscales, the subscale of "*Maintaining belief*," had the highest mean composite score 24.25(range of 5-25) and the subscale of "*Being with*," had the lowest mean composite score 22.70. There was no significant relationship found between the critical care nurses' socio-demographic characteristics, the overall score and the total scores of each of the five subscales.

Conclusion:

Whilst critical care nurses reported a high overall perception of caring, lower mean scores on the subscale "*Being with*" suggest that there areas for critical care nurses to grow in their role as carers. Further research is necessary for replication of the study using qualitative approaches to bring forth valuable findings on how the critical care environment has an impact on the caring experiences of critical care nurses.

Keywords: Caring; critical care nurses; patients; families; perceptions

Acronyms and Abbreviations

CACG Caring assessment for caregivers

CCU Critical care unit

CHCM Creative healthcare management

KZN Kwa-Zulu Natal

SANC South African Nursing Council

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Chapter One

Orientation to the study

1.1 Introduction

In current times, healthcare institutions have recognised the importance of providing a positive physical, psychosocial and emotional environment for critically ill patients and their families to promote optimal care outcomes (Bagherian et al., 2019). In particular, many healthcare facilities have stressed the caring initiatives in critical care units (CCUs) in attempts to mitigate concerns over providing only functional care. Watson (2012) asserts that the concept of caring is ambiguous and complex. The author explains that "Caring can be an adjective, a verb, or a noun; it can connote an ontological perspective of being that is often complicated by connotations that define caring as care, implying the physical, a task, body care, the external aspect of action or behaviours," (Watson, 2012). Meleis (2018) describes caring, as a process were two persons connect and are transformed by the relationship. Despite the lack of a universal definition for caring, caring in nursing generally entails spiritual, moral, physical, and social involvement of nurses, as they commit to themselves to patients and families (Shalaby et al., 2018). Through caring relationships in healthcare settings, patients feel safe and secure, and their lives become more meaningful and significant (Carlson, 2015).

To make the concept of caring less abstract, nursing researchers have attempted to define caring behaviours instead of caring. Caring behaviours are actions concerned with the wellbeing of patients, such as attentive listening, non-judgemental attitudes, sensitivity, comforting and honesty (Salimi & Azimpour, 2013). Shalaby et al. (2018) add that caring behaviours maybe instrumental and expressive actions. Instrumental caring behaviours include technical and physical behaviours, while expressive caring behaviours consist of psychosocial and emotional behaviours. Petrou et al. (2017) describe caring behaviours as nursing actions of help, health maintenance and provision, disease prevention and provision of services, such as psychological support. Watson (1985) speaks of 10 carative factors namely, (1) forming humanistic-altruistic value systems, (2) instilling faith-hope, (3) cultivating a sensitivity to self and others, (4) developing a helping-trust relationship, (5) promoting an expression of feelings, (6)

using problem-solving for decision-making, (7) promoting teaching learning, (8) promoting a supportive environment, (9) assisting with gratification of human needs, and (10) allowing for existential-phenomenological forces. These carative factors guide clinical practice of nurses and ensures holistic, humane care (Watson, 1985).

The importance of caring for critically ill patients and their families is well researched (Carlson et al., 2015; de Beer & Brysiewicz, 2016; Emmamally & Brysiewicz, 2018). Critical care nurses are able to meet complex bio-psycho- social needs of patients and their families through utilisation of caring processes (de Beer & Brysiewicz, 2016). Caring facilitates effective communication between healthcare professionals thereby improving a family's understanding of their loved one's condition or illness (Carlson et al., 2015). The authors expand that the process of caring enhances a family's ability to cope by fostering different communicative ways to restore hope and eliminate emotional distress. Furthermore, caring processes capacitate family members to be autonomous in decision-making for their loved ones (Soklaridis et al., 2019). According to Emmamally and Brysiewicz (2018), caring for critically ill patients and their families enables nurses to develop relationships that are respectful, dignified and non-judgemental. Caring for critically ill patients and their families would require that critical care nurses understand cultural differences, beliefs and values amongst the diverse patients they nurse. In essence, caring enables the critical care nurse to provide authentic care to patients and families characterised by the nurse's desire to meaningfully connect with them (Shamloo,2012)

Within a critical care environment, caring may take on different meanings to caring in other nursing disciplines, because of the patient's critical condition, technological advancements and different staffing category and skills (Carlson, 2015). Critical care nurses may confront barriers in their ability to express caring in the critical care settings and their work experiences may alter their caring behaviours (Shalaby et al., 2018). Various factors, such as the critical condition of the patient, insufficient staffing and limited resources, may influence the dynamics and potential of caring for patient. The endless demands of working in a CCU contributes to physical and emotional exhaustion for the nurses. Exhaustion leads to stress and burnout, both of which have a negative link with caring behaviours of nurses (Alshammari et al., 2018). There is a challenge in providing care to families of critically ill patients due to inadequate time

for incorporating family demands, lack of readiness to provide information timelessly and the absence of policy guidance on family collaboration (Lotfy Abdel-Aziz., et al., 2017; Shalaby et al., 2018). Furthermore, language barriers between nurses and families and the complexity of information may impede family understanding and contribute to communication breakdown. As a result, families tend to blame staff for not caring and can become distressed (Carlson, 2015). The use of advanced technology in critical care areas has also limited the opportunities for caring communication with patient and their families and caring involvement of families in decision-making and direct patient care. Straughair (2012) asserts that nurses who may have entered the profession for non-altruistic reasons including salary and job security may have a negative impact on their ability to engage in therapeutic acts of caring for patients. The perception of caring, as well as individual differences can have a direct effect on caring behaviours.

The effects of the COVID-19 pandemic, which signified a health emergency globally, had a serious affect in acute care units, especially CCUs (Jensen et al., 2022). Critical care nurses had to treat growing numbers of extremely ill patients with very little hope of recovery. Critical care nurses also had to employ and adapt to new working methods, treatment strategies and changing patient protocols. Additionally, working with insufficient personal protective equipment, rising patient admissions rates, as well as witnessing patients dying alone in numbers and the constant worry of exposure to the disease all had a strong effect on their ability to express caring behaviours (Karimi et al., 2020). The nature of illness, mostly respiratory distress, called for treatments of ventilation and other technologies, making it difficult for critical care nurses to balance the technical aspects of nursing with caring for patients and their families (Moretti et al., 2021). Caring for the critically ill patient during the COVID-19 pandemic took on the meaning of technical care, deviating from the true meaning of caring, which includes responding personally to and committing to caring holistically for critically ill patients.

Given the difficulties to caring encountered by critical care nurses under normal circumstances, and now to caring related to the pandemic, it is important to identify critical care nurses' perceptions of caring for critically ill patients and their families, in

order to create clinical environments that encourage caring actions and behaviours of critical care nurses.

1.2 Problem statement

Although not exclusive to nursing, caring is a word that is synonymous to nursing. This brings nurses moments of reckoning, on whether caring for patients and families is negotiable in nursing and more especially in units as CCUs where the severity of illness and need to stabilise patients takes priority. In contrast, research has indicated that caring is fundamental to nursing actions in CCUs, lending to improved patient outcomes and family satisfaction with nursing care (Bagherian et al., 2019). At the same time, there is acknowledgement that critical care nurses confront difficulties that may limit their expressions and actions of caring (Rostami et al., 2017). These difficulties cited by the authors (Bagherian et al., 2019; Rostami et al., 2017), include high levels of stress resulting from increased acuity of patient's illness, working with limited resources including inadequate staffing, the need to closely monitor patients and simultaneously work with multiple technologies, and fewer interactions with family members. The COVID-19 pandemic has further added to the stressful working conditions of the critical care nurses and altered the care relationship between critical care nurses and critically ill patients and their families (González-Gil et al., 2021). In caring contexts such as the CCU, and where the focus on clinical tasks threatens to supersede human connection, it is important to determine nurses' perceptions of caring to identify their strengths and address any inadequacies inherent in their caring behaviours (Cheruiyot & Brysiewicz, 2019; Stenlund & Strandberg, 2021). Furthermore, there is limited literature on nurses' perceptions of caring for critically ill patients during pandemics (Karimi et al., 2020), and although this is not the aim of the study, we are mindful that data collection occurred during the COVID-19 pandemic. Hence, caring for critically ill patients during the pandemic, may have had an influence on perceptions of caring of critical care nurses in this study.

1.3 Aim of the study

The aim of the study was to determine critical care nurses' perceptions of caring for patients at a selected hospital in KwaZulu-Natal.

1.4 Objectives of the study

The objectives of the study were to:

1. Describe socio-demographic profile of participants that influence caring behaviours.
2. Determine critical care nurse's perceptions of caring for patients at a selected hospital in KwaZulu-Natal.
3. Identify dimensions of caring that are most and least important to critical care nurses at a selected hospital in KwaZulu-Natal.
4. Determine the inter-relationship between critical care nurse's socio-demographic characteristics and their perceptions of caring at a selected hospital in KwaZulu- Natal.

1.5 Questions of the study

The questions of the study were to determine:

1.5.1. What are critical care nurse's perceptions of caring for patients in CCUs?

1.5.2. What dimensions of caring are most and least important to critical care nurses?

1.5.3. What are the inter-relationships between the critical care nurse's socio-demographic characteristics and their perceptions of caring?

1.6 Significance of the study

The study may have significance in the following areas:

1.6.1. Nursing education - The expectation is that the results can assist in formulating strategies and interventions that maybe incorporated into nursing curricula or care modules designed to cultivate quality caring behaviours in student nurses. The study comes at an appropriate time when nursing education institutions are involved in developing Postgraduate Curricula. The findings of the study may feed into learning outcomes of modules in the curriculum of the Post Graduate Diploma in Critical Care and perhaps also aid in designing clinical interventions for developing caring behaviours in critical care nurses.

1.6.2. **Clinical practice** - The study may generate important findings to feed into in-service programmes that can guide critical care nurses on strategies to promote caring behaviours with patients and families in critical care settings, to increase nursing practice and quality of care. The presentation of the study findings will be in a report to the hospital, and there is a possibility of a publication. The circulation of the findings may heighten critical care nurses awareness of their caring behaviours. Self-reflection may result in positive behavioural changes.

1.6.3. Nursing policy and management - The findings of this study may contribute to the development of policies related to aspects that promote caring of patients and their families. Nurse leaders may be encouraged to provide supportive structures in CCUs that facilitate caring of both patients and their families.

1.6.5. Nursing research - The study may contribute to further research aspects of caring in critical care settings and acute care settings. A future study may also relate to perceived changes in caring provided to Covid-19 positive patients.

1.7 Operational definitions

1.7.1 Exploring - Within the context of this study, exploring is an act of searching for information to ascertain facts on the phenomenon of caring.

1.7.2 Caring - Caring in nursing involves values, a commitment to care, actions that incorporate caring behaviours that are assistive, supportive, or facilitative to patients and families that need assistance with the goal of improving their wellbeing (Watson, 1985). The study adopted this definition of caring.

1.7.3 Families – The establishing of families is through biological and legal ties; however, family is a personal choice and is beyond blood, their connection is through continuous shared love and beliefs providing closeness and personal support in an individual's everyday life (Erlingson & Brysiewiczs, 2015). In this study, family refers to individuals who are significant to the critically ill patient physically, emotionally, psychologically, or economically.

1.7.4 CCUs - A critical care unit is a specialised department within a health facility, managed by specifically trained health professionals, providing specialised comprehensive nursing care to critically ill patients requiring close monitoring and life

support interventions (Competencies Critical Nurse Specialist (Adult), 2014). In this study, CCU incorporated six highly specialised units, within the selected institution that use advanced technologies and specialised healthcare personnel to meet the needs of critically ill patients and their families.

1.7.5 Critical care nurses - These included nurses registered with South African Nursing Council (SANC) either as professional nurses with a Diploma in Nursing and/or Degree in Nursing. They must be working in critical care units; however, they may or may not have a qualification in critical care training.

1.8 Theoretical framework

Swanson's Theory of Caring (1991) guided this study. Swanson proposed her Caring Theory, which is a middle range theory consisting of five caring processes (Chen & Chou, 2010). Swanson's Theory incorporates adaptive methods that not only help the patient and family through the healing process, but also teaches the nurse methods to help the patient and family emotionally and physically. Swanson's five caring processes include: (i) knowing, which is striving to understand an event, (ii) being with, which is being emotionally present, (iii) doing for, this is where the nurse cares for the patient as they would do for themselves if they were able, (iv) enabling, where nurses support the patient through life transitions which are unfamiliar to them, and lastly (v) maintaining belief, sustaining faith helps patients get through the process (Chen & Chou, 2010) .

Swanson recognised three types of situations that affect caring: patient-related, nurse related and organisational related. The organisational related situations for caring are encompassed in components that create a healthy working environment that supports capable and committed nursing practices towards caring (Tonges & Ray, 2011).

The three components include leadership, which is shared staff guided support, compensation and rewards, which incorporates professional development opportunities in the clinical ladder and incentive plans, and professional relationships, which encompasses a healing environment through culture and relationship-based caring (Tonges & Ray, 2011). In the present study, the five caring processes guided data collection as the Caring Assessment for Caregivers' (CACG) Questionnaire used in the study was developed based on Swanson's Theory of Caring (Steele-Moses et al., 2011).

1.9 Conclusion

This chapter has served to set the context for the study by providing an orientation to the study with an introduction, highlighting the identified problem, the aim and objectives and the significance of the study.

Chapter Two

Literature review

2.1 Introduction

This chapter provides a review of the literature pertinent to the study, which served as a platform for the conducting of this study. The literature review was undertaken to provide comprehensive and objective documentation of evidence from previous studies relevant to the phenomenon of caring.

2.1.1 Search strategy for peer-reviewed journals

A literature search was conducted on the following electronic databases and search engines: Research Gate, Science Direct, Ebsco Host, SAGE Pub, Google Scholar databases, British Nursing Index, Cumulative Index to Nursing and Allied Health Literature (CINAHL), PubMed and Medline. The following key search terms were used (separately and in combination): concept of caring in nursing; importance of caring in nursing; constitutes of caring; caring in critical care units; history of caring; caring associated theories; characteristics of caring encounters; facilitation of caring encounters; critically ill patients and their families; challenges to caring behaviours; perceptions of critical care nurses; perceptions of critically ill patients and their families. The literature search included published articles between the years 2012 and 2021 presenting current information on the phenomenon of caring among nurses.

The presentation of the findings from the literature search is in six main sections and two sub-sections. The first section focuses on the concept of caring and its importance. The second section provides an overview of the history of caring. The third section discusses the theories associated with caring. The fourth section discusses caring behaviours in nursing and in CCUs. The fifth section outlines challenges to caring behaviours, and has two sub-sections that focus on critical care nurses' perceptions of challenges to their caring behaviours and critically ill patients and their families' perceptions of caring behaviours.

2.2 Findings of Literature search

2.2.1 The concept of caring in nursing and its importance

The concept of caring emerged during the 1950s and is still evolving. Nursing experts have identified caring as the art and science of nursing, with caring in nursing described from various perspectives. Nursing as a humanistic profession embodies the essence of caring, through human experiences of illness and health (Kalfoss & Owe Cand, 2016). Caring is a universal concept evolving as a paradigm central to nursing practice and a component of all philosophies that guide nursing as a profession. Caring centres on helping behaviours that are essential in human interactions (Sapountzi-Krepia, 2013; Sebrant & Jong, 2020).

Noveno (2018) stated that caring has been the core principle of the nursing profession since its outset, and the reason for nursing being dubbed a caring profession (Bagherian et al., 2017). The complexity of the caring concept may have a link to an ontological and epistemological paradigm of the caring definition of being and knowing (Sebrant & Jong, 2020). Caring in nursing manifests itself in two ways, as an act of caring for another and as an adjective describing the nurse as kind and compassionate towards patients and families. It was Watson's theory that identified caring as the core of nursing (Watson, 2012). According to Watson (2012), the caring concept in nursing enhances the goals of promoting patient dignity and achieving harmony. Leininger's Theory of Caring (1991) acknowledged that a definition of caring must include a description of individual activities intended to provide support and assistance to enable patients to return to their independence (Alligood, 2018).

Caring is fundamental to the understanding of human nature and is significant in relationships with others and oneself (Smith et al., 2013; Petrou et al., 2017). Within the nursing profession, caring is a concept that embodies giving, sharing, loving, attending to, respecting, honoring, supporting, comforting, and accommodating both patients and their families(Blasdell, 2017). According to Bagherian et al. (2017), caring is communicated through nursing actions and incorporated with feelings in nursing knowledge, skills and competence and is dependent on patients' and families' specific needs. To this end, Andersson et al. (2015) elaborate on the importance of actively involving patients and families in caring interactions to achieve positive patient

outcomes (Andersson et al., 2015).

Caring in nursing is also viewed as a content specific therapeutic interpersonal process shaped by a combination of actions and intuitions and characterised by professional knowledge, skills, maturity, and interpersonal sensitivity of nurses (Theofanidis & Sapountzi-Krepia, 2015; Drahošová & Jarošová, 2016). Caring is categorised into (i) caring as a human trait, (ii) caring as a moral imperative, to preserve individual dignity or integrity, (iii) caring as an affect, dealing with empathetic feeling, and compassion for patient experiences, (iv) caring as an interpersonal interaction and (v) caring as an intervention, which is patient-centred (Andersson et al., 2015; Leyva, Peralta, Tejero & Santos, 2015).

Noveno (2018) describes caring as a human quality that a nurse imparts to all those who they interact with in fulfilling the holistic needs of their patients. Meleis (2018) describes caring as a process where two individuals share a connection that transforms caring relationships. Caring in nursing entails spiritual, moral, physical, and social involvement of nurses as they commit to themselves, to the patients and to their families (Shalaby et al., 2018). According to a study conducted by Bagherian et al. (2017), caring in nursing has been perceived as a nursing intervention influenced by a contextual link to several aspects of caring; these factors include workload, staff shortages, cultural differences, advanced technology, nurse to patient ratio, and limited direct patient care, which all compromise optimal patient care within a critical care environment (Andersson et al., 2015; Drahošová & Jarošová, 2016).

Caring is a form of protection and support for a patient (Drahošová & Jarošová, 2016) and is a value and an attitude manifested in the form of a concrete act/behaviours, which occurs in collaboration with a patient focused interest (Andersson et al., 2015). In addition, caring for a patient is not limited to medical aspects of nursing but rather expands across the patient's needs. Caring facilitates the provision of effective communication during information sharing through elements of attentive listening, understanding and empathy (Drahošová & Jarošová, 2016; Dursun Ergezen, Bozkurt, Dinçer & Kol, 2020). Caring reduces patient anxiety, builds a mutually trusting relationship between patient and nurse, and increases patient awareness towards the decision-making process (Andersson et al., 2015; Drahošová & Jarošová, 2016). Further to this, caring provides a sense of hope, support, and spiritual upliftment. In its

contribution to a positive nurse-patient relationship, caring helps protect patient comfort, autonomy, and dignity (Drahošová & Jarošová, 2016).

Although caring is defined as a concept that is complex, intangible, and difficult to measure (Oluma & Abadiga,2020), the studies elaborated on have shown that caring behaviours of nurses are associated with improved patient satisfaction, positive patient outcomes and optimistic outlooks towards recovery and mutual respect (Andersson et al., 2015; Castro-Palaganas, 2020).

2.2.2 History of caring in nursing

The history of caring in nursing as a human science stems from the beginning of humankind. There has always been a need for caring since the existence of human life and their interactions. However, the care offered differed based on the needs and lifestyles of the society (Theofanidis & Sapountzi-Krepia, 2015). Prior to the development of modern nursing, religious leaders, such as nuns and monks, provided nursing-like care through natural basic preservative acts and ancient knowledge on how to care (Theofanidis & Sapountzi-Krepia, 2015). The examples of such care existed in Christianity, Islam and Buddhist traditions (Ma et al., 2015). Women searched and discovered healing properties from herbs, substances, and oral traditions (Egenes, 2017; Theofanidis & Sapountzi-Krepia, 2015). Women provided traditional care through nurturing their offspring, and the assumption is that these caring approaches extended to the sick and injured community members (Egenes, 2017). During the reformation in the 16th century, Protestants closed the monasteries and convents and nuns could no longer provide care to the ill. Thereafter, nursing care went to the family members, especially the mothers who took on the role of caring for the sick (Ma et al., 2015).

Historically, caring was affiliated with nursing from the early 18th century when the activities of Florence Nightingale in the Crimean War did much to expand the notion of caring in nursing (Theofanidis & Sapountzi-Krepia, 2015; Karlsson et al, 2020). Nightingale cared for and improved the nursing conditions in hospitals for wounded soldiers, thereby reducing mortality rates, and preventing disease progression (McDonald, 2020). Nightingale believed the basis for good care was ensuring patients had enough hydration, sufficient food, were hygienic, comfortable and warm, and that

environmental cleanliness was a priority (Loveday, 2020). Theofanidis and Sapountzi-Krepia (2015) elaborated further that hospitals relied solely on nursing students for the provision of good patient care, and their responsibilities included prioritising environmental cleanliness, in the sense that they dusted, scrubbed and did dishes (Theofanidis & Sapountzi-Krepia, 2015); it was only when nurses graduated that they were seen as competent in providing patients with psychological support (Loveday, 2020; Theofanidis & Sapountzi-Krepia, 2015). In today's era, nurses dealing with the devastating effects of the Covid-19 pandemic are similarly dealing with what Nightingale faced during the Crimean war, namely increased numbers of mortality, nurses' risk to own health due to a lack of personal protective equipment and guidelines/protocols (Kandula, 2019). Adams (2016) attested that it was through the works of individuals such as Nightingale and others (Leininger, Watson & Martha Rogers) that caring was historically embedded and weaved through as the core of nursing, with people looking after and caring for the vulnerable.

Within the South African context of caring, the works of Albertina Sisulu, namely The caring nature of Nontsikelelo Albertina Sisulu (South African History Online, 2018) provides a unique insight of how caring brings about change. The need to care for others during the Spanish flu, which left Albertina Sisulu's mother affected and in need of assistance, fueled her desire and interest to care for others and pursue a career in nursing education. She cared immensely for her family and patients with dignity and respect. It was Sisulu's caring encounters that led to the birth of a new South African nation (Lee et al., 2017). Sisulu's commitment towards developing a caring culture was based on a way of being in a healing environment, where her awareness of community needs and the population at large, positioned her to provide care where it was necessary (Downing & Hastings-Tolsma, 2016).

In an integrative review of caring in South Africa, Sisulu provided a connection between individuals in need of care and hope, by instilling a sense of hope and trust to provide the best care (Downing & Hastings-Tolsma, 2016). Historically, during Sisulu's engagements with family and community members, a culture of interpersonal sensitivity was pursued and individuals receiving care were valued and respected (Smith et al., 2013). Furthermore, caring continued to exist in her works by means of being physically present with a smile and portraying acts of kindness and openness to

patients. The co-existence of the nurse and the patient sharing the caring encounter is of significance. Consequently, Sisulu stands at the core of the caring encounter and co-partners the nurse and patient for healing. Sisulu's perspective of a caring commitment provides nurses with an opportunity to engage in a new way of being in a healing environment with acts of connectedness (Downing & Hastings-Tolsma, 2016).

In the South African context, caring is synonymous with the spirit of Ubuntu, where caring with compassion serves as a foundation for connecting and protecting individuals who are vulnerable (Downing & Hastings-Tolsma, 2016). Further to this, the philosophy of Ubuntu consists of two aspects, i.e., relationships between individuals and how those relationships are conducted, are requisite for both ways of being and creating a healing environment (Taylor, 2014). Downing and Hastings-Tolsma (2016) asserted that Ubuntu as humanness; conscience, connectedness, and cohesion are similar to the characteristics embraced by Sisulu's works. The combination of Sisulu's values and beliefs and that of Ubuntu, provide a framework that focuses on caring as a core construct within the nursing profession. This caring framework guides nursing practice in South Africa (Palmieri & Watson, 2017). Downing and Hastings-Tolsma, (2016) posit that successful and therapeutic nurse-patient encounters are held together by threads of caring, which promote patient healing.

2.2.3 Theories associated with caring

Caring as a core concept has resulted in the development of numerous caring theories (Smith, 2020). The two theories most often associated with caring are The Theory of Human Caring (Watson, 1979) and The Middle-range Theory of Caring (Swanson, 1991), while other theories associated with caring include the Culture Care Theory (Leiniger, 1991) and Boykin and Schoenhofer's (2001) Theory of Nursing as Caring. These renowned theorists considered caring to be the essence of nursing practice and the key element of both quality healthcare and nurse-patient interactions (Vujanić et al., 2020).

Watson's Theory of Human Caring is a philosophical and spiritual foundation of the nursing discipline, with the perspective that caring for humanity is complete (Thomas, 2021; Kandula, 2020). Watson defined caring as a moral ideal of nursing, to protect, enhance and preserve human dignity through interpersonal practices (Blasdell, 2017).

Thomas (2021) asserts that Watson's Theory of Human Caring focuses on love, which connects humans. The essence of the theory is that "humans cannot be treated as objects and that humans cannot be separated from self, other, nature and the larger workforce" (Castro-Palaganas, 2020, pp. 1). The theory focuses on the interpersonal process between the nurse and the patient. The practice of Watson's theory is through the application of carative factors or caritas processes (Settecase-Wu & Whetsell, 2018). Carative factors are guidelines that demonstrate how nursing interventions can link to the human care process to advance caring in today's era (Blasdell, 2017). There are 10 important carative factors linked to the relationships of basic human needs, and health maintenance. They involve the interpersonal aspects of caring and operate as a structural guide in understanding care in interpersonal relationships (Alligood, 2018; Blasdell, 2017; Rani Kandula, 2019; Vujanić et al., 2020). Blasdell (2017) affirms that Watson's assumptions to human care values in nursing provide an understanding of how nursing is connected to caring. It is notable that Watson's Theory of Human Caring has brought about immeasurable benefits to nursing about caring, which include guidelines for nurse-patient interactions to improve nursing practice, and to create a caring-healing environment that provides holistic nursing care (Sitzman & Watson, 2018). Wei and Watson (2019) add that the theory emphasises that nurses must care for themselves to be able to care for others, hence promoting self-actualisation both personally and professionally. The goal of Watson's Theory of Human Caring has enabled nurses to promote spiritual and mental growth in individuals and others, by discovering one's own inner power, control, existence and experiences in order to enhance self-healing (Alligood, 2018; Blasdell, 2017).

Swanson's Middle Range Theory of Caring (1991) has served as a theoretical foundation to a number of research studies and identified as a significant theory for modern nursing research (Kalfoss & Owe Cand, 2016.) Swanson Theory defines caring as "a nurturing way of relating to a valued other toward whom one feels a personal sense of commitment and responsibility" (Blasdell, 2017, p.p. 4). The basis for Swanson's Theory was on three phenomenological studies conducted in separate perinatal nursing contexts (Mårtensson et al., 2020). In spite of the theory's origination from perinatal contexts, Blasdell (2017) and Kalfoss and Owe Cand (2016) postulate that the theory provides both a conceptual framework and empirical support for

generalisation beyond the perinatal and nursing practice context from which it developed, in an attempt to enable patients to achieve well-being.

Swanson proposes that caring consists of five caring processes each with multiple subdomains that encompass the definition of caring in nursing practice. However, the theory emphasises that caring occurs in a sequence of the five caring processes. The first process is that of knowing and involves understanding the events of the patient. The second process is that of being with and involves being emotionally present. Similarly, emotional presence is a technique where nurses share meanings of feelings and lived experiences of the one being cared for; the nurse displays willingness and readiness of the patient to be in their reality. In essence, patients are not alone, what happens to patients matters to nurses. The third process is that of doing for; this is where the nurse cares for the patient, as they would do for themselves. Concisely, doing for includes anticipating patient needs, comforting patients, protecting them from harm and preserving human dignity. The fourth process is that of enabling; here the nurse supports the patient through life's transitions that are unfamiliar to them. Enabling fosters a self-healing environment, in order to practice self-care. The process of enabling entails, informing, supporting, training, guiding, illuminating and offering advice to ensure patient well-being. The fifth process is that off maintaining belief; this involves sustaining faith in another's capacity to get through events and transitions to finding meaning for the future while maintaining belief (Blasdell, 2017; Lillykutty & Samson, 2017; Peacock-Johnson, 2018; Settecase-Wu & Whetsell, 2018). The theory is a guide in clinical practice to bring forth an individual approach to caring for patients and their families. This theory is the theoretical framework of the study. Research studies support the caring theory for its usefulness in clinical practice, nursing education and research (Kalfoss & Owe Cand, 2016). Research findings have also revealed that the application of Swanson's caring levels as an analytical tool has ensured consistently high standards for nursing performance (Lillykutty & Samson, 2017).

Madeleine Leiniger was the founder of The Trans-cultural Nursing Theory, where she introduced the Culture Care Theory to expand the traditional mind-body medical view of caring to a culturally entrenched care, which includes humanistic life experiences and values (Settecase-Wu & Whetsell, 2018). Leiniger defined caring as " caring in the

generic sense refers to those assistive, supportive or facilitating acts towards or for another individual or group with evident or anticipated needs to ameliorate or improve a human condition or lifeway" (Blasdell,2017, pp.3). According to Leiniger (1991), generic caring is separated from that of professional caring, elaborating that professional caring is a behaviour that is learned cognitively and derived culturally, through processes and techniques that help an individual, family or community to improve and maintain a healthy lifestyle (Alligood, 2018). Furthermore, Leiniger posits that human beings cannot exist without their cultural background and social structures (Blasdell, 2017). The goal of the Culture Care Theory was to provide a culturally consistent nursing care using the three care models that are care central and generic. The three care models encompass culture care preservation or maintenance, culture care accommodation or negotiation, culture care re-patterning or restructuring. The care models are safe, beneficial, and meaningful to individuals of diverse and similar cultures and serve as a guide for nursing practice decisions in order to provide culturally congruent care (Smith, 2020). According to Smith (2020), the theory is one of the most practical and comprehensive theories to advance transcultural and nursing knowledge with concomitant ways for nurses to establish a practice that improves cultural care.

Watson and Leininger's theories, both view nursing as a humanistic science, with the caring concept being the core of nursing practice. Both theorists however, developed different paradigms of caring. Watson focuses on the philosophical and spiritual foundation of caring, with the belief that caring is the ethical and model ideal of nursing, whilst Leiniger positioned caring within a cultural context because caring patterns can differ transculturally (Blasdell, 2017; Vujanić et al., 2020).

Boykin and Schoenhofer's Theory of Nursing as Caring is a practice theory, which postulates "all persons are caring" by morality of their human nature (Boykin & Schoenhofer, 2015: 11; Settecase-Wu & Whetsell, 2018). The authors elaborate that the theory comprises four concepts: personhood (living grounded in caring), the nursing situation (lived experience between patient and nurse), calls for nursing (caring requests heard by the nurse), and nursing as caring (the others personal growth and experience is enhanced nature) (Settecase-Wu & Whetsell, 2018). It is with this that the concept of caring is seen as an intentional act of entering a relationship with the

idea of growing in the relationship. As an expression of nursing, caring can be synonymous to relational practice with patients and families, where the caring encounter is a medium of reciprocal growth of the nurse and the patient, enhanced through authentic feelings and commitment to the patient's illness experience (Emmamally et al., 2020).

Through the recounting of the various theories on caring, it is apparent that the application of nursing theories is important for directing nursing practice. Lillykutty and Samson (2017) suggest the application of theories will develop a more effective, complete clinical nursing practice for nurses to deliver care that promotes dignity, respect and empowerment of patients, their families and healthcare professionals.

2.2.4 Caring behaviours of nurses with emphasis on critical care nurses

Caring is an attribute that individuals portray towards each other out of feelings of concern for another individual. The attributes of professional caring include cognitive, psychomotor, affective, and administrative skills (Cunniff, 2019). Through caring, nurses engage in an authentic practice that is genuine and meaningful to the patients and their families (Adams, 2016). By this, the nurse displays and remains genuine to his or herself as a committed, concerned, and devoted healthcare professional, creating an environment that is conducive to the patient's growth and healing process, in order to contribute significantly to the patient's health and illness outcomes (Adams, 2016). However, the onus lays upon individual nurses' decisions in which they practice their nursing duties to enhance caring in a holistic perspective.

According to Salimi and Azimpour (2013), caring behaviours are nursing actions in the interests of the patient's wellbeing. Shalaby et al. (2018) assert there are two elements, which determine caring behaviours. These are expressive caring behaviours, which include the psychological and emotional behaviours, and the instrumental caring behaviours, which are the technical and physical behaviours (Petrou et al., 2017; Noveno, 2018). In addition, a caring person displays characteristics of being competent, confident, and engaged, compassionate, which encompasses being courteous, concerned, friendly, interested, authentic, sensitive, nurturing and loving, being positive, empathetic and being reflective (Kalfoss & Owe Cand, 2016).

The caring behaviours of critical care nurses play a crucial role in nursing of critically ill

patients and their families. In explaining the statement, we see it is through their caring behaviours that critical care nurses are able to understand how patients perceive health issues and care processes. It is important for critical care nurses to treat critically ill patients holistically, i.e., caring for the patients' physical as well as the patients' emotional and psychological needs (Drahošová & Jarošová, 2016). When critical care nurses display caring behaviours, they foster collaborative nurse-patient and family relationships (Drahošová & Jarošová, 2016). Studies reveal that effective communication and mutual respect in nurse-patient relationships have the potential to facilitate positive patient health outcomes, which encompass decreased levels of anxiety, improved physical and mental wellbeing, improved adherence reduced length of hospital stay, decreased pain threshold and optimistic outlook towards critically ill patients' recovery. However, barriers often challenge caring behaviours of critical care nurses (Andersson et al., 2015; Castro-Palaganas, 2020; Drahošová & Jarošová, 2016; Noveno, 2018; Saleh et al., 2017).

The critical care environment is work intensive, technologically focused and stress provoking in nature for the patient, their families and healthcare professionals (Shalaby et al., 2018). The authors explain that these very same characteristics impact on how caring unfolds in a critical care environment. Caring within a critical care environment constitutes individualised patient-focused and advanced specialised care aligned to an environment that is technological (Shalaby et al., 2018). Seemingly, the critical conditions of patients and the complex technology within critical care units gives different meaning to caring behaviours and its priorities (Bagherian et al., 2017; Castro-Palaganas, 2020; Haryani & Lukmanulhakim, 2019). Caring in a critical care environment is a holistic process that requires nurses' vigilance in all aspects of patients' needs to achieve the bio-psycho-social needs of critically ill patients and their families through the integration of caring processes (Bagherian et al., 2017; Castro-Palaganas, 2020; Limbu et al., 2018; Shalaby et al., 2018). Furthermore, it requires the nurse to be competent and an expert within the sophisticated environment of advanced technology (Bagherian et al., 2017).

Study findings by Sabzevari et al. (2015) revealed the focus of technological advancements have challenged the meaning and position of caring in nursing. The use of technology in critical care units has the potential to hinder communication because

of its physical barrier created between the equipment and the patients, consequently, changing the focus of care from the patient to the equipment. Caring with technological advancements is often time consuming and demanding as a result of the physical activity and the time required of nurses to operate, interpret, and care for the technology, thus interfering with the provision of optimal patient care. However, critical care nurses play a significant role in providing holistic individualised care. Therefore, it is of essence for critical care nurses to maintain a balance between their humanistic and technological caring behaviours (Shalaby et al., 2018).

According to Haryani and Lukmanulhakim (2019), internal and external factors can influence caring behaviours. Salimi and Azimpour (2013) revealed that internal factors affecting the caring behaviours of critical-care nurses included nurses' characteristics, educational status, workload, job satisfaction, educational background, compassion fatigue, staff burn out. The external factors that may affect the caring behaviours of critical care nurses include, staff shortages, lack of policies to manage families, work stress, advanced technology, patient characteristics, patient and family expectations, and organisational culture (Haryani & Lukmanulhakim, 2019; Oluma & Abadiga, 2019).

2.2.5 Challenges to caring behaviours of critical care nurses

According to Shalaby et al. (2018), nurses face challenges that alter their ability to express caring behaviours, as the context in which it occurs influences caring. Adding to this dialogue, Potter and Fogel (2013) state that life-threatening situations within critical care environments create stressful situations where decisions evolve around providing quality life-saving treatment to patients. Critical care nurses have inadequate opportunities for communication with families, which families can perceive as nurses displaying uncaring attitudes (Shalaby et al., 2018). Further to this, having family present in the highly charged critical care environment, leaves nurses little choice but to prioritise patient care over providing reassurances to the family (Lotfy Abdel-Aziz., et al., 2017). Caring for a critically ill patient is a challenge on its own for critical care nurses.

The work culture and its demands often play a significant role in facilitating or inhibiting caring behaviours of nurses, in that a work culture that priorities family-centred care and caring behaviours will provide nurses with opportunities to exhibit these

behaviours, and vice versa (Emmamally & Brysiewicz, 2019). Hence, it is important for hospitals to have philosophies that promote caring for families and these philosophies must be present in all policies generated. Shalaby et al. (2018) assert that it is important to consider the circumstances surrounding critical care nursing and the nature of critically ill patients in order to promote awareness towards nurses implementing caring behaviours (Shalaby et al., 2018).

Caring behaviours of critical care nurse can also be challenged by the personal characteristics of nurse-patient interactions, as one's perception of caring is shaped by societal influences such as family, community and religion (Levya et al., 2015). The ways in which caring is expressed varies amongst different cultures and clinical settings (Haryani & Lukmanulhakim, 2019). This can pose a challenge when critical care nurses caring behaviours, as shaped by the culture, are at odds with what patients and families perceive as correct expressions of caring (Levya et al., 2015). Thus, it is important for critical care nurses to receive in-service education and workshops to assist them in developing a repertoire of caring behaviours (Emmamally et al., 2020).

Similarly, a study by Saleh et al. (2017) found that the increased workload in CCUs had an impact on caring behaviours of critical care nurses, with increased nurse to patient ratios ranking as the greatest challenge towards providing care. The shortages of critical care nurses is a global issue, as hospitals are currently facing a crisis in managing staff shortages as healthcare costs rise (Oluma & Abadiga, 2019). This is because healthcare facilities focus on maintaining advanced medical technologies rather than maintaining adequate staff. The nurse-to-patient ratio remains unbalanced following nursing shortages. Nurses often face situations where they have to practice beyond their scope of practice to save patients' lives. Often, critical care nurses are overburdened with non-nursing duties contributing to inadequate provision of nursing care because of mistakes and omissions (Saleh et al., 2017). Job satisfaction, conversely, was ranked the highest affecting caring behaviours within the critical care environment , as a result of long hours, lack of support for critical care nurses, inadequate training to improve skills and educational opportunities for growth. Furthermore, patient characteristics was the least effective challenge of nursing care behaviours (Shalaby et al., 2018; Salimi & Azimpour, 2013; Oluma & Abadiga, 2019).

A cross-sectional study by Vujanić et al. (2020) suggested that implementing nurse-

patient interaction models, based on specific behaviours in healthcare systems, could improve the challenges associated with caring behaviours in critical care environments. The authors believed that technological advancements have significantly altered the role of nurse-patient interaction making it more impersonal and less humane (Sabzevari et al., 2015). The undeniable fact, however, is that the modern sophisticated technology simplifies the healthcare process by reducing the risk of human error, which occurs because of staff shortages and increased workload. It is evident that advanced technology contributes significantly to patient safety, recovery process and healthcare costs (Akansel et al., 2020; Bagherian et al., 2017; Limbu et al., 2018). However, while the focus is on providing quality healthcare and increased patient satisfaction, critical care nurses have to maintain a balance between the application of modern technology and nurse patient interactions, as caring behaviours have a predominant role in linking nursing interactions to patient experiences (Vujanić et al., 2020).

2.2.6 Characteristics of caring encounters

Caring encounters occur between professional and therapeutic nurse-patient interactions and person-to-person meetings based on planning, providing and assessing care that satisfies individual patient needs. The caring encounter is an expression of unity and closeness that allows nurses to build trusting relationships with their patients and families, as they encounter mutuality and proximity (Holopainen et al., 2017). Research studies have reported that caring encounters have promoted positive patient care experiences that are attributed to the nurse's patience, openness, empathy, communication, advice, comfort, support, sensitivity, confidence, courage, respect, dignity, and professionalism towards the patient (Cheruiyot & Brysiewicz, 2019; Holopainen et al., 2017; Hemberg & Lipponen, 2017; Vujanić et al., 2020). Authors highlight that nurses in a caring encounter can achieve increased personal knowledge and understanding of the ways patients display the suffering they experience (Holopainen et al., 2017).

A caring encounter includes dimensions of being personal and professional, with a good balance between the two, and encourages nurses to focus on being and doing while in a caring encounter (Wälivaara et al., 2013). The nurse, whose caring attitude fosters comfort, hope and support to be there for the patient, orchestrates caring encounters. Nurses displaying a positive approach facilitate the patients' trust in the

nurses' competence. In order to facilitate caring encounters with critically ill patients and their families, nurses must be open and willing to communicate (Holopainen et al., 2017). Moreover, critical care nurses must be sensitive to the patient and family needs and provide an environment that is calm, peaceful, and quiet for the encounter to occur (Hemberg &Lipponen, 2017; Holopainen et al., 2017).

Three attributes of caring encounters emerged during literature analysis (Holopainen et al., 2017; Hemberg &Lipponen, 2017), being there, uniqueness and mutuality. The attribute of being there has three sub-themes: (i) participation and involvement; (ii) being with, being close and sharing; (iii) and presence, listening and seeing. Involving patients and enabling participation in care decisions, enables patients to feel they are part of their own care and brings about meaning to their lives (Holopainen et al., 2017; Hemberg &Lipponen, 2017). These attributes described by the researchers imply that presence relates to the nurses' courage to actively listen to the patients and their families' questions and concerns to better understand them and their current situation. Conversely, the attribute of uniqueness is where the patient wants viewing as an individual, with his or her own identity. The nurse facilitates uniqueness through selective choice of words to create a sense of safety and trust, verbal and nonverbal communication and eye contact. Lastly, the attribute of mutuality, is an equal caring encounter between the nurse and the patient. They encounter in reciprocity, being the person, they are sharing mutual responsibility, understanding, and interdependence to change the situation between the nurse and the patient in need of care.

2.2.7 Facilitating caring encounters with critically ill patients and their families

Families of critically ill patients experience feelings of fear, anxiety, stress, hopelessness, role change, uncertainty in the patient's diagnosis, prognosis (de beer & Brysiewicz, 2016; Yoo et al., 2020). This provides families with the inability to cope with stress, leaving them having to use maladaptive coping strategies (Lotfy Abdel-Aziz et al., 2017). Against this backdrop, identifying and meeting the needs of patients and families through caring encounters does reduce family suffering (Botes & Langley, 2016). Effective communications based on empathy is an essential part of a caring encounter, playing a significant role in promoting a family's psychological well-being and the critically ill patient's recovery (Yoo et al., 2020). Offering encouragement that things are under control, without false reassurances, is important in caring encounters

between the critical care nurse and the family, as it guides them through unforeseen stressful situations (Adams et al., 2014). Therefore, frequent interactive encounters provide nurses with a unique position to support family members in meeting the caring needs of families (Botes & Langley, 2016). Further, interactive encounters enable nurses to develop rapport between patients, families and themselves in strengthening therapeutic relationship strategies, which include eye contact, non-verbal communication skills, being approachable and pleasant (Adams et al., 2014; Yoo et al., 2020). The strategies enable patients and families to communicate and express their emotions about themselves, because they allow families to feel personally connected with the nurse (Adams et al., 2014).

Families feel confident leaving their loved ones in the hands of competent professionals (Adams et al., 2014). The researchers expand that where there is a lack of concern towards families and their loved ones, families often display anxiety under the critical care nurse's care. A respectful professional portrays a professional attitude for the patient and their families. A calm and confident professional assists a families' ability to cope, however, a lack of professional ethics results in coping difficulties and a lack of trust on the part of families (Adams et al., 2014; Weyant et al., 2017). Adams et al. (2014) described critical care nurses as a vital source of information, as ongoing explanations and guidance on the care provided inspired confidence and better coping strategies, preparing families for unexpected situations.

Communication is key to caring encounters especially in critical care units. Weyant et al. (2017) explains that information given to families should be simple, understandable and without interpretation. However, in certain instances, a family may not receive information and only vague answers to questions and concerns, and this diminishes the family's ability to cope and trust nurses (Hemberg & Lipponen, 2017). Thus, information sharing is of significance in caring encounters as it increases knowledge and promotes psychosocial support in an attempt to allay anxiety related to an unfamiliar environment (de beer & Brysiewicz, 2019). Nurses illustrate caring encounters by supporting families in decision-making, with critical care nurses remaining unbiased and capacitating families to make decisions using their own opinions and choices (Adams et al., 2014). Although families seek assistance on medical decisions and discussions from doctors rather than nurses, critical care nurses

provide information in more subtle ways, using verbal and non-verbal ways, for transferring information to families (Adams et al., 2014).

Botes and Langley (2016) elaborate that facilitating communication does not refer to the transmission of information only, but incorporates the method of information sharing, the frequency of providing information and how interactive the process of communication is. Scott et al. (2018) assert that families with good information about their loved one's condition and treatment, by telephonic means or a family meeting, remained updated. Moreover, communicating as part of caring encounters provides families with opportunities to have their questions and concerns answered, as well as support in situations when there are difficult decisions to make (Weyant et al., 2017). This enables families to cope more effectively with the situation at hand, while instilling hope and assisting them to adjust to the stressful situations (Scott et al., 2018).

Caring encounters in a CCU may be through frequent family encounters or telephonic communication, as well as family meetings. These encounters are pivotal in decreasing the psychological burden of families, probably through providing proximity in different ways (de Beer & Brysiewicz, 2019). Developing supportive and collaborative encounters with families entails coping with their emotional distress (Scott et al., 2018). The authors add that families desire to be physically close to their loved ones to participate in the care and be involved. Families who were unable to maintain closeness often displayed negative emotions, which resulted in a lack of reassurance (de Beer & Brysiewicz, 2019). Fulfilling the desire of families to be physically close to their loved ones reduces these negative emotions and displays support towards the care, creating a sense of hope, confidence and trust in families even in the case of an unconscious and sedated patient's care (Weyant et al., 2017). A major consideration in facilitating caring encounters with families is perhaps to tailor caring behaviours to the cultural expectations of families (Cheriyout & Brysiewicz, 2019). The authors state that critical care nurses who are culturally sensitive to families' needs of caring are best positioned to display appropriate caring behaviours.

In keeping with the focus of the study, it was prudent to review studies that specifically focused on critical care nurse's perceptions of challenges to their caring behaviours towards critically ill patients and their families. Critical care nurses perceive working in a critical care environment as demanding and challenging in nature of care (Bagherian

et al., 2017). Critically ill patients are physically and emotionally demanding to care for, which means critical care nurses are always hyper-vigilant. The critical care nurse also provides psychological support to patients and their families, the latter who may display anger and hostility towards the nurses (Bagherian et al., 2017). According to a phenomenological study by Limbu et al. (2018), the caring expressions of critical care nurses are explained best through their lived experiences in the workplace. Critical care nurses expressed their views of caring in a resource-constraint and low technology environment as time consuming, owing to the fact they often used old equipment and machines that were not functional. Similar to studies explored in the literature above, critical care nurses stated they spent more time managing the equipment rather than focusing on patients and families' needs for emotional care. Moreover, the nurses stated they had trouble in developing collaborative relationships with family members in the midst of prioritising the care of patients and technological malfunctions.

The literature expounded above leads to the conclusions that caring and technology are inseparable elements towards improving patient outcomes, and critical care nurses need to find a balance in dividing their attention between the two areas.

2.2.8 Critically ill patients and their families' perceptions on caring behaviours of critical care nurses

Critically ill patients and their families view caring behaviours of critical care nurses as knowledge, skills, empathy, respect, tolerance, cheerfulness, and trust (Dursun Ergezen et al., 2020). Patients and families perceived their experiences of care as positive when critical care nurses are knowledgeable, skilled, sensitive, and thoughtful during interactions. Further to this, critically ill patients expressed that the time spent by the nurses, during individualised care increased their satisfaction in the care they received because they were able to express themselves and be included in their own treatment (Gillepsie et al., 2017). Patients believed that when their care was individualised, there was acknowledgement of and provision for their needs, and they were pleased with the promptness of care rendered by the critical care nurse (Dursun Ergezen et al., 2020). It becomes evident that caring behaviours of critical care nurses most valued by patients and their families align closely to the principles of patient-centred care.

In a systematic review of comparative studies, patients perceived critical care nurses

caring behaviours of communicating with the patient, responding to calls, providing them with information and showing interest towards them did not occur as frequently as they expected (Dursun Ergezen et al., 2020). According to the findings, patients believed the nurses focused on technical skills, with limited display of caring behaviours (Enns & Sawatzky, 2016; Drahošová & Jarošová, 2016). Once again, studies revealed that increased workload, staff shortages, and limited time allocated for individual patient care needs does affect patients' perceptions of quality care, indicating that in these situations critical care nurses tend to prioritise the treatment and basic needs of their patients to improve quality patient care (Drahošová & Jarošová, 2016; Dursun Ergezen et al., 2020). Patients' perceived that the nurse's availability whenever needed is a vital aspect of caring. Thus, it becomes somewhat apparent that critical care nurses need to align their caring behaviours to what critically ill patients and their families perceive as caring (Andersson et al., 2015; Drahošová & Jarošová, 2016).

Families of critically ill patients equate caring with provision of clear, updated information about their loved one and being close to their loved one (Almagharbeh, 2019; Carlson et al., 2015). Families perceived they felt more content when information provided daily to them was clear, honest, accurate, up to date and in an understandable language according to their health literacy, enabling them to actively participate in the decision-making process (de Beer & Brysiewicz, 2019). In Scott et al's (2018) study, families' perceived nurses to be caring when they provided information regarding the progress in their loved ones' condition. Notably, families felt they developed confidence and trust in the nurse who cared for their loved ones when they received assurance and encouraged to be close to their loved one (Adams et al., 2014). Conversely, in cases where nurses did not facilitate family involvement, families verbalised difficulty in coping. Further to this families, developed anger, lack of trust and confidence in the care, with hesitancy in asking questions and dissatisfaction towards responses portrayed by nurses (Adams et al., 2014). From the study's results, the conclusion is that patients and families' perceptions of caring is aligned to communication about the patients' illnesses and nurses' behaviours that facilitate families being beside and involved in patients' care.

2.9 Conclusion

The discussion in this chapter demonstrates that caring is an ambiguous concept with no universal definition. Caring in nursing has evolved as an ontological paradigm central to nursing practice, shaped precisely by various theories, which are foundational in promoting holistic patient care. The concept of caring is a content specific, therapeutic, interpersonal process shaped by a combination of actions and intuitions, and characterized by professional knowledge, skills, maturity, and interpersonal sensitivity of nurses. Caring significantly contributes to improved patient care outcomes of open communication, improved patient satisfaction, positive patient outcomes, higher survival rates, shorter admission stays, decreased anxiety of families and optimistic outlooks for recovery. Caring within a critical care environment constitutes a holistic process of individualised patient and family-centred focus, which is challenged because of the focus on technology and treatment of patients who are gravely ill. The challenges that serve as hindrances to caring encounters and behaviours in critical care environments have been expounded as, life threatening situations, the caring environment, nurses and patient characteristics, educational status, work experience, workload, job satisfaction, patient and family expectations, scarce resources, compassion fatigue, occupational stress, staff shortages and advanced technology. Amidst these challenges, a critical care nurse's attributes of, patience, openness, empathy, communication, advice, comfort, support, sensitivity, confidence, courage, respect, dignity, being there, uniqueness, mutuality and professionalism have been identified as caring behaviours. Important to the dialogue of caring behaviours of critical care nurses we found that critically ill patients and their families perceived caring behaviours as being a part of the care, meeting their needs and identifying satisfaction of patients and their families during caring encounters.

Chapter Three

Research design and methodology

3.1 Introduction

In this chapter, aspects of research methodology are described: the research paradigm, research approach, research design, research setting, population, target population, inclusion and exclusion criteria, sampling, data collection instrument, validity and reliability, data collection process, data analysis, and ethical considerations.

3.2 Research paradigm

The research paradigm guiding the study was positivism. The researcher chose the positivist paradigm to guide the study as it provided a platform from which to interpret and ascertain data from human perceptions in a more specific and precise manner(Kelly et al., 2018). In line with the epistemological premise of positivism, data collection was through a self-administered survey, thus the researcher had no influence on the findings(Kelly et al., 2018; Ryan, 2018). Regarding the axiological assumption, positivists maintain that values and biases should not influence the study and therefore objectivity is required (Polit & Beck, 2017). The achieving of this was through the researcher taking an objective stance in the data collection and analysis processes.

3.3 Research approach

The basis for the research approach adopted for the study was on the quantitative research approach. The researcher chose a quantitative approach for the current study due to the emphasis of objectivity of quantitative studies, i.e. without bias and separated from the data. The quantitative approach best provided numerical data that allowed the researcher to look for correlations between socio-demographic characteristics of the nurses and their perceptions of caring.

3.4 Research design

The research design was a cross-sectional, descriptive design, which included an analytical component(Gray et al.,2017). The design chosen allowed the researcher to determine relationships between variables without exerting any control over the variables.

3.5 Research setting

The research study took place in South Africa's first large scale hospital in KZN, which is both a tertiary and quaternary referral hospital. The hospital provides specialised patient care and is the first public/private partnership in South Africa operating on paperless and filmless principles.

The conducting of the study was in six out of eight highly specialised adult CCUs within the hospital. The remaining two CCUs, neonatal care and paediatric CCUs were not included in the study as the care differs from that of adult care CCUs. The high care unit of the hospital was also not included as the acuity of the patients in the high care units differs from that of the CCUs. It has been outlined in the introduction to the study that acuity of patients does influence perceptions of caring. The estimate number of patients in each unit were (Renal transplant CCU- Four; Neurological CCU-Nine; Medical and Surgical CCU-Nine; Cardiac Surgery CCU-Eight; Coronary care unit- Six; CCU Trauma-Eight, the total estimate number of patients were Forty-Four.

The reason for choosing this hospital as the setting was that as a referral hospital to the province of KZN, it serves a catchment area of approximately 10 million people of a multicultural diverse population group from Kwa-Zulu Natal and parts of the Eastern Cape population bordering KZN. This provides employment to a large number of nurses (*n*=592) from different parts of South Africa. The researcher has taken cognisance that caring is defined by people in terms of their diverse socioeconomic, cultural beliefs and political status and has anticipated that the diversity of the target population, in terms of their socio-demographic characteristics, would reveal unique quantitative data.

3.6 Target population

The target population for this study consisted of critical care nurses working across the six CCUs within the hospital, and comprised of two-day teams and two-night teams that work concurrently to each shift. In total, 151 nurses work in the six CCUs.

Table 3.1. The number of professional nurses working in each of the 6 CCUs

Names of the CCUs	Professional nurses with a qualification in critical care nursing	Professional nurses without a qualification in critical care nursing
Renal transplant CCU	7	3
Neurological CCU	16	11
Medical and Surgical CCU	22	8
Cardiac surgery CCU	22	9
Coronary care unit	15	6
CCU Trauma	25	7
Total number	107	44

*** Statistical report on staffing - IALCH 2022**

3.7 Sampling and sample size

The researcher selected the purposive sampling method of the non-probability sampling design for this study. The researcher assumed that critical care nurses working in the CCUs have the greatest knowledge regarding the phenomenon of caring for critically ill patients (Gray et al., 2017). There was purposive sampling of critical care nurses based on inclusion and exclusion criteria.

3.7.1 Inclusion and exclusion criteria

The inclusion criteria for the study were:

(i) Nurses registered with the South African Nursing Council (SANC) as a professional nurse with a Diploma and/or Degree in Nursing
(ii) Professional nurses working in the six CCUs for a period of ≥12 months
(iii) Professional nurses with or without a specialisation in critical care nursing
(iv) Professional nurses willing to participate in the study

The exclusion criteria for the study were:

(i) Enrolled nurses and nursing auxiliaries
(ii) Professional nurses with less than 12 months of experience in the unit
(iii) Professional nurses who have the inclusion criteria but are unwilling to participate.

3.7.2 The calculation of the sample size was with the help of the statistician. The study population comprises 151 critical care nurses. Based on the statistical parameters, where the proportion assumption is 0.8, and the confidence interval 1.96, the study's required sample size was approximately 139. To make allowances for attrition, there was a 4% increase made by adding approximately six more to the sample. This gave a minimum sample size of 145 critical care nurses.

3.8 Data collection instrument

In this study, data collection used a self-report survey method (see Annexure A). A two-part survey consisting of Section A, a socio-demographic part developed by the researcher, which included five socio-demographic variables (characteristics) of the participants, i.e., age, gender, highest nursing qualifications, a qualification in critical care nursing and years of experience working in the CCU. Section B of the survey included the CACG Questionnaire, developed by Steele-Moses et al. (2011), as part of a project of Creative Healthcare Management (CHCM). The questionnaire was developed specifically for use with nurses in settings that use a relationship-based model in keeping with the CHCM vision of creating opportunities for the development of nurse-patient connectedness, through greater perceptions of caring. CHCM is a privately funded corporation that works closely with healthcare organisations to improve quality healthcare outcomes with the focus on improving relationships (https://chcm.com). To this end, the corporation invests in research studies, webinars, and training programmes to enhance patient and family experiences of care and healthcare professionals experience of caring. Their investment in healthcare is also through consultation with healthcare organisations and facilitating processes to strengthen healthcare with Relationship-Based Care (https://chcm.com). The development of the Caring Assessment for Caregivers' Questionnaire was with the relationship-based focus of caring for patients and families holistically; the basis is the five caring processes derived from Swanson's Middle Range Theory of Caring.

The questionnaire consists of five subscales, also referred to as the dimensions of caring, with five scaled items in each of the five subscales, which describes how a nurse feels in sequence of their scoring. The subscales or dimensions of caring incorporate Subscale One (*Maintaining Belief*), Subscale Two (*Knowing*), Subscale Three (*Being With*), Subscale Four (*Doing For*) and Subscale Five (*Enabling*). The subscales provide a description of care provided by a nurse in accordance with their need to be emotionally present and connected with their patients (Steele-Moses et al., 2011).

Each item in the subscale is ranked on a Likert score ranging from 1 to 5, with 1 being described as a low caring behaviour situated to the left of the scale and 5 displaying a higher caring behaviour situated on the right of the scale (Steele-Moses et al., 2011). The total score per subscale ranges from 5 to 25, with the instrument total score ranging from 25 to 125. The higher the score the stronger the caring orientation of the caregiver (Peacock-Johnson., 2018). The researcher obtained permission to use the instrument from the developer (see Annexure H).

3.9 Validity and reliability of the questionnaire

Validity is the level in which the questionnaire measures the variable for measurement by drawing meaningful inferences (Polit & Beck, 2017). Validity of the questionnaire was determined through psychometric testing, which consisted of content validity, and construct validity (Steele-Moses et al., 2011). The content validity index for the subscales ranged from 0.70 to 0.93, while the content validity index of the instrument is acceptable at 0.84. Construct validity was analysed using the maximum likelihood factor analysis based on the theoretical assumption of the instrument containing five factors (Steele-Moses et al., 2011).

In the current study, there was validity achieved through:

3.9.1 Content validity - The establishing of content validity for this study was by aligning the objectives of the study and the theoretical concepts of the study to subscales of the CACG questionnaire.

Table 3.2 Content validity of the CACG questionnaire

Objectives of the study	Theoretical framework concepts	Parts of Questions for each concept
1. Determine critical care nurse's perceptions of caring for patients at a selected hospital in KwaZulu–Natal	1. Maintaining belief 2. Knowing 3. Being with 4. Doing for 5. Enabling	Part one 1-5 Part two 1-5 Part three 1-5 Part four 1-5 Part five 1-5
2. Identify dimensions of caring that are most and least important to critical care nurses at a selected hospital in KwaZulu–Natal		Part one 1-5 Part two 1-5 Part three 1-5 Part four 1-5 Part five 1-5

3.9.2 Face validity – this refers to a subjective assessment of whether a measure or question appears to be appropriate, reasonable, and consistent to the researcher's objectives in attempts to obtain reliable information from the designed questionnaire (Polit & Beck, 2017). In this study, the research supervisor, a specialist critical care nurse with international and national critical care experience, established face validity of the questionnaire.

3.9.3 Reliability - refers to the degree in which the instrument measures an attribute in yielding consistent and accurate results if used repeatedly over time and in another context (Gray et al., 2017).

There has been previous establishment of the reliability of the CACG questionnaire by both test-retest and internal consistency. Test-retest reliability was determined in a study of 54 nurses from two hospitals of a different suburb, tested two weeks apart. Further to this, the responses correlated to obtain coefficient reliability (Steele-Moses et al., 2011). An alpha coefficient of 0.939 determined the overall internal consistency

(Steele-Moses et al., 2011). In this study, internal consistency of the CACG was determined through a pilot study.

3.9.4 Piloting of the CACG

There was a pilot study on a smaller scale conducted prior to commencement of the main study; this was to simulate the main study. Five critical care nurses working in the six CCUs received the CACG instrument. The piloting of the questionnaire was to identify any difficulties of answering the questionnaire prior to the large-scale study, and allow for relevant changes. The results of the pilot study were not included in the main study, and there were no changes made to the CACG. The overall internal consistency of the CACG in this study showed good internal consistency of 0.987.

To make sure scales measure the same underlying construct, there was a reliability analysis constructed, as shown in Table 3.3. Ideally, the Cronbach alpha coefficient of a scale should be above 0.7.

Table 3.3 Reliability analysis of the CACG questionnaire

Reliability Analysis	Cronbach's Alpha	Number of items
Maintaining Belief	0.80	5
Knowing	0.77	5
Being With	0.75	5
Doing for	0.72	5
Enabling	0.73	5

According to Pavot, Diener, Colvin and Sandvik (1991), a scale of 0.9 indicates excellent reliability, 0.8 implies good, 0.7 means an acceptable reliability, whereas 0.6 is questionable. In the present study, the construct maintain belief internal scale was (0.80), Knowing (0.77), Being with (0.75), Doing for (0.72) and Enabling (0.73), which are all in the acceptable range.

3.10 Recruitment of participants and data collection process

The plan for recruitment of participants and data collection followed the guidelines for data collection during COVID-19 from the relevant Ethics Committee of the university

where the researcher is studying. Data recruitment and collection only occurred once there was ethical approval obtained from the Ethics Committee of the university (BREC/00002770/2021) (see Annexure D). Additionally, permission to conduct the study was obtained from the Department of Health (DoH) KwaZulu-Natal (NHRD REF: KZ_202109_005) (see Annexure E), the hospital director (see Annexure G), and nursing service manager, assistant nursing manager and operational managers of the CCUs.

The researcher secured a meeting with the nursing service manager of the selected hospital to discuss the study, secure approval for the study, and gain input regarding the hospital managements' preferred method for data recruitment of participants and data collection from participants. This was necessary as data collection occurred in Level 2 of the COVID-19 lockdown. The researcher presented the options of electronic surveys using Survey Monkey (A) and the traditional method of recruiting participants through staff meetings and handing out questionnaires to willing participants (B). The management preferred the traditional method of handing out questionnaires, influenced by the fact that the researcher is an employee at the hospital, and working in a CCU.

As part of recruitment, there were posters with information about the study and welcoming the participation of nurses posted on all bulletin boards of the CCUs making the critical care nurses aware of the study. Additionally, hospital management permitted the researcher to liaise with the unit managers of each CCU to meet with day and night staff, to introduce the study to them and invite them to participate.

3.10.1 Data collection process

The hospital management preferred the traditional method of handing out questionnaires due to the decline in Covid statistics and an increase in healthcare worker vaccination compliance in the province. The researcher negotiated a suitable time with the unit managers to meet with the critical care nurses on both day and night duty, to explain the purpose of the study, and invite the nurses. The researcher met with the critical care nurses willing to participate in the study, with limited personal contact exposure, santisation and social distancing maintained to protect the participants from Covid-19 associated risks exposure. The researcher highlighted the voluntary nature of participation in the study, and discussed the maintenance of

confidentiality and the right to withdraw from the study at any time; after this the questionnaires were distributed in sealed envelopes. The researcher visited all CCUs daily and collected questionnaires personally.

3.11 Data analysis

Data coding occurred prior to analysis to examine coding errors to determine the need for data cleaning procedures. Data analysis used the statistical package for Social Science Software SPSS version 27. Descriptive statistics were organised using frequencies, percentages, means and standard deviations to summarise the categorical and continuous data collected. The Pearson chi-square test established any associations between the participants' computed scores of the five subscales and their socio-demographic characteristics. Additionally, an independent samples t-test tested the differences critical care nurse's socio-demographic characteristics and each of the five subscales of the questionnaire (Polit & Beck, 2017:385). A p-value of <0.05 was considered statistically significant.

3.12 Ethical considerations

The ethical considerations for this study followed the ethical framework by Emanuel et al. (2004) and Regmi et al. (2016), which consisted of principles that underlie the ethical conduct of research involving human subjects.

3.12.1 Collaborative partnership

In this study, the selected setting may benefit from the findings of the study, especially in the development of future policies related to aspects that promote caring of patients and their families, as highlighted during the process of recruitment and on the information sheet.

3.12.2 Scientific validity

The strict adherence to the research process was with the supervisor's guidance, and in maintaining transparency throughout the research process.

3.12.3 Justice

The purposive selection of the sample in this study was to allow all nurses working in the critical care units meeting the inclusion criteria to participate, therefore, minimising sampling bias.

3.12.4 Respect for persons

Applying the principle of autonomy and respect for persons, the participants were entitled to their own choices and opinions. The researcher respected the participants and their decisions towards voluntary participation, and in the event of withdrawal of participation, there were no penalties or coercion used to attain participation in the study. The information sheet highlighted that participation was voluntary and there was no obligation to participate in the study.

3.12.5 Informed consent

The researcher provided participants with all the information pertaining to the research study according to the participants' level of understanding, to enable voluntary participation based on their decisions. The information page detailed the voluntary nature of participation in the study, preservation of confidentiality, risk and benefits of the study and the right to withdraw from the study at any given time. Only once the prospective participant had received the information sheet and an opportunity to present concerns did the individual signed the consent (Annexures B and C).

3.12.6 Anonymity

Maintenance of anonymity occurred throughout the research process, as the researcher did not link participants to the data. Participants did not provide their names on the questionnaire as there was coding used instead.

3.12.7 Confidentiality

There was no reporting, in any manner, of information pertaining to the participant that could identify them. All electronic data were password protected with a password known only to the researcher and the supervisor. The participant information sheet

highlighted that all data would be password encrypted. Hard copies of data will be stored in a locked cupboard in the locked office of the supervisor.

3.12.8 Beneficence

In application of the principle of beneficence, the researcher ensured the study contained no potential harm to participants. The participant information sheet clearly stated there were no risks or benefits.

3.13 Data management and protection

The data was password encrypted known and accessible only to the researcher and supervisor. After a period of five years all soft copies and data stored in added storage devices, such as laptops, flash drives and external hard drives, will be removed from the recycle bin and all hard copies of the research data shredded.

3.14 Data dissemination

There will be a report of the study findings disseminated to the hospital of the selected setting.

3.15 Conclusion

This chapter presented the aspects of research methodology and research design, influenced by the positivist paradigm that guided the study. The chapter provided a detailed description of the research instruments outlining reliability and validity, as well as detailed descriptions of the data collection process, research setting, and the pilot study. There was a discussion of the data collection process that linked with ethical considerations, followed by the data analysis discussion, which leads to Chapter Four.

Chapter Four

Data presentation and analysis

4.1 Introduction

This chapter presents the findings and analysis of the data collected from the participants. A two-part survey collected quantitative data in response to the aim of the study, which was to determine critical care nurses' perceptions of caring at a selected hospital in KwaZulu-Natal. The survey consisted of two sections; Section A collected data on the socio-demographic variables of the participants, and Section B comprised the CACG questionnaire. The presentation of the findings is in alignment with the questionnaire.

4.1.1 Sample realisation and response rate

Of the 145 (*n*=145) critical care nurses sampled for the study 139 (*n*=139) participated, giving a 96% favourable response rate.

4.2. Socio-demographic characteristics of participants

The socio-demographic data collected from the participants included the variables of age, gender, highest nursing qualification, and years of experience working in a CCU.

4.2.1 Age of the participants

The majority of the participants (61.2%, *n*=85) were between the ages of 30-49 years, 38.1% (*n*=53) were ≥50 years, and only 7.0% (*n*=1) were < 30 years of age (See Figure 4.1).

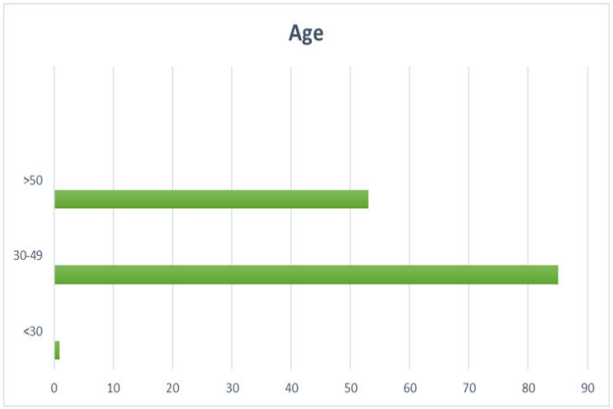

Figure 4.1. Age of the participants (*N=139)*

4.2.2. Gender of the participants

Of the 139 participants, 92.1% (*n*=128) were females, and only 7.9% (*n*=11) were males (Figure 4.2).

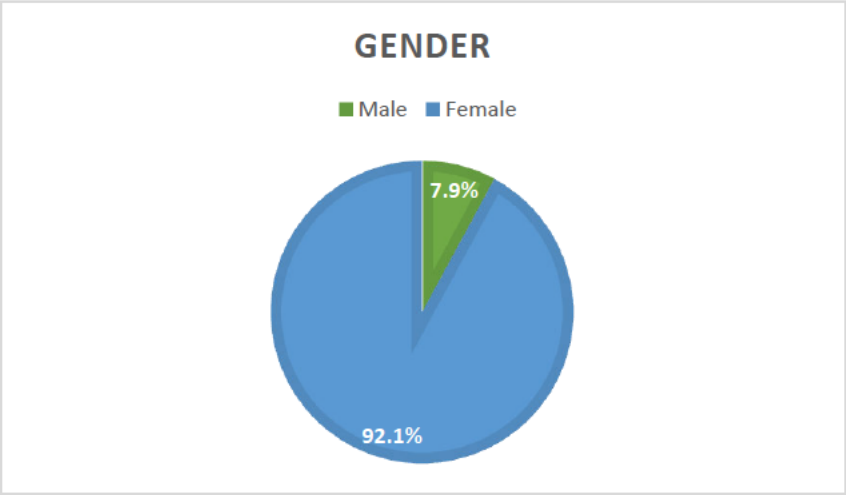

Figure 4.2. Gender of the participants (*N=139)*

4.2.3 Highest nursing qualification of the participants

In terms of the participants highest nursing qualifications, the Diploma in Nursing accounted for 64.0% (*n*=89) of the participants, 35.3% (*n*=49) held a Degree in Nursing, and 7.0% (*n*=1) held a Master's in Nursing qualification; the option for a PHD in Nursing yielded no response (Figure 4.3).

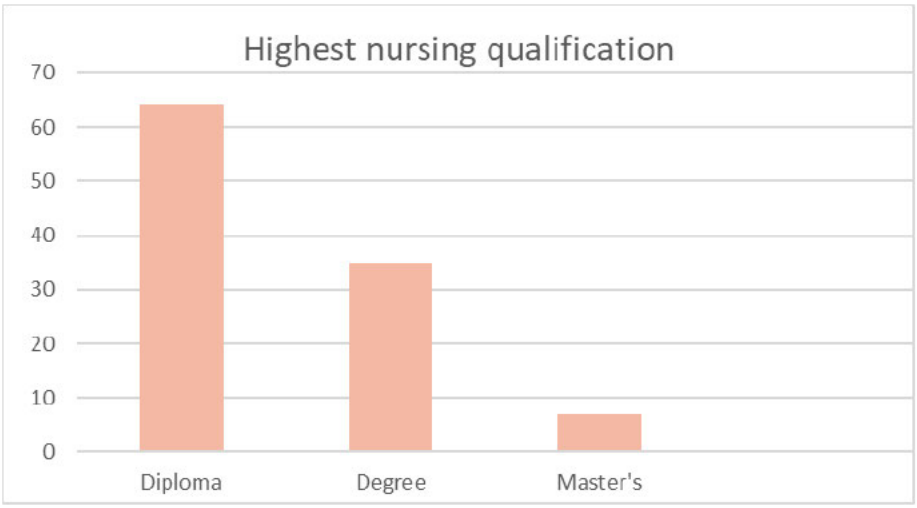

Figure 4.3. Highest nursing qualification of the participants *N*=139

4.2.4 Participants years of experience in CCU

With regard to participants' years of experience in CCU, the majority of participants (72.7%, *n*=101) had > 10 years of work experience in CCU, 20.9% (*n*=29) had < 10 years of work experience in CCU, and 6.5%, *(n*=9) had 10 years of work experience in CCU (Figure 4. 4).

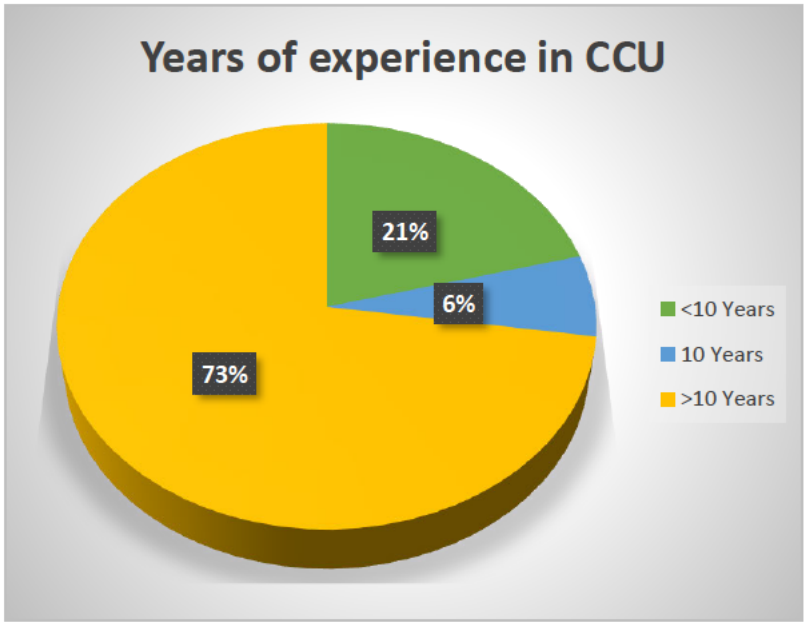

Figure 4.4. Years of experience in CCU *(N*=139)

4.3. Presentation and analysis of findings of the CACG questionnaire

The CACG questionnaire has five subscales (also called dimensions of caring), namely (i) maintaining belief, (ii) knowing, (iii) being with, (iv) doing for, (v) enabling. Items in each subscale are ranked on a Likert scale ranging from 1 to 5, with behaviours alluding to a low caring orientation to the left of the scale and behaviours alluding to a high caring orientation to the right of the scale. The findings from the CACG questionnaire are reported on as follows:

1. The critical care nurses' overall perception of caring
2. The dimensions of caring that were most and least important to critical care nurses
3. The items in each of the five subscales that had the highest and lowest scores (a low caring orientation on the left and a behavior describing high caring orientation on the right)

4. Analysis of the inter-relationship between the participants' socio-demographic characteristics and their perceptions of caring at a selected hospital in KwaZulu- Natal

4.3.1 The critical care nurse's overall perceptions of caring

The participants' overall perceptions of caring was determined by calculating the mean composite score of the CACG. Findings revealed a mean composite score on the CACG of 116.01. The CACG has a total that ranges from 25-125, with a higher score alluding to a stronger overall caring orientation of the participant (See Table 4.1).

Table 4.1. Perceived Caring Score (*N*=139)

Perceived Caring Score	Minimum	Maximum	Mean	Std. Deviation
Overall score in Critical care nurses	4.3	4.9	116.01	7.51

4.3.2 The dimensions of caring that were most and least important to critical care nurses

To identify the dimensions of caring most and least important to the participants, there were mean composite scores (5-25 range) for each subscales calculated. The findings revealed that of the five subscales (dimensions of caring) the subscale of "*Maintaining Belief*," had the highest mean composite score (mean composite score = 24.25) and the subscale of "*Being With*," had the lowest mean composite score (mean composite score= 22.70, SD= 0.63). Each subscale has a composite score ranging from 5-25, with higher scores alluding to a stronger caring orientation of the participant (See Table 4.2 for detailed reporting on all subscales).

Table 4.2. Subscale Scores for the CACG

Subscales of CACG	Mean composite score
Maintaining Belief	24.25
Knowing	22.72
Being With	22.70
Doing For	23.60
Informing/Empowering	22.75

4.3.3. The items in each of the five subscales that had the highest and lowest scores

The calculation of the mean of each item was to identify the highest and lowest scored items in each of the five subscales. Each item scores from 1-5, with low scores associated with a behavior describing a low caring orientation and high scores associated with a behavior describing a high caring orientation.

4.3.3.1 Subscale 1: "Maintaining Belief "

In this subscale, item 1 had the highest mean score (4.91, SD=0.33) as the majority of the participants (92.8%; *n*=129) scored the item a 5, and 5.8% (*n*=8) scored the item a 4. The responses were towards the right of Likert scale, focusing on the behaviour of caring for the whole person and emphasising facilitation of healing. Only, 1.4% (*n*=2) of the participants gave the item a score of 3, which is a neutral score between the lower caring behaviour and a higher caring behaviour.

In comparison, item 3 had the lowest mean score (4.81, SD=0.41) in the subscale. One hundred and thirteen (81.3%) participants scored the item a 5 and 18.0% (*n*=25) scored the item a 4. The participants' responses remained on the right of the Likert scale towards the behaviour of doing whatever necessary to resolve patient's problems effectively, and the willingness to "*go the extra mile*." Only, one (7.0%) participant scored the item a 3 (See Table 4.3 for detailed reporting on all items).

It is noteworthy that 1(7.0%) participant scored item 5 a 1, on the left of the Likert scale towards the lower caring behaviour of *" I frequently find it difficult to respect*

people who are too demanding or behave in ways that should not be tolerated; I treat people with respect when they deserve it."

Table 4.3 Participant responses to Subscale "Maintaining belief" (*N=139*)

Subscale 1 : Maintaining belief	1		2		3		4		5			Mean	SD
	Freq (n)	%	Freq (n)	%	Freq (n)	%	Freq (n)	%	Freq (n)	%			
1. I focus on accomplishing the tasks necessary to provide care	0	0	0	0	2	1.4	8	5.8	129	92.8	I focus on caring for the whole person (body, mind, and spirit) with emphasis on facilitating healing	4.91	0.33
2. I am often absorbed in accomplishing the tasks required which interferes with my ability to be empathetic and compassionate	0	0	0	0	2	1.4	20	14.4	117	84.2	I convey empathy and compassion for each person I care for; I appreciate and honour the uniqueness of each patient	4.83	0.42
3. I do what I can to help patients when I have the time My work is more productive without the distractions of individual's problems	0	0	0	0	1	7	25	18.0	113	81.3	I do whatever it takes to resolve patient's problems effectively; I am willing to "go the extra mile"	4.81	0.41
4. I am frequently challenged to maintain an accepting and non-judgmental attitude	0	0	0	0	1	7.0	19	13.7	119	85.6	I consciously maintain an accepting and non-judgmental attitude in the way I provide care/service	4.85	0.38

when I cannot relate or respect the values and behaviours of patients and family members											to all patients/families, even when our values differ		
5. I frequently find it difficult to respect people who are too demanding or behave in ways that should not be tolerated; I treat people with respect when they deserve it	1	7.0	0	0	2	1.4	13	9.4	123	88.5	I believe each person deserves to be treated with respect and dignity; I know that being ill can be experienced as a crisis and that people feel vulnerable; emotions may be expressed as fear or anger	4.85	0.50

4.3.3.2 Subscale 2: "Knowing"

In this subscale, item 1 had the highest mean score (4.79, SD=0.46), as the majority of participants (81.3%; *n*=113) scored the item a 5 and 16.5% (*n*=23) scored the item a 4. The responses were towards the right of Likert scale, focusing on "*I care for each patient and their family by establishing a therapeutic relationship, looking beyond the patient*." Only, 22.2% (*n*=3) of the participants gave the item a neutral score of 3.

In comparison, item 3 had the lowest mean score (4.36, SD=0.76) in the subscale. Seventy (50.4%) participants scored the item a 5 and 37.4% (*n*=52) scored the item a 4. The participants' responses remained on the right of the Likert scale towards *"The behaviour of prioritising care based on what patients and families tell is most important to them and the required medical and nursing care."* Only, 15 (10.8 %) participants scored the item a 3.

It is noteworthy that item 3 had one (7.0%) participant that scored the item a 1, on the left of the Likert scale towards the lower caring behaviour of *"I prioritise care based on the tasks that need to be accomplished during the time I am working."* (See Table 4.4 for detailed reporting on all items)

Table 4.4 Participant responses to Subscale "Knowing" (*N=139*)

Subscale 2: Knowing	1		2		3		4		5			Mean	SD
	Freq (n)	%	Freq (n)	%	Freq (n)	%	Freq (n)	%	Freq (n)	%			
1. I care for the patients assigned to me by focusing on the tasks that need to be completed for the period of time I am working; individual relationships are not realistic	0	O	0	0	3	22.2	23	16.5	113	81.3	I care for each patient and their family by establishing a therapeutic relationship; I look beyond the patient to the person and believe a relationship is fundamental to good care	4.79	0.46
2. I care for patients based on what I know and my experience tells me works best; there is not enough time to learn about each person or their circumstances	0	0	0	0	12	8.6	62	44.6	65	46.8	I intentionally try to understand each patient/family's unique story and circumstances; I avoid assumptions	4.38	0.64
3. I prioritise care based on the tasks	1	7	1	7	15	10.8	52	37.4	70	50.4	I prioritise care based on what patients and families	4.36	0.76

	that need to be accomplished during the time I am working										tell me is most important to them and the required medical and nursing care		
4.	I involve the patient's family when needed but do not view family members as essential to the care; I frequently perceive family members as interfering with the care	0	0	0	0	8	5.8	54	38.8	77	55.4	I consistently involve the patient's family in the care experience; I believe that the family (as defined by the patient) is essential to the patient's recovery and healing. I value learning pertinent information from the family	4.50	0.61
5.	I think it is important to tell patients the truth; sometimes that means letting the patient/family know about things that are getting in the way of care	0	0	1	7	6	4.3	25	18.0	107	77.0	I am careful to not burden the patient and family with problems or issues that are mine or my organisation's to own and resolve; I believe that the patient needs a peaceful and restful environment and should not be distracted by worries that are outside their control	4.71	0.58

4.3.3.3 Subscale 3: "Being with"

In this subscale, item 5 had the highest mean score (4.73, SD=0.51), as the majority of the participants (75.5%; *n*=105) scored the item a 5 and 21.6% (*n*=30) scored the item a 4. The responses were towards the right of Likert scale focusing on the behavior of "*I am accessible and proactive and able to respond in my care."* Only, 2.9% (*n*=4) of the participants gave the item a score of 3, which is a neutral score between the lower caring behaviour and a higher caring behaviour.

In comparison, item 3 had the lowest mean score (4.26, SD=0.79) in the subscale. Sixty-four (46.0%) participants scored the item a 5 and 35.3% (*n*=49) scored the item a 4. The participants' responses remained on the right of the Likert scale towards the "*behaviour of being conscious about touch as a healing interaction; and always asking permission to touch gently."* Only, 24 (17.3 %) participants scored the item a 3 (See Table 4.5 for detailed reporting on all items).

It is noteworthy that item 1, had one (7.0%) participant who scored the item a 1, on the left of the Likert scale towards the lower caring behaviour of, *" I tend to get my work done without concern about introducing myself, stating my role, and describing what I am going to do."*

Table 4.5 illustrates the participant responses to subscale "Being with" (N=139)

Subscale 3: Being with	1		2		3		4		5			Mean	SD
	Freq (n)	%	Freq (n)	%	Freq (n)	%	Freq (n)	%	Freq (n)	%			
1. I tend to get my work done without concern about introducing myself, stating my role, and describing what I am going to do.	0	0	1	7	3	2.2	36	25.9	99	71.2	I initiate a relationship with the patient/family by extending a welcome and introducing myself (including my name, role, and how I will care/serve them).	4.68	0.55
2. I tend to interact while standing; there is a great deal to get done and I don't generally sit with the patient/family.	0	0	2	1.4	20	1.44	52	37.4	65	46.8	I make it a practice to sit at the bedside and be fully present with the patient/family at least five minutes per shift.	4.30	0.77
3. I have not thought a great deal about touch; I am practical in my approach and may not always be gentle.	0	0	2	1.4	24	17.3	49	35.3	64	46.0	I am conscious about touch as a healing interaction; I always ask permission and touch gently.	4.26	0.79

4. I find it difficult to be still and listen; I tend to want to solve the problem and move on.	0	0	0	0	6	4.3	28	20.1	105	75.5	I make time to listen to the patients/families I care for; I view listening as a healing intervention.	4.71	0.54
5. I frequently feel stretched and stressed by patient/family requests; it is difficult to consistently meet requests	0	0	0	0	4	2.9	30	21.6	105	75.5	I am accessible and proactive in my care, and I am able to respond promptly and consistently to requests	4.73	0.51

4.3.3.4 Subscale 4: "Doing for"

In this subscale, item 5 had the highest mean score (4.86 SD=0.38), as the majority of the participants (87.8%; *n*=122) scored the item a 5 and 10.8% (*n*=15) scored it a 4. The responses were towards the right of Likert scale focusing on the behavior of "*Working with team members with a constant focus on the patient and family; I am willing to help and know I will receive help when needed."* Only, 1.4% (*n*=2) of the participants gave the item a neutral score of 3.

In comparison, item 2 had the lowest mean score (4.45, SD=0.64) in the subscale. Seventy-four (53.2%) participants scored the item a 5 and 38.8% (*n*=54) scored it a 4. The participants' responses remained on the right of the Likert scale towards the behaviour of, "*Tending to the "little things that mean a great deal to each patient*." Only, 11 (7.9%) participants scored the item a 3 (See Table 4.6 for detailed reporting on all items).

It is noteworthy that item 3 had one (7.0%) participant who scored the item 1, on the left of the Likert scale towards the lower caring behaviour of *"I often avoid direct communication especially if it is not comfortable; I rarely challenge other members of the health care team even if I question the appropriateness of their plan/orders."*

Table 4.6 presents the participant responses to subscale "Doing for" (*N=139*)

Subscale 4: Doing for	1		2		3		4		5			Mean	SD
	Freq (n)	%	Freq (n)	%	Freq (n)	%	Freq (n)	%	Freq (n)	%			
1. I maintain my skills and knowledge and attend mandatory education requirements; I do not generally seek out additional education	0	0	0	0	3	2.2	31	22.3	105	75.5	I maintain a high level of knowledge and skills to provide care to patients and families; I am constantly learning and strengthening my knowledge	4.73	0.49
2. In the rush and demands of the shift, I frequently miss the "little things;" I am lucky to accomplish the key tasks	0	0	0	0	11	7.9	54	38.8	74	53.2	I tend to the "little things" that mean a great deal to each patient (i.e. call light within reach, comfort and cleanliness, tissue box within reach, over bed tray within reach)	4.45	0.64
3. I often avoid direct communication especially if it is not comfortable; I rarely challenge other members of the healthcare team even if I	0	0	1	7	4	2.9	28	20.1	106	76.3	I communicate directly with other members of the healthcare team to coordinate patient care; I do not hesitate to question a medical order/plan to assure it is	4.72	0.55

	question the appropriateness of their plan/orders										appropriate and safe for the patient		
4.	I try to monitor the patient carefully, but find it difficult to do that and manage the volume of work	0	0	0	0	2	1.4	19	13.7	118	84.9	I tend to the well-being of the whole person, and assess and monitor each patient based on their individual needs including pain management, psychosocial needs, and safety	4.83	0.41
5.	Our team works in a parallel fashion with each person focused on getting their work done; asking for help is rare and not encouraged.	0	0	0	0	2	1.4	15	10.8	122	87.6	I work with my team members with a constant focus on the patient and family; I am willing to help and know I will receive help when needed.	4.86	0.38

4.3.3.5 Subscale 5: "Enabling"

In this subscale, item 1 had the highest mean score (4.71, SD=0.51), as the majority of the participants (74.1%; *n*=103) scored the item a 5 and 23.0% (*n*=32) scored the item a 4. The responses were towards the right of Likert scale focusing on the behavior of *"Communicating proactive, consistent, and honest information to the patient and family based on agreed wants and needs."* Only, 2.9% (*n*=4) of the participants gave the item a neutral score of 3.

In comparison, item 3 had the lowest mean score (4.32, SD=0.65) in the subscale. Fifty-eight (41.7%) participants scored the item a 5, 48.2% (*n*=67) scored it a 4, and 14 (10.1%) participants scored the item a 3. The participants' responses remained on the right of the Likert scale towards the behaviour of *"I collaborately review the medical plan of care and address/question any areas that are of concern. I help patients/ family to understand the plan."* (See Table 4.7 for detailed reporting on all items)

Table 4.7 presents the participant responses to subscale "Enabling" *(N=139)*

Subscale 5: Enabling	1		2		3		4		5			Mean	SD
	Freq (n)	%	Freq (n)	%	Freq (n)	%	Freq (n)	%	Freq (n)	%			
1. I communicate standard information to most of my patients; I rarely see a need to deviate from our unit routines	0	0	0	0	4	2.9	32	23.0	103	74.1	I communicate proactive, consistent and honest information to the patient and family based on what we agree they want and need	4.71	0.51
2. I provide care based on standardised plans or tasks; I rarely have time to develop individual plans with my patients or coordinate care with other members of the team	0	0	0	0	5	3.6	60	43.2	74	53.2	I develop a specific plan of care with my patients and their families; I coordinate care with other members of the health care team	4.50	0.57
3. I rarely question the medical plan,	0	0	0	0	14	10.1	67	48.2	58	41.7	I collaboratively review the medical plan of care and	4.32	0.65

	as that is the sole responsibility of the physician										address/question any areas that are of concern. I help patients/family to understand the plan		
4.	The decisions for care are determined by the physician and the healthcare team	0	0	0	0	9	6.5	27	19.4	103	74.1	I involve and support patients and their families in making decisions about their care; I view the patient as a central decision-maker in care	4.68	0.59
5.	I take the lead from the physician and follow the physician's orders as written. I do not rock the boat.	0	0	0	0	10	7.2	43	30.9	86	61.9	I advocate for patients even when it means taking a risk myself	4.55	0.63

4.4 Analysis of the inter-relationship between the participants' socio-demographic characteristics and their perceptions of caring

There was a cross tabulation performed using the Pearson Chi-Square Test to determine the inter-relationship between the participants socio-demographic characteristics with the overall score of the questionnaire and the total scores of each subscales. A p value of <0.05 was considered statistically significant. There was no significant relationship found between the critical care nurses' socio-demographic characteristics and the overall score of the CACG and the total scores of each of the five subscales (See Table 4.8).

Table 4.8. Inter-relationship between socio-demographic characteristics and perceptions of caring

		Maintaining Belief	Knowledge	Being With	Doing For	Enabling
Age	Pearson Correlation	.040	.001	-.182*	.011	.076
	Sig. (2-tailed)	.638	.993	.032	.899	.374
Gender	Pearson Correlation	.205*	.095	.251**	.149	.074
	Sig. (2-tailed)	.015	.268	.003	.079	.385
Qualification	Pearson Correlation	-.014	-.020	.044	.035	.138
	Sig. (2-tailed)	.869	.815	.608	.681	.106
Years working in CCU	Pearson Correlation	-.009	-.045	.127	-.008	.137
	Sig. (2-tailed)	.913	.597	.135	.928	.109
Maintaining Belief	Pearson Correlation	1	.416**	.379**	.509**	.378**
	Sig. (2-tailed)		.000	.000	.000	.000
Knowledge	Pearson Correlation	.416**	1	.630**	.599**	454**
	Sig. (2-tailed)	.000		.000	.000	.000
Being With	Pearson Correlation	.379**	.630**	1	.665**	.584**
	Sig. (2-tailed)	.000	.000		.000	.000
Doing For	Pearson Correlation	.009**	.599**	.665**	1	.693**
	Sig. (2-tailed)	.000	.000	.000		.000
Enabling	Pearson Correlation	.378**	.454**	.584**	.693**	1
	Sig. (2-tailed)	.000	.000	.000	.000	

An analysis using Pearson's correlation coefficient indicated a significant negative linear relationship between age and the construct "*Being With*" (*r*=-0.182), p-value=0.032. Likewise, gender had a positive correlation with the construct "*Maintaining belief*" and the relationship was significant since the p-value was 0.015. The results further indicated the relationship between gender and the construct "*Being with*" (0.215) was weak but positive and significant since the p-value was equal to 0.03.

The study reveals there was a positive significant relationship between "*Maintaining belief*" and "K*nowledge*;" Pearson's correlation coefficient was 0.416 and the p-value was 0.000. Similarly, "Maintaining belief" and "Being with" had a significant positive mild linear relationship since the p-value was 0.00 and the Pearson correlation coefficient was 0.379. An evaluation of the linear relationship between "*Maintaining belief*" and *"Doing for*" (*r*=0.509, p-value=0.00) was positive and significant.

4.5. Conclusion

This chapter presented the findings and analysis of the data collected using a two-part survey and the SPSS package to organise and analyse the quantitative data. The findings revealed there was no significant relationship found between the critical care nurses' socio-demographic characteristics and the overall score of the CACG and the total scores of each of the five subscales; the presentation of the findings is in frequency, percentages, figures and tables. Of the five subscales, the subscale of "*Maintaining belief*," had the highest mean composite score alluding to a stronger caring orientation of the participant and the subscale of "*Being with*," had the lowest mean composite score alluding to a lower caring orientation of the participant. Chapter Five will provide a detailed discussion of the study findings obtained in relation to current literature studies.

Chapter Five

Discussion of findings, strengths, limitations, and recommendations

5.1 Introduction

This chapter will discuss significant findings of the study in comparison to current literature. Furthermore, the chapter will discuss the study strengths, limitations, and in line with the findings present recommendations to nursing policy and management, practice, education and research.

The organisation of the discussion is in line with the study findings, namely the socio-demographic characteristics of participants, the overall perceptions of caring behaviours, dimensions of caring that were most and least important to critical care nurses, items in each of the five subscales that had the highest and lowest scores and the interrelationships between socio-demographic characteristics of participants and their perceptions of caring.

5.2 Discussion of Findings

The study had a response rate of 96.0%, which is in contrast to a similar study (63.0%) by Peacock-Johnson (2018) who used the same questionnaire and focused on critical care nurses' perceptions on caring. This is a positive result, in that the critical care nurses of the current study were interested in participating in a study on caring, despite bearing the physical and psychological challenges of working during the COVID-19 pandemic. In nursing practice, numerous factors, such as the age, gender, years of experience, qualifications, self- respect, workplace circumstances and beliefs, can influence caring behaviours (Shalaby et al., 2018; Salimi & Azimpour, 2013). The socio-demographic findings in the study relating to age, showed the majority of the participants (61.2%) were above 30 years, which was consistent with previous studies on caring (Akansel et al., 2020; Shalaby et al., 2018).

In keeping with the notion of nursing being perceived traditionally as a female dominated profession (Ndou & Moloko-Phiri, 2018; Barrett-Landau & Henle, 2014), the majority of participants (92.1%) in the current study were females. Of note, in a

study where the focus is on caring, is that Nightingale regarded women as carers, with the role expectations of caring aligned with females rather than males (Ross, 2017).

The majority of the participants in the study had a Diploma in Nursing (64.0%: n=89). Under the nursing qualifications framework, the Colleges of Nursing have an affiliation with the universities to produce registered nurses through a programme designated for the institution. Nursing colleges account for majority of diploma qualifications for nurses due to its designated programme ("National Policy on Nursing Education and Training | Government Publications,"2019; Bezuidenhout et al., 2013). In the current study, only 35.3% of participants held a Degree in Nursing and 7.0% held a Master's in Nursing; none held a PhD. Nurses working in clinical settings in South Africa face various obstacles to continuing education, namely, the lack of information on programmes available, study leave constraints, recognition and support of post basic qualifications (Mbombi & Mothiba, 2020). Nurses working in CCUS in South Africa have two options in terms of access to post basic training; they either wait their turn for training within their institutions, or alternatively, study privately on their own. The blocking of access to post basic training has decreased the number of nurses holding post basic qualifications (Mbombi & Mothiba, 2020).

In the current study, the majority of the participants (72.7%) had > 10 years of work experience. This is a positive findings as a study on nurses' perceptions of caring in Iran identified that nurses with more years of experience may perform with considerable competence and skills to many of the caring behaviors found on the CACG instrument (Peacock-Johnson, 2018).

5.3 Critical care nurse's overall perceptions of caring

Caring in a critical care setting requires a patient-focused, and specialised care within a work intensive and technologically focused environment (Bagherian et al., 2017; CastroPalaganas, 2020; Limbu et al., 2018; Shalaby et al., 2018); these are the same characteristics that influence how caring unfolds within a critical care environment (Shalaby et al., 2018). Despite the challenges of a labour and knowledge in the intensive critical care environment, the findings of the current study revealed the critical care nurses had a high orientation or perception of caring [M= 116 (25-125)]. The findings of a high caring orientation of critical care nurses were also seen in the

study of Peacock-Johnson (2018), in which the mean composite score of caring using the CACG was 107.15.

5.4 Dimensions of caring that were most and least important

The trend of a high overall perception to caring identified in this study, also permeated through the five dimensions of caring, with the subscale of "*Maintaining belief*," having the highest mean score of 24.25. "*Maintaining belief*" in caring implies an essential belief in individuals and their ability to endure life events and transitions and come out with purpose (Mårtensson et al., 2020). The researchers add that fundamental to maintaining beliefs is the nurses' ability to bolster the hope and faith of patients and their families. A study in the Middle East concluded that the methods used in nurse's assignment, limited time, and limited caring support can significantly influence caring behaviours associated with maintaining beliefs (Modic et al., 2016). In interpreting the positive results obtained in the current study, it is also important to consider which factors expressed by Modic et al. (2016) could have an impacted on the caring behaviours of the participants in this study. The subscale or dimension of caring "*Being with*," had the lowest orientation to caring (M=22.70). The subscale focuses on caring behaviours consistent with nurses' being physically and emotionally present with the patients and their families. The finding almost mimics the results of a study conducted by Joonbakhsh and Pashaee (2014), where the same subscale revealed a mean score of 22.75. The finding is also congruent with the conclusions of Peacock-Johnson's (2018) study, which looked at nurses' perceptions of caring using a relationship-based model. The study revealed that the nurses' low perceptions in the subscale of "*Being with,"* reflects how nurses are unable to spend time at patients' bedsides due to competing demands for their time.

5.5 Items in each of the Five Subscales that had the highest and lowest scores

The concept of holistic caring has long been emphasised in healthcare, revolving around the connecting of body, mind, and spirit of patients (Albaqawi, Butcon & Molina., 2017). Although, critically ill patients admitted into CCU undergo complex health problems, their needs must not be compartmentalised into physical needs first with other needs following (Nin Vaeza et al., 2020). Notably, in Subscale 1, "*Maintaining belief*," item (1) had the highest mean score (M=4.85), indicating that the

caring behaviour most important to the participants was caring for the whole person, with emphasis on the facilitation of healing. McMillan et al. (2018) explain that to achieve health and wellbeing amongst individuals, communities and the environment, caring must focus on healing of the whole person. Other studies focusing on holistic healing in critically ill patients and their families obtained similar results of critical care nurses being committed to holistic care (Albaqawi et al., 2017; Cruz et al., 2017). The lowest rated item (M=4.81) in Subscale 1 was critical care nurses' still doing whatever they could to assist patients and families. The caring behavior must be understood in the context of a critical care environment, where factors such inadequate opportunities for communication with relatives and high turnover rates of experienced critical care nurses, often interfere with nurses abilities to support families (Myhren et al., 2013). Of significance, was that one response for the item leaned towards the uncaring behaviour of nurses finding difficulty in respecting people who are too demanding. Respecting diverse cultural values, beliefs, lifestyles, and practices have enabled critical care nurses to cope with the stressors of a CCU and facilitate positive patient health outcomes (de Beer & Brysiewicz, 2017). Furthermore, a response of difficulty in respecting patients considered demanding goes against the philosophies of patient- and family-centred care. This finding points to a need for workshops that target the development of relational skills in critical care nurses.

Subscale 2, "*Knowing*" in caring, implies that nurses look beyond the illness experience of patients and families and focus on individuals as part of a greater system (Mårtensson et al., 2020). In this subscale, the caring behaviour most important to participants (item-1; M=4.79) was establishing therapeutic relationships with patients and their families, in which critical care nurses look beyond the patient to the person. The finding was dissimilar to the findings in a study conducted in Nepal, where critical care nurses' expressed their experiences of caring in a resource-constrained and low technology environment was time-consuming (Limbu et al., 2018). Nepal is a developing country, where critical care nurses often use old equipment and machines that are not adequately functional. Thus, the critical care nurses found themselves spending more time managing the equipment rather than focusing on the patient and families as a whole, and had difficulty developing collaborative relationships with family members in the midst of technological malfunctions. In light of the similar

logistic and human resource challenges faced by nurses in South Africa, it was heartening that the participants in the current study remained focused on the patients and families. A trilogy of collaboration, patients, families and health professionals working together optimises the outcomes of healthcare (Emmamally et al., 2020). The least important caring behavior (M=4.36) in Subscale 2, related to critical care nurses prioritising care based on patients and families requests. Of significance, is that the caring behaviour had one response veering to the left of the scale towards the uncaring behavior of prioritising tasks allocated in the shift. The study of Modic et al. (2020) supported this isolated finding, reporting that the methods used in how nurses were assigned, limited time and lack of support can significantly affect nurses' caring behaviours. Likewise, another study, conducted in a South African public hospital, found that critical care nurses perceived CCU to be a highly stressful environment, which resulted in them being task-orientated rather than person-orientated, irrespective of their qualifications or years of experiences (Ndlovu et al., 2022).

The Subscale 3, "*Being with,"* requires that the nurses be physically and emotionally present with the patient and their family, in which nurses use therapeutic communication skills and higher-level listening to convey information or educate (Mårtensson et al., 2020). In this subscale, item 5 received the highest mean score (M=4.73), where critical care nurses prioritised caring behaviours of being accessible to patients and proactive in their care. Again, this positive finding speaks well for critical care nurses commitment to caring, as it appears the nurses in this study, despite facing demands of patients, acknowledge the importance of being available to patients. The caring behavior with the lowest score in Subscale 3, was that critical care nurses were conscious about touch as a healing interaction, and always asked permission and touched gently (Item 3, M= 4.26). By a caring touch, the critical care nurse displays an embodied and relational understanding of the patient's dignity (Sandnes & Uhrenfeldt, 2022). In addition, critical care nurses expressed a caring touch can replace words, or reinforce spoken words (Sandnes & Uhrenfeldt, 2022). In this subscale, there was one response for item 1 that leaned towards the uncaring behaviour of a nurse getting on with work without introducing oneself (M=68). The finding is concerning as there is always a need to form therapeutic relationships with patients and families to facilitate them to communicate and express their emotions

and concerns (Adams et al., 2014; Yoo et al., 2020). It is important that critical care nurses remember the basics in behavioural skills taught in nursing, even as they move to advanced levels clinical of clinical practice.

Subscale 4, "*Doing for*," describes a dimension of caring in which nurses provide for their patients who are unable to provide for themselves, inclusive of caring behaviours that are more technically oriented than that of the other four subscales (Peacock-Johnson, 2018). Item 5, with the highest mean score (4.86), related to caring behaviours, where critical care nurses perceived that they worked with team members with a constant focus on the patient and family, and were willing to help when they knew they would receive help when needed. As much as this item is highly rated, results the interpretation should consider other study findings that alluded to mixed messages among the multidisciplinary team members, which comprised of holistically caring for a patient and their family (Hynes et al., 2020). The item with the lowest score (M=4.45) related to the caring behaviour of a nurse being attentive to little aspects of caring without missing anything that may be critical to the patient (i.e. call light within reach, comfort and cleanliness, tissue box within reach, over bed tray within reach). A low score to this item is disconcerting, as any missing detail of caring, affects a patient's perception of the caring encounter with the nurse (Shalaby et al., 2018). A noteworthy finding in the subscale, is that one response for item 3, veered towards the uncaring behaviour of avoiding direct communication with patients (M=4.72). A study in Seoul, Korea, reported that inefficient communication contributes to anxiety and complaints amongst patients (Yoo et al., 2020). Yoo et al. (2020) further expanded on the poorly developed communicative skills amongst critical care nurses compared to general ward nurses, and between the younger and less experienced nurses and more experienced counterparts. Shalaby et al. (2018) concur that critical care nurses have inadequate opportunities for communication with families, which families perceive as uncaring attitude.

Subscale 5, "*Enabling*," implies that nurses facilitate guidance, empowerment, advocating and validating through life transitions and unfamiliar events (Mårtensson et al., 2020). In this respect, Ganz and Sapir (2019) postulate that it is important for the nurses to relay clear communication timely and honestly regarding all possible eventualities, as this assists with earlier decisions for comfort care over prolonged

futile treatments. It was therefore noteworthy that item 1 had the highest mean score (M=4.71), in which positive responses were associated with the caring behaviours of being proactive, consistent, and honest in information communication to the patient and family based on what they want and need. The item that received the lowest mean score (4.32) in Subscale 5, leaned towards nurses working collaboratively to review the plan of care and address/question any areas of concern to the patient and family. The finding contrasted to the study by Ganz and Sapri (2019), which revealed that nurses perceived that addressing patients' needs and concerns was essential in high-quality nursing care.

5.6 Interrelationships between socio-demographic characteristics of participants' and their perceptions of caring

There were no significant relationships found between the critical care nurses' socio-demographic characteristics and the overall score of the CACG. When looking at each subscale, a weak negative association between age and the Subscale 3 of "*Being with*," became evident, with younger nurses having a higher caring orientation than those older. Although older critical care nurses are more skilled and productive, they are more vulnerable to compassion fatigue of the critical care environment because of the repeated exposure to traumatic events (Ndlovu et al., 2022). Further to this, the ageing process may render certain tasks less desirable and more challenging to older critical care nurses care, giving them less time to focus on patient-centered care. Previously there was focus on the biomedical model in teaching and learning, compared to today where the focus of teaching are relational models (Peacock-Johnson, 2018). Relationship-based care models transform the healthcare environment to facilitate relationship-based care, therapeutic nurse-patient-relationships and patient-centred care that enables dignity with patient values and preferences. This could account for the difference in views between older and younger nurses (Peacock-Johnson, 2018).

There was a positive correlation between the socio-demographic variables of gender and the Subscale 1"*Maintaining belief*," with female nurses having a higher caring orientation compared to their male counterparts. A recent study by Shalaby et al. (2018) revealed contrasting findings where there were no significant relationships between caring behaviors and the socio-demographic characteristics of age and gender.

5.7 Strengths of the study

This study took place during the COVID-19 pandemic, when critical care nurses were suffering burn out with the workload, tension and at times helplessness associated with caring for patients diagnosed with COVID-19. Despite the background, the response rate for the study was overwhelming, perhaps associated with the critical care nurses commitment to caring and to making the commitment known.

5.8 Limitations of the study

Conducting the study during the Covid-19 pandemic and the accompanied stressors, increased and staggered the time of data collection, as the researcher had to be mindful of the workload of critical care nurses.

Participants came from one hospital in KwaZulu-Natal, therefore, the results may not be generalised to critical care nurses working in other hospital settings with dissimilar conditions to those of the tertiary hospital used in this study.

5.9 Recommendations

In line with the findings of the study, the following recommendations are for nursing management, practice, education, and research:

5.9.1 Nursing policy and management

There is a need to develop policies related to aspects that promote caring of patients and their families. Management must provide supportive structures in CCUs that facilitate critical care nurses caring for both patients and their families. This may translate to equitable, smaller workloads and recognition of nurses who invest in caring initiatives.

5.9.2 Nursing practice

There is a need for promotion of in-service training that can guide critical care nurses on strategies to promote caring behaviours with patients and families in critical care settings. There needs to be workshops focusing on building relational skills of nurses. There is a need for promotion of infection prevention control In-service training on pandemics that can guide critical care nurses on Infection control measures, treatment

strategies and changing protocols to employ and adapt to new working methods for hospital preparedness.

5.9.3 Nursing education

There is need for the formulation of strategies and interventions for incorporation into the nursing curricula to cultivate quality caring behaviours in nurses. There can also be care modules specifically designed to focus on building relational and therapeutic skills of nurses, for undergraduate and postgraduate programmes, using simulations and reflective sessions as teaching aids and methodologies.

5.9.4 Nursing research

Replication of the current study using qualitative approaches could bring forth valuable findings on how the critical care environment affects the caring experiences of critical care nurses. There could be comparative studies in state-funded versus private sector hospitals, with the important conclusions revealing how resources have an impact on the caring orientation of critical care nurses. A future study could also relate to perceived changes in caring provided to COVID-19 patients.

5.10 Conclusions

This study sought to determine critical care nurses' perceptions of caring at a selected hospital in KwaZulu-Natal. The participants reported a high overall perception of caring aligned to the findings of other studies using the same questionnaire. The findings of this study demonstrated that the critical care nurse participants had a high caring orientation for the dimension of caring, "*Maintaining belief*," whilst the dimension of caring, "*Being with*," scored the lowest.

Differences in healthcare institutions probably relate to different caring cultures and nurses' workload; therefore, it is important to consider CCU circumstances, nurses' educational background, job satisfaction, as well as the nature of critically ill patients to promote nurses' awareness and implementation of caring behaviours. The findings of this study demonstrated that the socio-demographic characteristics of the critical care nurse participants revealed the majority of the participants were above 30 years of age, held a Diploma in Nursing, and had >10 years of work experience in CCU. Further to this, there was no significant relationship found between caring behaviors

on the CACG questionnaire and the socio-demographic characteristics of age and gender.

The study conducted at a time when critical care nurses were reeling from the demands and helplessness of the COVID-19 pandemic revealed findings that cemented the commitment of the participants to caring for patients at families. Perhaps this study gives added meaning to the phrase, "*caring against all odds."* It would be interesting to conduct a mixed methods study where a qualitative arm would enhance the findings of this quantitative study and provide robust data in this field of caring in critical care nursing.

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Annexure A: Survey

Title: Critical care nurses' perceptions of caring for patients at a selected hospital in KwaZulu-Natal

This questionnaire contains two sections, namely Section A: a socio-demographic data and Section B: a Caring Assessment for Caregivers' questionnaire

 Indicate your answer by selecting the appropriate box

Section A:

1. What is your age in years?

1	< 30
2	30 -49
3	≥50

2. What is your gender?

1	Male
2	Female

3. What is your highest nursing qualification?

1	Diploma in Nursing
2	Degree in Nursing
3	Master's in Nursing
4	PHD in Nursing

4. How many years have you been working in a critical care unit?

1	< 10years
2.	10 years
3.	>10 years

Section B: The Caring Assessment for Caregivers' questionnaire

This section consists of five subscales, with five scaled items in each of the subscales.
Instructions: as you read each subscale of the assessment, select the number that best describes your perception towards caring. Rating between 1= means a low caring behaviour and 5= means a high caring behaviour; 2, 3 and 4 reflect various behaviours in between.

Part One: Subscale: Maintaining belief		
I focus on accomplishing the tasks necessary to provide care	1 2 3 4 5	I focus on caring for the whole person (body, mind, and spirit) with emphasis on facilitating healing
I am often absorbed in accomplishing the tasks required, which interferes with my ability to be empathetic and compassionate	1 2 3 4 5	I convey empathy and compassion for each person I care for; I appreciate and honour the uniqueness of each patient
I do what I can to help patients when I have the time. My work is more productive without the distractions of individual's problems.	1 2 3 4 5	I do whatever it takes to resolve patient's problems effectively; I am willing to "go the extra mile"
I am frequently challenged to maintain an accepting and non-judgmental attitude when I cannot relate or respect the values and behaviours of patients and family members	1 2 3 4 5	I consciously maintain an accepting and non-judgmental attitude in the way I provide care/service to all patients/families, even when our values differ
I frequently find it difficult to respect people who are too demanding or behave in ways that should not be tolerated; I treat people with respect when they deserve it	1 2 3 4 5	I believe each person deserves to be treated with respect and dignity; I know that being ill can be experienced as a crisis and that people feel vulnerable; emotions may be expressed as fear or anger

Part Two: Subscale: Knowing		
I care for the patients assigned to me by focusing on the tasks that need to be completed for the period of time I am working; individual relationships are not realistic	1 2 3 4 5	I care for each patient and their family by establishing a therapeutic relationship; I look beyond the patient to the person and believe a relationship is fundamental to good care
I care for patients based on what I know and my experience tells me works best; there is not enough time to learn about each person or their circumstances	1 2 3 4 5	I intentionally try to understand each patient/family's unique story and circumstances; I avoid assumptions
I prioritise care based on the tasks that need to be accomplished during the time I am working	1 2 3 4 5	I prioritise care based on what patients and families tell me is most important to them and the required medical and nursing care
I involve the patient's family when needed but do not view family members as essential to the care; I frequently perceive family members as interfering with the care	1 2 3 4 5	I consistently involve the patient's family in the care experience; I believe the family (as defined by the patient) is essential to the patient's recovery and healing I value learning pertinent information from the family
I think it is important to tell patients the truth; sometimes that means letting the patient/family know about things that are getting in the way of care	1 2 3 4 5	I am careful to not burden the patient and family with problems or issues that are mine or my organisation's to own and resolve; I believe the patient needs a peaceful and restful environment and should not be distracted by worries that are outside their control

Part Three: Subscale: Being with		
I tend to get my work done without concern about introducing myself, stating my role, and describing what I am going to do	1 2 3 4 5	I initiate a relationship with the patient/family by extending a welcome and introducing myself (including my name, role, and how I will care/serve them)
I tend to interact while standing; there is a great deal to get done and I don't generally sit with the patient/family	1 2 3 4 5	I make it a practice to sit at the bedside and be fully present with the patient/family at least five minutes per shift
I have not thought a great deal about touch; I am practical in my approach and may not always be gentle	1 2 3 4 5	I am conscious about touch as a healing interaction; I always ask permission and touch gently
I find it difficult to be still and listen; I tend to want to solve the problem and move on	1 2 3 4 5	I make time to listen to the patients/families I care for; I view listening as a healing intervention
I frequently feel stretched and stressed by patient/family requests; it is difficult to consistently meet requests	1 2 3 4 5	I am accessible and proactive in my care, and I am able to respond promptly and consistently to requests

Part Four: Subscale: Doing for						
I maintain my skills and knowledge and attend mandatory education requirements; I do not generally seek out additional education	1	2	3	4	5	I maintain a high level of knowledge and skills to provide care to patients and families; I am constantly learning and strengthening my knowledge
In the rush and demands of the shift, I frequently miss the "little things;" I am lucky to accomplish the key tasks	1	2	3	4	5	I tend to the "little things" that mean a great deal to each patient (i.e. call light within reach, comfort and cleanliness, tissue box within reach, over bed tray within reach)
I often avoid direct communication especially if it is not comfortable; I rarely challenge other members of the healthcare team even if I question the appropriateness of their plan/orders	1	2	3	4	5	I communicate directly with other members of the healthcare team to coordinate patient care; I do not hesitate to question a medical order/plan to assure it is appropriate and safe for the patient
I try to monitor the patient carefully, but find it difficult to do that and manage the volume of work	1	2	3	4	5	I tend to the well-being of the whole person, and assess and monitor each patient based on their individual needs including pain management, psychosocial needs, and safety
Our team works in a parallel fashion with each person focused on getting their work done; asking for help is rare and not encouraged	1	2	3	4	5	I work with my team members with a constant focus on the patient and family; I am willing to help and know I will receive help when needed

Part Five: Subscale: Enabling		
I communicate standard information to most of my patients; I rarely see a need to deviate from our unit routines	1 2 3 4 5	I communicate proactive, consistent and honest information to the patient and family based on what we agree they want and need
I provide care based on standardised plans or tasks; I rarely have time to develop individual plans with my patients or coordinate care with other members of the team	1 2 3 4 5	I develop a specific plan of care with my patients and their families; I coordinate care with other members of the healthcare team
I rarely question the medical plan, as that is the sole responsibility of the physician	1 2 3 4 5	I collaboratively review the medical plan of care and address/question any areas that are of concern I help patients/family to understand the plan
The decisions for care are determined by the physician and the healthcare team	1 2 3 4 5	I involve and support patients and their families in making decisions about their care; I view the patient as a central decision-maker in care
I take the lead from the physician and follow the physician's orders as written I do not rock the boat	1 2 3 4 5	I advocate for patients even when it means taking a risk myself

Thank you for your participation

Annexure B: Information sheet

Title: Critical care nurses' perceptions of caring for patients at a selected hospital in KwaZulu Natal

Dear: Critical Care nurse

I am Merashni Jugroop a Master of Nursing student, Student number 211538445, studying at the University of KwaZulu-Natal, College of Health Sciences, School of Nursing & Public Health, Discipline of Nursing. My contact details are as follows: merash2@gmail.com , 0722 563599.

I invite you to participate in a study, entitled: Critical-care nurses' perceptions of caring at a selected hospital in KwaZulu Natal, that seeks the provision of information based on your perceptions. This study aims to determine critical-care nurses' perceptions of caring patients at a selected hospital in KwaZulu-Natal.

Procedure:

You are requested to partake in the study by completing a two-part questionnaire consisting of section A, socio-demographic part, and section B, a Caring Assessment for Caregivers part consisting of 25 questions. It should take you approximately 15 minutes to complete the two-part questionnaire.

Voluntary participation

Please be aware participation is voluntary, hence, you are not obliged to participate in this study. You have the right to discontinue participation at any time, and in the event of withdrawal, the participant will not incur any penalty, or loss of benefits to which you are entitled. Please note that pressing the SUBMIT BUTTON AT THE END OF EACH PART OF THE QUESTIONNAIRE INDICATES YOUR CONSENT TO PARTICIPATE

Risk- There is no risk associated with participation in this study. If you experience any discomfort or uneasy feeling during the process of participation, you may discontinue

Benefits- There is no direct benefit linked to participation in this study, it is possible that with your information the research study will assist in the development of future policies related to aspects that promote caring of patients and their families and feed into in-service programmes that can guide critical-care nurses on strategies to

promote caring behaviours. In addition, contribute to further research aspects of caring in critical care unit settings.

Confidentiality and anonymity

The results of this research study will be confidential and anonymous. There will be no identification of participation linked or connected to a name, person or department due to the use of a coding system on the questionnaire, which means all responses have no participant connection. You, as a participant, will maintain anonymity by not entering your name anywhere on the questionnaire. Furthermore, your email address will remain in a file separate from electronically completed surveys so to ensure there is no link between the data and the email.

Data security - Data responses filled out in the two-part questionnaire will be password encrypted on all electronic storage devices for a period of five years, thereafter destroyed.

Participants completing an electronic survey - Please note, pressing the SUBMIT BUTTON AT THE END OF EACH PART OF THE SURVEY INDICATES YOUR CONSENT TO PARTICIPATE.

The UKZN Biomedical Research Ethics Committee has ethically reviewed and approved this study (approval number: BREC/00002770/2021). In the event of any queries or concern, you may contact the research supervisor on 031-2601437/ Emmamally@ukzn.ac.za or the UKZN Biomedical Research Ethics Committee.

The contact details are as follows:
BIOMEDICAL RESEARCH ETHICS ADMINISTRATION
Research Office, Westville Campus
Govan Mbeki Building
University of KwaZulu-Natal
Private Bag X 54001, Durban, 4000
KwaZulu-Natal, SOUTH AFRICA
Tel: 27 31 2602486 - Fax: 27 31 2604609

Email: BREC@ukzn.ac.za

Annexure C: Declaration for consent

I, ……., have been informed about the study entitled Critical care nurses' perceptions of caring patients at a selected hospital in KwaZulu-Natal by Merashni Jugroop, Student number 211538445

I understand the purpose and procedures of the study.

I have had an opportunity to ask questions about the study and have received answers to my satisfaction.

I declare that my participation in this study is voluntary, and that I may withdraw at any time without affecting any treatment or care to which I would usually be entitled.

If I have any further questions/concerns or queries related to the study I understand that I may contact the researcher on:

merash2@gmail.com or telephone 0722563599.

If I have any questions or concerns about my rights as a study participant, or if I am concerned about an aspect of the study or the researchers then I may further contact:

BIOMEDICAL RESEARCH ETHICS ADMINISTRATION

Research Office, Westville Campus

Govan Mbeki Building

Private Bag X 54001

Durban

4000

KwaZulu-Natal, SOUTH AFRICA

Tel: 27 31 2604769 - Fax: 27 31 2604609

Email: BREC@ukzn.ac.za

Signature of Participant ……

Date ……

Annexure D: Research approval

UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

16 September 2021

Miss Merashni Jugroop (211538445)
School of Nurs & Public Health
Howard College

Dear Miss Merashni Jugroop,

Protocol reference number: BREC/00002770/2021
Project title: Critical care nurses perceptions of caring at a selected hospital in KwaZulu Natal
Degree: Masters

EXPEDITED APPLICATION: APPROVAL LETTER

A sub-committee of the Biomedical Research Ethics Committee has considered and noted your application.

The conditions have been met and the study is given full ethics approval and may begin as from 16 September 2021. Please ensure that outstanding site permissions are obtained and forwarded to BREC for approval before commencing research at a site.

This approval is subject to national and UKZN lockdown regulations, see (http://research.ukzn.ac.za/Libraries/BREC/BREC_Amended_level_2_Lockdown_Guidlines.sflb.ashx). Based on feedback from some sites, we urge PIs to show sensitivity and exercise appropriate consideration at sites where personnel and service users appear stressed or overloaded.

This approval is valid for one year from 16 September 2021. To ensure uninterrupted approval of this study beyond the approval expiry date, an application for recertification must be submitted to BREC on the appropriate BREC form 2-3 months before the expiry date.

Any amendments to this study, unless urgently required to ensure safety of participants, must be approved by BREC prior to implementation.

Your acceptance of this approval denotes your compliance with South African National Research Ethics Guidelines (2015), South African National Good Clinical Practice Guidelines (2020) (if applicable) and with UKZN BREC ethics requirements as contained in the UKZN BREC Terms of Reference and Standard Operating Procedures, all available at http://research.ukzn.ac.za/Research-Ethics/Biomedical-Research-Ethics.aspx.

BREC is registered with the South African National Health Research Ethics Council (REC-290408-009). BREC has US Office for Human Research Protections (OHRP) Federal-wide Assurance (FWA 678).

The sub-committee's decision will be noted by a full Committee at its next meeting taking place on 12 October 2021.

Yours sincerely,

Prof D Wassenaar
Chair: Biomedical Research Ethics Committee

Biomedical Research Ethics Committee
Chair: Professor D R Wassenaar
UKZN Research Ethics Office Westville Campus, Govan Mbeki Building
Postal Address: Private Bag X54001, Durban 4000
Email: BREC@ukzn.ac.za
Website: http://research.ukzn.ac.za/Research-Ethics/Biomedical-Research-Ethics.aspx

UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

06 October 2021

Miss Merashni Jugroop (211538445)
School Of Nursing & Public Health
Howard College

Dear Miss Jugroop,

Protocol reference number: BREC/00002770/2021
Project title: Critical care nurses perceptions of caring at a selected hospital in Kwa-Zulu Natal.
Degree: Masters

We wish to advise you that your correspondence received on 21 September 2021 submitting of IALCH site permission and DOH permission for the above study has been **noted** by a subcommittee of the Biomedical Research Ethics Committee.

The committee will be notified of the above at its next meeting taking place on 09 November 2021.

Yours sincerely

Ms A Marimuthu
(for) Prof D Wassenaar
Chair: Biomedical Research Ethics Committee

Annexure E: Department Of Health Approval

health
Department:
Health
PROVINCE OF KWAZULU-NATAL

DIRECTORATE:
Health Research & Knowledge Management

Physical Address: 330 Langalibalele Street, Pietermaritzburg
Postal Address: Private Bag X9051
Tel: 033 395 2805/ 3189/ 3123 Fax: 033 394 3782
Email:
www.kznhealth.gov.za

NHRD Ref: KZ_202109_005

Dear Ms M. Jugroop
(UKZN)

Approval of research

1. The research proposal titled **'Critical care nurses' perceptions of caring at a selected hospital in KwaZulu Natal'** was reviewed by the KwaZulu-Natal Department of Health (KZN-DoH).

   The proposal is hereby **approved** for research to be undertaken at Inkosi Albert Luthuli Central Hospital.

2. You are requested to take note of the following:
   a. *All research conducted in KwaZulu-Natal must comply with government regulations relating to Covid-19. These include but are not limited to: regulations concerning social distancing, the wearing of personal protective equipment, and limitations on meetings and social gatherings.*
   b. *Kindly liaise with the facility manager BEFORE your research begins in order to ensure that conditions in the facility are conducive to the conduct of your research. These include, but are not limited to, an assurance that the numbers of patients attending the facility are sufficient to support your sample size requirements, and that the space and physical infrastructure of the facility can accommodate the research team and any additional equipment required for the research.*
   c. *Please ensure that you provide your letter of ethics re-certification to this unit, when the current approval expires.*
   d. *Provide an interim progress report and final report (electronic and hard copies) when your research is complete to **HEALTH RESEARCH AND KNOWLEDGE MANAGEMENT, 10-102, PRIVATE BAG X9051, PIETERMARITZBURG, 3200** and e-mail an electronic copy to hrkm@kznhealth.gov.za*
   e. *Please note that the Department of Health shall not be held liable for any injury that occurs as a result of this study.*

For any additional information please contact Mr X. Xaba on 033-395 2805.

Yours Sincerely

Dr E Lutge
Chairperson, Health Research Committee
Date: 08/09/2021

Annexure F- Letter of support

From: Xaba Xolani
To: Waheedha Emmamally
Subject: RE: support for research study
Date: Tuesday, 12 January 2021 12:11:33

Good day

The procedure is that the student contacts the health facility once s/he has a provisional approval from the REC (either BREC or HSSREC). Once she has a provisional ethics, she must then obtain a support letter from the health facility and then apply to the Provincial Health Research Committee for final approval via the National Health Research Database (nhrd.health.gov.za).

Regards,
Xolani

From: Waheedha Emmamally <Emmamally@ukzn.ac.za>
Sent: 11 January 2021 05:22 PM
To: Lutge Elizabeth <Elizabeth.Lutge@kznhealth.gov.za>; Linda.Mtshali@ialch.co.za
Cc: Merashni Jugroop (211538445) <211538445@stu.ukzn.ac.za>
Subject: support for research study

Good Day

I am writing to you on behalf of a Masters student that I am supervising (Merashni Jugroop, student number 211538445) who works in Inkosi Albert Luthuli and is currently registered for her Masters in Nursing. She is at present registered for her dissertation entitled, "Critical care nurses' perceptions of caring at a selected hospital in KwaZulu Natal – An exploratory and descriptive study"
She is at the stage of sending her proposal to ethics (see attached). A requirement of the ethical committee is that the student inform the management of the setting where she hopes to conduct her study of her intent and for the student to show management her proposal. The ethics committee requires an email or letter from management of the setting to state whether they will support her conducting the study. Once we have the letter of support we then send the proposal to the ethics committee who a give provisional ethics approval. With the provisional approval we then apply to DOH and management for permission to conduct the study and send the permission letter to ethics for the actual ethics approval of the study.

Merashni requires support from the management of IALCH for her study, please can I ask that you peruse her proposal and notify her if the study is supported. In preparing the proposal Merashni has taken into consideration all COVID protocols applicable to studies in terms of data collection and ethical consideration of participants detailed in the appropriate sections of her proposal.

We look forward to a positive response. The student and myself are available at any time

Annexure G- Permission to conduct research at Inkosi Albert Luthuli Central

KWAZULU-NATAL PROVINCE
HEALTH
REPUBLIC OF SOUTH AFRICA

DIRECTORATE:

INKOSI ALBERT LUTHULI CENTRAL HOSPITAL
Private Bag X03, Mayville, 4058
800 Vusi Mahlaba (Belair) Road, Mayville,4091
Tel: 031 240 1059 Fax: 031 240 1305 Email: Ursula.john@ialch.co.za
OFFICE OF THE MEDICAL MANAGER

Reference: IHRC/0002770/2021
Enquiries: Medical Management

31 August 2021

Miss M Jugroop (211538445)
School of Nursing & Public Health
Howard College

Dear Miss Jugroop

RE: PERMISSION TO CONDUCT RESEARCH AT IALCH

I have pleasure in informing you that permission has been granted to you by the Medical Manager to conduct research on: **Critical care nurses perceptions of caring at a selected hospital in Kwa-Zulu Natal.**

Kindly take note of the following information before you continue:

1. Please ensure that you adhere to all the policies, procedures, protocols and guidelines of the Department of Health with regards to this research.
2. This research will only commence once this office has received confirmation from the Provincial Health Research Committee in the KZN Department of Health.
3. Kindly ensure that this office is informed before you commence your research.
4. The hospital will not provide any resources for this research.
5. You will be expected to provide feedback once your research is complete to the Medical Manager.

Yours faithfully

.....
Dr A Harrichandparsad
Clinical Care Manager

GROWING KWAZULU-NATAL TOGETHER

KWAZULU-NATAL PROVINCE
HEALTH
REPUBLIC OF SOUTH AFRICA

DIRECTORATE:
OFFICE OF THE MEDICAL MANAGER

INKOSI ALBERT LUTHULI CENTRAL HOSPITAL
Private Bag X03, Mayville, 4058
800 Vusi Mahlaela (Bellair) Road, Mayville, 4091
Tel: 031 240 1059 Fax: 031 240 1005 Email: Ursula.john@kzkh.co.za

31 August 2021

Miss M Jugroop (211538445)
School of Nursing & Public Health
Howard College

Dear Miss Jugroop

Re: Approved Research: Ref No: BREC/00002770/2021: Critical care nurses perceptions of caring at a selected hospital in Kwa-Zulu Natal.

As per the policy of the Provincial Health Research Committee (PHRC), you are hereby granted permission to conduct the above mentioned research once all relevant documentation has been submitted to PHRC inclusive of Full Ethical Approval.

Kindly note the following.

1. The research should adhere to all policies, procedures, protocols and guidelines of the KwaZulu-Natal Department of Health.
2. Research will only commence once the PHRC has granted approval to the researcher.
3. The researcher must ensure that the Medical Manager is informed before the commencement of the research by means of the approval letter by the chairperson of the PHRC.
4. The Medical Manager expects to be provided feedback on the findings of the research.
5. Kindly submit your research to:

   The Secretariat
   Health Research & Knowledge Management
   330 Langalibalele Street, Pietermaritzburg, 3200
   Private Bag X9501, Pietermaritzburg, 3201
   Tel: 033395-3123, Fax 033394-3782
   Email: hrkm@kznhealth.gov.za

Yours faithfully

.....

Dr A Harrichandparsad
Clinical Care Manager

Annexure I - Instrument permission

August 27, 2020

CREATIVE HEALTH CARE MANAGEMENT

Merashni Jugroop
University of KwaZulu-Natal
211538445@stu.ukzn.ac.za

Re: Caring Assessment for the Caregivers Instrument Use Permission

Dear Merashni,

Creative Health Care Management (CHCM) is pleased to provide you the opportunity to use the Caring Assessment for the Caregivers Instrument in your research and education materials. The following terms and conditions are in force for the duration of utilization:

- The Caring Assessment for the Caregivers Instrument can be used as approved for internal use and cannot be duplicated in any form outside of scope described below:

Please describe your scope of use for these materials. Be as specific as possible:

Description of Items:
- Caring Assessment for the Caregivers Instrument

Source Type: Manual

Source Title: Re-Igniting the Spirit of Caring Participant Manual

Type of Usage:
- Scholarly Work/Research
- Staff Education and Development
- Ongoing usage: Collecting data over time.

Specific Usage:
I am a student registered for masters in nursing at the University of KwaZulu-Natal, I plan to conduct a study on critical care nurses perceptions of caring in critical care units. I would love if you would provide me with permission to use your instrument entitled "caring assessment for care givers" instrument. The instrument will be adapted to assess nurses' perceptions of caring.

Format (s) required: Word

8500 Normandale Lake Blvd, Suite 350, Bloomington, MN 55437 - Phone 800.728.7766/952.854.9015 - Fax: 952.854.1866 - www.chcm.com

Terms and Conditions Continued

- Any additional alterations of the Caring Assessment for the Caregivers Instrument must receive final approval from Creative Health Care Management prior to use.
- The Caring Assessment for the Caregivers Instrument can be transmitted internally through digital systems such as email and intranet sites.
- The Caring Assessment for the Caregivers Instrument cannot be accessible on public-facing media such as websites and social media (Facebook, LinkedIn, Pinterest, etc.)
- The Caring Assessment for the Caregivers Instrument cannot be used to create retail products/educational materials for resale.
- The following appropriate citations must accompany the Caring Assessment for the Caregivers Instrument at all times:
    - "Used with permission. From *Re-Igniting the Spirit of Caring Participant Manual* © 2016 Creative Health Care Management. www.chcm.com"

Materials covered under this agreement:

1. Caring Assessment for the Caregivers Instrument

I have read and will comply with the terms and conditions above. I am authorized to sign on behalf of my organization.

Name: MEGASHNI JUGROOP

Signed: [signature] Date: 01/09/2020

CHCM Approval: _____ Date: _____

Yours in service,

Catherine L. Perrizo

Catherine L. Perrizo
Contracting Officer
Creative Health Care Management, Inc.
800.728.7766 x103 - 952.854.1866 (fax)
cperrizo@chcm.com

Annexure J: Editing Certificate

Gill Smithies

Proofreading & Language Editing Services

59, Lewis Drive, Amanzimtoti, 4126, KwaZulu Natal

Cell: 071 352 5410 E-mail: moramist@vodamail.co.za

Work Certificate

To	Ms. M. Jugroop
Address	School of Nursing & Public Health, College of Health Sciences, University of KwaZulu-Natal
Date	26/10/2022
Subject	Dissertation: Critical care nurses' perceptions of caring at a selected hospital in KwaZulu-Natal
Ref	MJ/GS/01

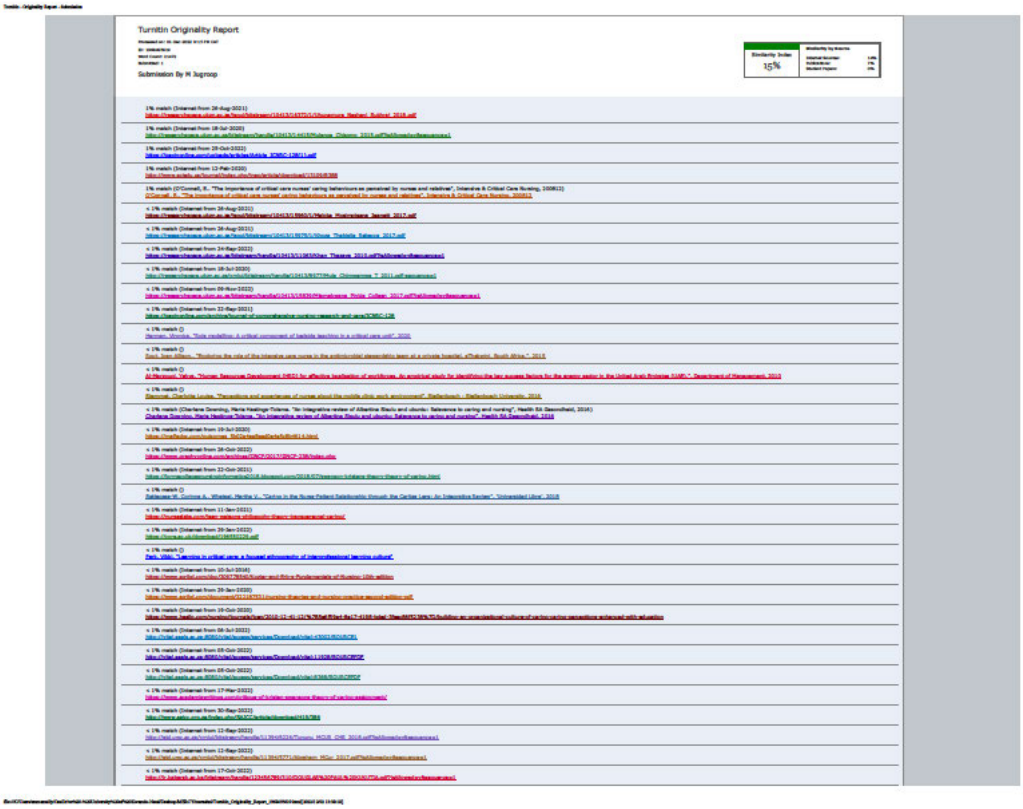
I certify that I have edited the following for language, grammar and style, and made recommendations,

Dissertation: Critical care nurses' perceptions of caring at a selected hospital in KwaZulu-Natal, by M. Jugroop,

to the standard as required by the University of KwaZulu Natal.

Gill Smithies

Annexure K: Turnitin Report



Turnitin Originality Report

Submission By M Jugroop

15%