DEVELOPMENT OF A WORKSHOP TO ASSIST NURSES TO MEET THE NEEDS OF FAMILY MEMBERS OF PATIENTS IN THE CRITICAL CARE UNIT IN A PRIVATE HOSPITAL IN GAUTENG

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DECLARATION

I, Nicolas Sehloho Molelengoane, declare that this research study is my own work and that all sources quoted have been indicated and acknowledged by means of complete referencing. It is being submitted for the degree of Master of Science in Nursing Education at the University of the Witwatersrand, Gauteng. It has not been submitted before for any degree or examination in other University.

Nicolas Sehloho Molelengoane

On this 1st day of September 2021

Human Research Ethics Committee (Medical) – Clearance Certificate No. M170655

DEDICATION

This work is dedicated to the Lord Almighty for always answering my prayers when the road was less travelled.

My wife, Violet Papadi, Sons, Jeremiah Jerry Tiisetso and Jacob Jake Mpho Molelengoane, for their support, sacrifice and patience throughout the study.

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ABSTRACT

The admission of a patient to the critical care unit is one of the most stressful events in any family. Critical hospitalization generates high stress for both the patient and families, often leading to a crisis and negative experiences during their stay. Families may feel vulnerable and helpless with no clear knowledge of what to expect from the nurses working in the critical care unit. Nurses are members of the healthcare team who are best placed to support the family members of patients in the critical care unit throughout the patients' stay and on 24 hour a day basis. Family members have specific needs which need to be understood by the nurses working in the critical care unit.

If these needs are not identified and met, the family members will be left frustrated and in fear. Understanding the family member's needs can help nurses working in the critical care units, to deliver quality of care to the patients in a family centred manner.

Purpose of the Study

The purpose of the study was to develop a workshop to assist nurses to meet the needs of family members of patients in the Critical Care Unit in a private hospital in Gauteng.

Research Methods

A qualitative, exploratory study using focus groups as a data collection method was conducted in two phases. Convenience sampling was used for both phases. In the first phase semi-structured interviews were used to explore the perceptions of family members of how nurses can meet their needs. The second phase consisted of the development of a workshop designed to assist nurses to meet family needs. The size of the sample for Phase One comprised of eighteen (18) family members in six (6) family groups. In Phase Two, experts were used to evaluate the workshop. Experts were considered to be family members, educators and Critical Care nurses. These comprised 5 family members, 10 CCU nurses and 7 nurse educators.

The study took place in the critical care unit in a private hospital in Gauteng. Family members were asked three questions relating to their needs and how the nurses could help them meet their needs. The data was recorded and transcribed and subjected to thematic content analysis. A workshop was then developed based on the findings of the focus groups.

Main Findings

In the first phase of the study, the two themes of needs of family members were identified. These were: (i) information needs and (ii) the need for support.

The second phase of the study consisted of the development of a workshop designed to assist nurses to meet family needs. While applying the steps of the ADDIE model it became clear that a constructivist approach was most appropriate to assist nurses to meet the needs of family members. The workshop was therefore designed for maximum participation and provided opportunities to engage with the research material to ensure the learning was relevant. The workshop was then evaluated by a group of experts who consisted of family members, CCU nurses for whom the workshop was designed and nurse educators.

Conclusion

The findings of this study support what is already known about information and support needs of family members of patients in the Critical Care Units. The study confirmed that the needs of family members in the private hospital CCU were no different to those in other general hospital wards. A common approach to meeting these needs should therefore be explored and shared. Development of the workshop to assist critical care unit nurses to meet to these needs was an attempt to commence this dialogue and provide a practical tool for doing this.

Key Concepts:

Critical Care Unit, Critical Care Nurse, Family members, Private Hospital, Workshop.

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CHAPTER ONE

OVERVIEW OF THE STUDY

1.1. INTRODUCTION AND BACKGROUND

The admission of a patient to the critical care unit is one of the most stressful events in any family (Al-Multair et al, 2013, Munyiginya & Brysiewicz, 2014). It can have an impact on the relationships within the family, such as their responsibilities, their normal duties, work and finances. When a family encounters a difficult situation, such as a family member's admission to critical care unit, the entire family system is often altered (Ellis et al, 2016).

Some family members take time off work to spend in the critical care waiting room, in order to be with their loved ones at each visiting time. The family members of the patients who are admitted to the critical care unit often do not leave for fear that something may happen to their loved one should they leave. Patients' family members are personally affected by the experience with critical care. Each family member's own health and well-being may be affected if his or her own needs are not met and by the actions of the health care team.

Critical care hospitalization generates high stress for both patients and families, often leading to crisis and negative experiences during the critical care unit stay (Khalaila, 2014). The stressors are multi-factorial and include the pre-designated visiting hours for limited time-periods interspersed throughout a long hospital stay (Riley et al, 2014) and the fact that when a patient is initially admitted, nursing care is focused on maintaining the physiological stability of the patient, and less attention is given to the needs and concerns of the family members who are, at that point usually extremely anxious (McKiernan & McCarthy, 2010).

Critical illness often occurs without warning (Kohi, Obogo & Mselle, 2016) and care to families whose patients die in the critical care units, is often inadequate because of factors such as lack of communication between patients and health care providers (Visser, Deliens, & Houttekier, 2014), lack of patient- and family-centred care and lack of emotional and psychosocial support. Families may feel vulnerable and helpless with no clear knowledge of what to expect from the nurses working in the critical care unit. At the same time, critical care setting has been regarded as a major stressor because of the complex nature of patient's health problems that require an extensive use of highly technical environment (Malliarou et al, 2014).

The mortality rate of CCU patients is between 12 and 17% and even if family members are not aware of the statistics they are clearly aware that their family member's lives are at risk. On top of these stressors, they are also aware that, in a private health care environment the costs of care are likely to be high.

Nurses are the members of the health care team who are best placed to support the family members of patients in CCU throughout the patients stay and on a 24 hour a day basis. High quality family communication is the backbone of the art and science of nursing (Longhmani et al, 2014) and this communication has a significant impact on patient well- being as well as the quality and outcome of nursing care, and is related to patient's family overall satisfaction with their care. Nurses working in the critical care unit should communicate effectively with the family members, as patients' communication will at times, be compromised, especially those who are sedated, intubated or with loss of consciousness, in a highly technological environment, by making time to actively listen to the patient and family, therapeutic touch, being sensitive to cultural diversity, ensuring privacy, assurance of confidentiality and paying attention to non-verbal cues.

As patients in critical care units (CCUs) are not always able to decide for themselves, their family must receive thorough information on the diagnosis, prognosis, and available treatments as stated by Azoulay et al. (2014). It is crucial to provide this information before requesting the family involvement. The role of the nurse working in the critical care unit is to ensure that the family members are provided with accurate information and this helps the family to be satisfied with the care of their loved ones. Effective communication by health care providers can improve families' understanding of their situation and decrease their psychological burden (Adams, Mannix & Harrington, 2017). Communication facilitates earlier recognition of how the illness is affecting the family unit and establishes a cooperative patient-focused style of care. According to Yoo, Shim, and Lim (2020), good communication and information are a source of comfort and empowerment for the family. Having said this, this aspect is often overlooked due to the fact that the critical care unit (CCU) nurses role is complex.

Interventions are needed that address the stress experienced by families when a loved one is admitted to a CCU, and that help to develop their coping mechanisms. It is essential that health professionals understand how important it is for families to have some form of control and support in their vulnerable situation (Kydonaki, Kearn & Tocher, 2019) and reflect on how they would like to be treated in a similar situation as stated by Büyükçoban, et al (2015).

It is widely acknowledged that relatives play an important role in the CCU patient's recovery and thus, should be included in patients care activities. However, little is documented about the issues critical care nurses face when attempting to include relatives in patient care, as stated by McConnell and Moroney (2015).

Family members need honest information about the patient's progress and outcome to make the situation more bearable for them. Making sense of the situation is a continuous process which involves tracking and evaluating care given. When they are with their loves ones, there is a sustained family bond and a demonstration of love and support for the patient. Meeting the emotional needs of family members of patients in the critical care unit (CCU) is an important aspect of patient- and family-centered care (Henrich et al, 2011).

While understanding the degree of stress it can cause family members to have a loved one in an CCU and while understanding the reasons for the stress and the nurses' role in assisting, it has to be acknowledged that nurses and physicians do not always accurately predict the needs of patient's families (Davidson, 2009). If they receive sufficient support, certain attributes of the family unit can strengthen the family's response to crisis and help them to cope. This is important not only for the family members but the patient too as it is also known that the family member's presence in the critical care unit has been found to positively influence the patient's experience (Obringer et al., 2012).

A great deal of research has already been done to identify the needs of families of patients in CCU. Several authors classified these needs into these four common categories viz. cognitive, emotional, social and practical needs (Brooke & Warren, 2014; Carlson et al., 2015; Botes & Langley, 2016; Verhaeghe, 2005). No previous research has, however, been done in relation to determining needs in the CCU's of the private hospital group. Anecdotal evidence shows that the nurses in these units have are either unaware of, or have difficulties in meeting the needs of the family members and needs assistance in this regard.

1.2. PROBLEM STATEMENT

Family members of patients in the critical care unit have specific needs, such as information about the patient' condition (Wiruh, 2016), which are often misunderstood by the nurses working in the critical care unit.

The private hospital group CCU's have unique challenges related to communicating with families regarding their sick family members as the primary communication source expected by the family is often the private physician. (Cicekci et al (2017) but the physicians are not always available at the time the family members visit the patient. Nurses have a responsibility not only to their patients, but also to family members, for meeting their information needs but do not always know how to meet the needs of these family members Kynoch et al (2016) suggested that there is a need for qualitative research in this field as it is necessary to understand the needs of the family members and to prioritize them within the context in which they are.

Meeting the family needs is not currently included in the curriculum of either the diploma or the certificate Critical Care courses followed by the majority of nurses in this private hospital group. It is therefore important to develop a workshop on the needs of family members of patients in the critical care units, to assist nurses to understand and respond to families and their needs. The workshop was best suited to assist the group to improve their individual skills through the provision of knowledge and active participation and discussion.

1.3. RESEARCH QUESTION

How can nurses best be prepared to meet the needs of family members of patients in the critical care unit in the private hospital in Gauteng in order to provide family-centred care?

1.4. PURPOSE OF THE STUDY

The purpose of the study was to develop a workshop to assist nurses to meet the needs of family members of patients in the Critical Care Unit in a private hospital in Gauteng.

1.5. OBJECTIVES

The objectives are as follows:

- Explore and describe the perceived needs of family members of patients in Critical Care Units and how the nurses could help them meet their needs.
- Develop a workshop to assist nurses to meet the needs of family members of patients in the Critical Care Unit in a private hospital in Gauteng.
- Evaluate a workshop to assist nurses to meet the needs of family members of patients.

1.6. DEFINITION OF KEY CONCEPTS

A Critical Care Unit (CCU) is a dynamic, potentially life-saving environment containing some most advanced technology available to nurses and medical staff. In this study, the term Intensive Care Unit (ICU) also refers to Critical Care Unit (CCU).

A Critical Care nurse is highly trained to use specialized skills and use in-depth knowledge in order to ensure that critically ill patients obtain optimal care for their illnesses and injuries.

Family in the context of human society is a social unit of people affiliated by blood, marriage, or adoption or having a shared commitment to a mutual relationship, whether living together or not (Sánchez-Vallejo et al, 2017). The patient family setting comprises all those people related to the patient through affection, feelings or blood ties.

A private hospital is a hospital owned by a for-profit company and privately funded through payment of medical services by patients themselves, or through their health insurers or medical aid schemes.

Workshop is a purposely convened single, short educational programme of a group of ten to twenty people which focuses on a common interest or problem. The facilitator assists the group to improve their individual skills through the provision of knowledge and active participation and discussion.

1.7. CONCLUSION

An overview of the study has been given in this chapter. The next chapter will provide a review of the literature relevant to this study.

CHAPTER TWO

LITERATURE REVIEW

2.1. INTRODUCTION

In the previous chapter, an outline of the study was given. In this chapter, the literature which informed the development of a workshop to assist nurses to meet the needs of family members of patients in the critical care unit in a private hospital in Gauteng is presented. The following areas are covered: The critical care environment and its impact on family members, the needs of family members of patients in a critical care unit and evidence of efforts made to meet these needs and their relative success or otherwise. In addition, information is presented on how nurses in the clinical environment can best learn to change practice where required.

2.2. THE CRITICAL CARE ENVIRONMENT

Critical illness is usually life threatening as patients have a dysfunction on one or more organs resulting in physiological instability, or death as a result of acute, and severe, life-threatening biochemical and physiological malfunction (Sprigings & Chambers, 2018; Loss et al, 2017). The development of critical illness is often unexpected as its onset, although often preceded by changes in vital signs over a period of hours, is often undetected (Vincent, 2019). Once the critical illness is diagnosed, however, the patient receives multiple interventions immediately on admission leaving family members with no time to prepare and deeply concerned.

When scanning the academic literature related to the critical care environment, it becomes clear that a great deal is written about the working environment of critical care units from the nurses and other health professionals' point of views (Crilly et al, 2019; Monroe et al, 2020; Ulrich, 2019; Halm, 2019; Khan et al, 2018). These articles relate to reasons why critical care nurses suffer from burnout.

For a description of the critical care environment it is necessary to resort to the grey literature, and one of the best descriptions the researcher came across was the description written for family members by NHS England (Campbell, 2020). Their website refers to these units as characterized by specialist staff, and the presence of equipment including monitors, ventilators, IV lines, feeding tubes, drains, catheters, alarms and bleeps. They also mention that patients are cared for by a multi-disciplinary team and that their relatives may be sedated.

It is only when one reads the literature that describes family member and patient perceptions of CCUs that one reads about the equipment and other issues raised by the NHS. According to Castro and Botelho (2017), the critical care environment is a ‘huge shock’ to patients as they are threatened by a huge number of devices, being surrounded by strangers, and unable to move due to the catheters, drains and lines. Kynoch et al (2016) refer to critical care units being “far from home” and they can be a technologically bewildering experience due to presence of equipment as well as the rules, sounds, staff and routines. One author who does describe the modern critical care unit is Vincent (2013), who refers to the fact that while still used, ventilators are smaller, and many procedures less invasive than they were twenty years ago.

Due to the need for immediate and intensive care by the multi-disciplinary team, critical care nursing traditionally concentrates primarily on the individual patients. Staff focuses on the condition of the patient and the family members are often forgotten about or ignored until the drama of the situation dies down (Kohi et al, 2016).

2.3. THE NEEDS OF FAMILY MEMBERS IN THE CRITICAL CARE UNIT

There are many reasons why the admission of a patient to a critical care unit can be stressful for the family members. It is often unexpected and, as it is an unusual event, family members may be uncertain and they have to deal with an unfamiliar environment which includes advanced monitoring systems and aggressive treatments (Imanipour, et al., 2019). In addition to this, there is the concern about the outcome of the patient’s illness as most people understand that if a patient needs critical care the chances of his dying are high (de Beer & Brysiewicz, 2016). Furthermore, family members are often placed in a position of acting as decision-makers for critically ill patients (Jordan, 2019). Many patients with complex health-care needs are prescribed several medications on a daily basis. With admission to hospital, patients are often placed in a vulnerable position (Manias, 2015). Family members can therefore play an important role in supporting patients in decision making about managing medications and negotiating communication exchange with health professionals.

Many quantitative studies have been done on the needs of family members of patients in critical care units (Al-Mutair, 2013; Brooke & Warren, 2014; Botes & Langley, 2016; Al-sharari, 2019). All these studies use the Critical Care Family Needs Inventory (CCFNI) as a basis for data collection. The list of family needs was developed by Molter and Leske in 1983. They grouped into a list of forty five (45) needs and derived five dimensions of the CCFNI, viz. the needs for support; comfort; information; proximity and assurance. Since then authors have translated the tool into various languages including, but not only, Chinese (Chien & Lee, 2005; Dharmalingam, 2016; Wantiyah et al, 2018). With its wide use, the CCFN inventory is considered to be a valid diagnostic tool for assessing family needs in critical care units (Comisso et al, 2018). The difficulty with the quantitative studies is that, where used to assess deficits in management of the family needs, most studies identify the “top five” or top ten” items where the need is strongly expressed or where there is a marked deficit. When planning how to address these issues, inevitably some important issues would not have been addressed.

An important quantitative study in the context similar to this research was done by Kinrade et al (2009) in Australia. They compared opinions of nurses of family needs to the actual stated needs of the family members and found very little agreement between the two. The family members top rated needs were: having questions answered honestly; being able to visit any time and to see the patient often; to feel the nursing staff cared about the patient; and to be told of the expected outcome. On the other hand, while nurses rated also rated having questions answered honestly and showing the hospital personnel cared about the patient in the top five, none of the other priorities of the family were rated as important. Instead, the nurses rated assuring the family members that the best care possible was being given; that the family members be told the truth however distressing and giving understandable explanations in the top five. It is clear that, unless nurses understand the needs of the patients, they will not be able to meet their needs.

Kynoch et al (2016) suggested that there is a need for qualitative research in this field as it is necessary to understand the needs of the family members and to prioritize them within the context in which they are. Vincent (2013) points out that the environment in which critical care takes place, and even the care itself is evolving making it important to consider family needs in the current context, and, as important, to understand the nurses’ situation as they may not be able to respond to the family member’s needs (Borhani et al, 2017).

As with the quantitative studies, all the qualitative studies identified information needs as very important to families of patients in the critical care units. The qualitative studies however give a more in-depth idea of why the information is needed and what type of information is needed and even when it is needed. Czerwonka et al (2015) pointed out that while information needs are important, the needs changed over the recovery trajectory so that the information required on admission differed from that needed during the course of the admission. Both Al-Mutair et al (2013) and Gill et al (2016) rank information needs of most importance. Gill et al (2016) and Abdel-Aziz, Ahmed and Younis (2017) explain that this is because family members are in shock and are disorientated when their relative is admitted and have a need to know what is happening. Maina et al (2018) pointed out that family members are usually given general information about the patient's condition and prognosis but that the details were often left out. In this study the other problem was that the information was only conveyed to them when they were visiting which may go some way to explaining why many of the studies also identified the need to 'be there' or have a presence. Family involvement was a major theme of the study by Kalliopi et al (2020) and was one of the qualitative studies that examined family centred care in critical care units. This factor was also identified as important by Al-Mutair et al (2013).

Other needs commonly identified were a need for comfort, presence and/or support from the staff (Gill et al, 2016; Al-Mutair et al, 2013).

Two South African studies: de Beer (2019) and Kisorio and Langley (2016), identified spiritual needs as important which was not seen in the quantitative studies. In the latter study, family members referred to "a time of darkness" indicating, again, the need for information and reassurance.

Some of the authors gave reasons for the importance of the needs such as information sharing facilitating high quality and ethical care (Jordan, 2018), to prevent isolation, frustration and a positive influence on the physical and mental health of family members (De Beer & Brysiewicz, 2016).

2.4. ATTEMPTS TO MEET THE NEEDS OF FAMILY MEMBERS

As discussed in the previous section, one of the most widely perceived needs of family members is that of the need for information. It is interesting to note the reasons the nurses give in the literature about why information should be given to family members. These range from facilitating consent to perform procedures on the patient (Dibsh et al, 2019), reducing anxiety, directing appropriate decision making on the part of the family members and reducing readmissions (Ngcobo, 2018), giving family members a sense of control (Gill, 2016) and showing family members that the staff care about their relative (Silva et al, 2017). Each family member's own health may be affected by the admission, care and treatment of their loved ones in the critical care unit and by whether his or her needs are met and by the actions of the health care team (Davidson, 2009).

Some of the reasons are therefore altruistic but others are intent in getting cooperation to facilitate the work of caring for the patient.

Information sharing is, however, not always successful as information is sometimes given to the ‘wrong’ family member (Gill et al, 2016). Martin and Koesel (2010) refer to the need to create an environment that will encourage dialogue not only between nurse and family members but also between the patient and family members as being an obligation of the nurse. Ngcobo (2018) adds weight to this argument in terms of communication with the family as she believes that family members are more likely to ask for information from nurses than other members of the multidisciplinary team.

One of the problems that often occurs that interferes with communication, information sharing and all other needs of the family is that the patient in critical care is commonly seriously ill and needing emergency care which results in nurses focusing on the technological aspects of care rather than human and family care (de Beer & Brysiewicz, 2016). Another issue which makes it more difficult to facilitate information sharing in multi-cultural care settings is language differences as family members prefer to be spoken to n their own vernacular and in simple terms. In Provinces in South Africa such as Gauteng where the researcher is gathering data, this can be quite a challenge as not only are the official languages of South Africa spoken, but there are many migrants living in the province.

It would appear, as illustrated by Khaleghparat et al (2016) that there are pros and cons. They suggested the advantages of unrestricted visiting hours included a reduction in stress of the family members, and respecting their right and needs, improving interaction and providing information. The disadvantages were stated as a violation of patient’s privacy and interference with the treatment of the patient. In other words, unrestricted visiting met the family needs, and restricted visiting met the staff needs. The patient need seems to fall between the two. In an earlier article by the same authors Khaleghparat et al (2016), as well as in Maina et al (2018) it was suggested that head nurses of critical care units prefer to restrict visiting hours in order to exert power and control. Maina et al (2018) also commented that the nurses who were in favour of open visiting believed it would assist the family members, but that they saw the family members as “victims” and therefore felt sorry for them. Hetland (2017) and Iwashyna (2017) argue strongly in favour of open visiting hours, saying that it is a societal imperative to allow open visiting. It would appear from the study conducted by Jouot et al (2015) that staff resistance to open visiting hours the longer the policy is implemented.

2.5. CHANGING THE PRACTICE OF NURSES IN CRITICAL CARE UNITS

Critical care nurses have difficulty in identifying and meeting the family needs of critically ill patients and many appear to perceive family members in the critical care units as merely an extension of the critically ill patients and not looking into any emphasis on the needs of the families (de-la-Cueva-Ariza et al, 2018). In addition to this, as discussed earlier in this chapter, critical care nursing is a technologically-orientated, high stress and fast paced environment so any attempt to assist nurses to meet family needs requires innovative solutions in terms of changing behaviour. Due to these factors and the staff shortages many critical care units experience, there is limited time available for the education of these nurses in-service education (Joyce, Berg & Bittner, 2017).

A great deal has been written about the best ways to teach in a critical care unit, and much in known about improving both clinical and theoretical competence.

Continuous professional development training in the critical care environment may include workshop programmes, on spot training, clinical facilitation, and simulation, all of which help and support the trainees and critical care participants to apply what they have learned into practice (Darling-Hammond, 2017).

Joyce et al, (2017) suggest bedside teaching of bedside manners and professionalism, and suggest allocating time for this. In order to address the problem of limited time for teaching, Santosch et al (2018) suggest a number of models such as the 1-minute preceptor model, which provides a simple ICU teaching and mini-chalk talks which can be used during daily teaching of patient care, at the patient's bedside. Carlos et al (2016) emphasize the importance of advanced planning and pre-selection of patients for bedside teaching and state that it is very effective and practical way of incorporating teaching in a time-efficient way (Carlos et al, 2016), and stress the importance of creating a conducive bedside teaching climate to ensure that the patient and learners are comfortable with interaction.

Clinical educators need to identify learner's needs during patient's rounds as well as asking good questions so as not to teach what a student already knows, and use this as a teaching opportunity despite a limited time in the critical care environment, Joyce et al (2017). Such little teaching moment can help learners to acquire new skills and knowledge. Though the critical care unit is highly technical and a challenging environment, through the daily care influenced by the workplace culture and behaviours, clinical facilitation needs to remain focused at emancipatory practice development (Filmalter et al, 2015) including the personcenteredness, establishing therapeutic relations between all health care providers, family members, and stressing values such as respect for people and their right for self-determination (Heyns et al, 2017).

One of the practices in ensuring effectiveness and teaching in the critical care units is through simulation. Sean et al (2019) argue that teaching and practicing through simulation, intensifies competency, procedural mastery, development of communication skills and interprofessional team performance in the critical care environment. Simulation has developed from low density to high density, which can be used in a manner that certain procedures, such management of airway emergencies, intubation, endotracheal tube dislodgement (Keller et al, 2018) can be practiced without endangering patient's lives (Dhawan et al, 2016). Simulation as a teaching model is used to provide a safe learning environment that replicated the complex critical care environment and allows hands-on-practice during high-stakes scenarios that incorporated health care team dynamics. Efforts to improve teamwork in the health care context include multidisciplinary simulation-based resuscitation team training (Murphy et al 2015).

Evidence based practice through research in the critical care environment based on clinical facilitation appears to be increasing its momentum and needs to be implemented as a tool in getting research findings into practice (Cranley et al, 2017). Provision of adequately skilled and qualified registered nurses in the critical care unit improves the quality of care, health care delivery, research and policy. Innovative and adaptable managerial interventions need to be taken to be taken into consideration to improve critical care nurse' job satisfaction and retain skilled nurse (Zhang et al, 2013). These skilled, critical care unit nurses, should implement developed plans and appropriate strategies to fulfil psychosocial needs and improve the quality of life of family members of these patients (Divdar et al, 2019).

While the former information may be useful, the purpose of the current study is to assist nurses to meet the needs of family members of patients in the critical care unit in a private hospital in Gauteng. As seen in the literature quoted earlier, the greatest needs of families are not for clinical expertise - this is often assumed. It is rather for the 'soft skills' such as needs for support, comfort, information and assurance. Finding a way to get busy, technologically focused nurses to turn their attention to those needs is the challenge for this study. Family-centred care provides for a partnership process in decision making and does improve communication between family members and nurses (Jordan, 2019) but requires a systems change which may be difficult to implement and would certainly only take place over time.

It is worth reflecting on some of the learning models to get direction on how best to assist nurses in the critical care units to meet the needs of family members. As what is essentially required is behavioural change, it is important to examine these types of theories which, initially became recognized in the 1970's.

Bandura (1977) postulates that people learn from observing other people, and model their behaviour on others. As such learning involves attention, memory and motivation. In other words, the nurses' attention should be focused on the needs of the family and they need to be motivated to meet their needs. The memory aspect means that this process would need to be carried out many times or reinforced.

The theory of reasoned action Fishbein and Ajzen (2011) states that the best predictor of whether or not a person engages in behavioural change is whether he has the intention to do so. The more important a person perceives an action to be, the more likely he is to form an intention to engage in the behaviour.

Prochaska and DiClemente (2013) add a time dimension to the understanding of behavioural change saying that one passes through various stages when changing behaviour. They refer to pre-contemplation, contemplation, determination, action, relapse and maintenance as the stages of the change model. The nurses who, according to the literature do not always understand the needs of the family, would be in the pre-contemplation stage as they are unaware that their behaviour is problematic. It is therefore important to enable them to understand the family needs and the importance of meeting them as part of any intervention to assist them to meet family needs.

In changing the nursing practices, promoting organizational culture is an effective factor in reducing psychological burden, burnout, and job satisfaction in nurses. Organizational culture affects perception, intelligence, feelings, goals, job satisfaction, resilience, creativity of employees (Rushton et al 2015). This intervention can help nurses in the critical care unit to cultivate strategies and practices for renewal, including mindfulness practices and personal resilience plans.

Ward et al (2009) confirm the idea that knowledge transfer occurs in stages and over time. In a literature study they identified five components namely problem identification selection, development of knowledge, analysis of the context, followed by the teaching and learning and then use of the knowledge. This is useful information in guiding the development of an intervention for this study as it is context specific and while there is a great deal of literature on the needs of families of critically ill patients, there are no studies related to the specific context of this study.

Coaching in the critical care unit could be useful to improve team building, clinical teaching, rounding, efficiency, end-of-life conversation or implementation of quality initiatives (Gershengorn, Kosher, & Factor, 2014).

The other popular method of assisting health professionals to engage in behavioural change is through simulation, particularly for sensitive interpersonal issues. Bowen et al (2020) showed, through a randomized control study, that a successful simulation exercise relating to having difficult conversations with family members improved both empathy rating and ability to conduct conversations successfully. McKenney et al (2018) ran a two-day workshop where participants started by having sympathy for disabled people, but during the workshop, developed empathy and by the end demonstrated advocacy skills. Costello et al (2017) mentioned that simulation improved collaboration within the multi-disciplinary team. Phillips's (2020) simulation on poverty showed improvement in attitudes and empathy but did not improve insight or self-reflection abilities.

Healthcare services are consecutively obligated to consider and implement innovative strategies to ensure quality critical care delivery to healthcare users (Heyns, Botma, & Van Rensburg, 2015). Practice development focuses on methods to address the quality of care and advance healthcare practices.

While there are many ways of teaching and learning, for the purposes of improving critical care nurses' response to family members, it would appear from the literature reviews that workshops and simulations are useful methods and that active participation in learning is important. Short exposure to learning is useful but there is evidence that there needs to be follow up rather than presenting the workshop as a single event.

2.6. CONCLUSION

In this chapter literature relevant to the research topic has been reviewed and included literature which assisted in understanding the critical care environment, what is already known about the needs of family members of critically ill patients and attempts that have been made to meet these needs, and finally literature on possible ways of meeting their needs.

In the following chapter the research methodology of the study is described.

CHAPTER THREE

RESEARCH METHODS

3.1. INTRODUCTION

In this chapter, the research design, research setting, sampling, data collection, data analysis, trustworthiness, and ethical considerations will be described.

3.2. RESEARCH DESIGN

A research design is a systematic plan and process used by a researcher to solve the research problem. It provides a clearly defined structure which entails logical steps to guide the process, within which the study is implemented (Polit & Beck, 2010).

This study was a qualitative, exploratory study conducted in two phases with a small section of quantitative analysis of respondents' assessment. In the first phase semi-structured interviews, used focus groups as a data collection method to explore the perceptions of family members of how nurses can meet their needs. The second phase consisted of the development of a workshop designed to assist nurses to meet family needs. The principles of the ADDIE model was used to guide this process and was endorsed by means of an expert review (Aldoobie, 2017; Apostolopoulos, 2018; Kurt, 2017). Convenience sampling was used for both phases.

3.2.1 Qualitative research.

Qualitative research is a scientific method of observation used to gather data without numbers. This type of research answers questions why and how a certain phenomenon may occur rather than how often. It explores meanings, symbols, concepts, and characteristics, and aims at describing these things. It is primarily an exploratory research method used to gain an understanding and insights into problems. Qualitative research stresses the way in which people interpret, and make sense of, their experiences to understand the social reality of people (Maharajan, 2018). Numerical representivity is not the concern of qualitative research, but rather the deepening of understanding of a given problem. It produces in-depth information in order to understand the various dimensions of the problem under analysis (Almeida, 2017).

3.2.2. Descriptive research

Doyle et al, (2020) explain that descriptive research is useful in nursing studies where the experiences of people are under investigation and provides an appropriate method to address issues where the focus is on contributing and change and improving the quality of care.

Descriptive research designs assist the researcher to answer “who, what, where and when” questions rather than “why” questions. It assists in findings out the current status of the phenomenon under consideration. As Aggarwal and Ranganathan (2019) explain, “Descriptive research is used to obtain information concerning the current status of the phenomena and to describe "what exists" with respect to variables or conditions in a situation.”

3.3. RESEARCH SETTING

A research setting is the environment or the location in which data is collected. In the case of qualitative studies it is important that the data is collected in the place or environment where the participant normally works or lives so that there are no factors that impact on the study that would not normally be present in that environment. This refers to a natural setting that is “free of alterations” (Brink et al., 2012).

The first phase of this study took place in the critical care units in a private hospital, belonging to one of the large hospital groups in the country, with a bed capacity of 258. The hospital is situated in Gauteng province, South Africa.

At the time of the research study, there were (5) five critical care units (CCUs). Three of the CCUs, namely: coronary, trauma and cardiothoracic units were included in this study. These units were selected as the patients have a range of acuities with associated differing levels of potential impact on their families.

The hospital was purposely selected as, apart from being one of the largest accredited private hospitals in the province, it was accessibility to the researcher. The registered nurses working in these units have all followed either a certificate or a diploma course in critical care nursing offered by the company, or a diploma, or degree course in critical care nursing at a university. In the Coronary Care Unit, there were six (6) registered nurses who were qualified in critical care nursing science. Seven (7) registered had done a short course (Elementary course in in critical nursing science). Five (5) registered nurses who had not yet done the specialist training, and seven (7) enrolled nurses who had followed a non-formal orientation programme. Cardiothoracic Care Unit, with acuity of 30 beds, had (30) thirty registered nurses who were qualified in Critical Care Nursing Science, (5) five registered nurses had done a short course (elementary course in critical nursing science. (8) Eight new registered nurses who had not yet done the specialist training, then (10) ten Enrolled nurses. Trauma Critical Care unit had (15) registered nurses who were qualified in critical care nursing science, (5) five registered nurses had not yet done a short course (elementary course in critical nursing science) and (8) eight enrolled nurses.

Unlike other inpatients units, the visiting time for ICU is limited. A total of 60 minutes a day is allowed – divided equally into morning and afternoon visits. During this period, the family members are given updates about the clinical condition of the patient.

The setting of Phase Two was at a Critical Care Unit of the selected Private Hospital. Representatives of family members had the workshop on site and completed the questionnaires on site. CCU Nurses and Nurse Educators were contacted via email. They evaluated the workshop virtually and submitted their completed evaluations electronically.

3.4. POPULATION AND SAMPLING

3.4.1. Population

A population refers to all members who meet the particular criteria specified for a research investigation (Alvi, 2016). It is a targeted group for the study (Polit & Beck, 2010). Burns and Grove (2009) define the population as “the particular type of individual or element,” such as families of patients in the critical care units, who were the focus of the research.

The study population for Phase 1 consisted of family members of patients who had been admitted to the critical care units in the private hospital in Gauteng. As defined in chapter one, family members include people affiliated by blood, marriage, or adoption or those who have a shared commitment to or a mutual relationship with the other person, whether living together or not. For the purpose of this study all people who consider themselves as family members according to this definition were included in the study.

The study population for Phase 2 comprised of family members of Critical Care patients, educators and Critical Care nurses.

3.4.2. Sampling

Sampling is a process of selecting people from a group or population to participate in the study. The sample is the sub-unit of the population involved with the research work. In qualitative research, sampling continues until data saturation is reached because the total number of participants to be included is not known in advance (Brink et al., 2012).

The sample size is an important indicator of quality in qualitative research (Vasileiou et al, 2018). The sample size used in qualitative research methods is often smaller than that used in quantitative research methods due the emphasis on gaining in-depth understanding of a phenomenon (Dworkin, 2012). The size of the sample for Phase One comprised of eighteen (18) family members in six (6) family groups. In Phase Two, experts were used to evaluate the workshop. Experts were considered to be family members, educators and Critical Care nurses. These comprised 5 family members, 10 CCU nurses and 7 nurse educators.

Convenience sampling was used in this study. This is a specific type of non-probability sampling method that relies on data collection from population members who are conveniently available to participate in the study. The first available participants who meet the sampling criteria are included (Saunders et al, 2012). Certain practical criteria such as easy accessibility, proximity and availability as well as a willingness to participate are applied when using convenience sampling (Etikan, et al., 2016).

Data saturation refers to the point in the research process when no new information is discovered during data analysis (Polit & Beck, 2010). Data saturation means that a researcher can be reasonably sure that further data collection would yield similar results and would only serve to confirm emerging themes and conclusions.

3.4.3. Phases of data collection

3.4.3.1. Phase 1

Burns and Grove (2009) describe the inclusion sampling criteria as “those characteristics that a subject or element must possess to be part of the largest population”. Because data was collected from different population groups, each population had its own inclusion criteria.

The inclusion criteria for the selection of participants in this phase of the study were: family members who were adults aged 18 years or more whose family member had been a patient admitted to the CCU, and had been a patient for at least 48 hours. In addition, the family members were only included if they had visited the patient at least once during their stay in the CCU and who were able to communicate in English.

Family units were approached during the visiting hours to establish if they would be willing to participate in the study. Convenient dates and times were negotiated to suit both the family and the researcher. The size of the family unit varied but was expected to consist of between 3 and 6 members.

The size of the sample was determined according to when data saturation was reached. Initially, six group interviews were conducted to ensure that at least two (2) family groups from the different types of critical care units were included, i.e. coronary, trauma, and cardiothoracic care units. These units were selected to ensure a range in patient acuities and therefore potential impact on the family members.

In this study, data saturation was reached after interviewing eighteen (18) family members in six (6) family groups.

3.4.3.2. Phase 2

In phase two, experts were used to evaluate the workshop. Here convenience sampling was also used and experts were considered to be family members, educators and critical care nurses who would have insight and knowledge of critical care experiences (in the case of family members and CCU nurses) and of educational principles (nurse educators).

Inclusion criteria for family members were that a family member had been with a patient in the CCU for at least 24 hours to ensure they had sufficient experience of the CCU environment.

Inclusion criteria for the critical care nurses were that they had at least one year's experience as a CCU nurse.

Inclusion criterion for the educators was that they had to be registered with the South African Nursing Council (SANC) as Nurse Educators.

3.5. DATA COLLECTION FOR PHASE 1 – FOCUS GROUP INTERVIEWS

3.5.1. Data collection method.

In this study, focus-group interviews (FGIs) were conducted, which allowed focused, conversational, two-way communication between the interviewer and the participants. In these FGIs, questions were prepared ahead of time, which allowed the interviewer to be prepared (Keller & Conradin, 2019). Focus group interviews are frequently used as a qualitative approach to gain an in-depth understanding of social issues (Nyumba et al 2018). Nyumba et al (2018) suggest using what they refer to as "mini focus groups" when more people are difficult to access but where the group has a high level of expertise related to the research question. In this case they suggest that having 2 to 5 members is appropriate. Another author, Morgan (2019) refers to “dyads” when two people are involved in the focus group and the term triad refers to three people. FGIs were most suitable for this study as it was not feasible to interview the family members individually because they came to visit the patient as a family group. The semi-structured interview guide was used (refer to Annexure 1), and all members of the group were encouraged to participate in answering the questions.

3.5.2. Data collection tool

In this study, an interview guide consisting of four open-ended questions was used. Each with additional probes, was used (Annexure 1). Some questions were prepared, for the researcher to guide the interview towards the satisfaction of research objectives, but additional questions or probes were used during the interviews (Langos, 2014).

In qualitative research, the researcher is instrumental in gathering data (Polit & Beck, 2010). An interview guide helps the researcher to focus the interview to the specific objective of the study and encourages the participant to give more in-depth information freely (Polit & Beck, 2010).

The researcher designed an interview guide, together with the research supervisor. The tool was pre-tested on five (5) participants for content and face validity. The pretesting of the tool also gave the researcher the opportunity to improve his interviewing skills, refine questions and estimate time for completing and interview session. The pre-test results were not included in the main study.

3.5.3. The process of data collection

After requesting permission to conduct the study, from the manager of the hospital, the researcher met with the unit managers of the selected departments and units and asked for permission to interview the family members of patients in their respective units. The researcher was granted permission to interview family members of patients in the critical care units after visiting times.

- **Gaining access to the participants**

The prospective participants were approached by the researcher who introduced himself, verbally explained the purpose of the study and invited the individual participants to take part in the study. An information sheet (Annexure: 3) was presented to the participants who were interested in participating in the study. Questions from the participants regarding the purpose of the study and process were answered to the satisfaction of the participants. A consent form for participating in the study (Annexure: 4) and a consent form for digital recording (Annexure: 5) were issued before the commencement of the interview and voluntarily signed by every participant.

- **During the Focus Group Interviews (FGIs):**

All the interviews were held in locations which were suitable for the participants, most of which were in the family waiting rooms and the unit manager's offices with their permission, when convenient. These interviews were conducted after visiting times and when the participants were ready to participate in the study.

The duration of the FGIs varied from 20 minutes to 30 minutes each.

Family members were sometimes emotional and the researcher waited for them to begin or continue answering the questions and excused them if they did not wish to continue. Some however expressed the relief at being able to talk about their needs and difficulties.

The researcher thanked the participants for voluntarily participating in the study at the end of each interview.

3.6. DATA COLLECTION FOR PHASE 2 – DEVELOPMENT AND TESTING OF WORKSHOP

The researcher developed learning activities for each of the categories that emerged from the analysis of the data in phase 1. The details of how this was done according to the ADDIE model are described in detail in chapter 5.

Once the workshop material was developed, the CCU nurses and Nurse Educators were contacted via email. Once they had indicated a willingness to assist, the material (Annexure 7) plus an evaluation form (Annexure 2) and an information sheet (Annexure 6) were emailed to them. Family members were selected by the specific families to be their representatives. The family representatives were given questionnaires to complete after the FGIs. A total of completed questionnaires that were returned was twenty-two (22). These comprised of those from 5 family members, 10 CCU nurses and 7 nurse educators.

3.7. DATA ANALYSIS FOR PHASE 1 – FOCUS GROUP INTERVIEWS

3.7.1. Data transcription

Data transcription is the action of providing, in this case, a verbatim or word-for-word, written account of spoken words. The researcher transcribed all the interviews from the audio recordings himself in order to get an in-depth understanding of what was said, therefore familiarizing himself with the data which is one of the steps in Braun and Clarke's (2013) 6-step process of data analysis.

The information shared by each focus group was saved and a number was used by the researcher or the purpose of identification. All the data transcripts were checked for completeness and accuracy by concurrently listening and reading all the typed scripts before they were further analysed.

The six steps of Braun and Clark's system of thematic analysis are familiarizing yourself with your data, generating initial codes, searching for themes, reviewing themes, defining and naming themes and producing the report (Braun & Clark, 2013).

- **Reading and Familiarisation.**

The data scripts were repeatedly read by the researcher while listening to the audio recordings to gain the sense of data and to become familiar with the content, and in this way the researcher became immersed in the data and was able to identify issues pertinent to the research question. The researcher was also searched for meanings and patterns of the entire data for categorization.

- **Generating initial codes**

In this phase, the data is organised in a meaningful and systematic way. Coding reduces lots of data into small chunks of meaning allowing concepts of interest to be viewed in a more meaningful way related to the research problem (Braun & Clark, 2013). Clear ideas which contained related information were highlighted using the same colour font and pasted into a table for easy identification and categorizations of the code data.

- **Searching for themes**

A theme is a feature or pattern that captures something significant or characterizes particular perceptions about the research question (Braun & Clark, 2013). Themes come both from the data and from researcher's prior theoretical understanding of the phenomenon under study (Bernard, 2015). The coded data were presented in a table to help group the codes in themes. Potential themes were deduced and coded after which they were established into themes and categories.

- **Reviewing themes**

Once the potential themes and categories were established, the researcher returned to the data set and compared the theme with the data to ensure there was a "good fit" (Caulfield, 2019) and whether there was sufficient data to support the themes and categories as entities.

- **Defining and naming themes.**

Each theme was defined or explained which was useful in assisting the researcher to be sure he had an adequate understanding of the data. The names provided for a comprehensive description of the data content (Braun & Clark, 2013). The themes were then named using easily understandable names (Caulfield, 2019).

The researcher's supervisor assisted in the process and acted as a co-coder to improve trustworthiness of the process.

- **Report writing**

In this phase, report writing began which included the set of fully worked out themes.

3.8. DATA ANALYSIS FOR PHASE 2 – DEVELOPMENT AND TESTING OF WORKSHOP

The data received from the experts was entered onto an Excel spreadsheet. Evaluation of the workshop activities (Ice-breaker, Slide Presentation, Group Discussion, etc.) was done using checklists. Refer to Annexure 2 for all the evaluation tools/checklist.

The quantitative data was subjected to descriptive statistical analysis using means only for each element of each section of the workshop individually. The data was displayed graphically to demonstrate the relative rating of each element.

A summary of all the sections of the workshop was then presented in graphical form (refer to Chapter 6 of this study).

3.9. RIGOUR OF THE STUDY

Trustworthiness, which is the process of persuading themselves and others that the research findings have truth value and are worthy of attention (Lincoln & Guba, 1985) was applied to the qualitative aspects of the study. It is the foundation of high quality qualitative research (Birt et al, 2016). It is the degree to which a researcher can be confident about data collected for a study (Lincoln & Guba, 1985). It helps external judgements to be made about the consistency and neutrality of the findings of the study.

3.9.1. Credibility

Credibility refers to the confidence that can be placed in the truth of the research findings. It establishes whether the research findings represent plausible information drawn from the participants' original data and is a correct interpretation of the participants' original views (Korstjens & Moser, 2018). The following strategies to ensure credibility were satisfied, which were prolonged engagement, member checking, and persistent observation.

In terms of prolonged engagement, the researcher established the rapport with the participants, and spent time with them prior to the commencement of the interview. This made the participants comfortable to share their personal experiences and feelings about their needs while their family member was a patient in the unit.

Member checking was done during the interview session as it was not possible for the researcher to follow up with the relatives at a later stage. The researcher checked his understanding of what they had said, analysed the participant's responses and asked for comments to ascertain if the conclusions drawn represented their perspectives.

Researcher credentials are an important aspect of credibility. The researcher himself has extensive knowledge of the critical care unit dynamics. While the researcher was a novice researcher, his supervisor had extensive experience in qualitative research and guided the process. The entire research process was actively monitored by the supervisor to ensure adherence to the methodology of this research.

3.9.2. Dependability

Dependability refers to the consistency and the reliability of the research findings and ensures that someone outside the research study will be able to follow, audit and critique the research process (Moon et al, 2016). To this effect, the researcher provided a full description of the research and methods.

The research supervisor provided guidance and ensured that the researcher was adhering to the research protocol. The research supervisor provided constructive feedback regarding the data analysis to ensure better interpretation of the findings and evaluated the content of the interviews for quality and adequacy.

3.9.3. Conformability

Conformability refers to the degree to which the results of an enquiry could be corroborated by other researchers (Anney, 2014). An audit trial was created by the following measures:

- The interviews were digitally recorded to capture all information given by the participants and they were transcribed verbatim.
- All raw data will be kept safely for two years after publication and six years without publication but will be made available should there be an audit enquiry.

3.9.4. Transferability

Transferability refers to the degree to which the results of qualitative research can be transferred to other contexts with other respondents (Anney, 2014). By ensuring that the research methods were well described it enabled another researcher to replicate the study should they wish. As the study was confined to one hospital it cannot be certain that the results will be transferable either to another private CCU or to public sector CCUs.

The quantitative aspect of the study used an evaluation tool developed by the researcher that confirmed to the educational assessment principles of fairness, flexibility, validity and reliability determined by the researcher and his supervisor using a standardized 4-point Likert scale. Due to the small sample size it was not possible to test the validity and reliability specifically.

3.10. ETHICAL CONSIDERATIONS

In this study, ethical decisions were made and adhered to, based on the guidelines described by Grove and Gray (2018) which include obtaining the informed consent, the right to self-determination, privacy, anonymity and confidentiality.

3.10.1. Permissions

Permission to conduct this study was obtained from the relevant authorities (refer to Annexures 9-12):

- The University of the Witwatersrand Postgraduate Committee granted the title approval on the 30.07.2017.
- The Human Research Ethics Committee (Medical) of the University of Witwatersrand and granted the clearance certificate, protocol number M170655 on the 06.09.2018.
- Research site was sought from Research operations committee and Hospital General Manager of the private teaching hospital. The permission was granted on the 27.09.2018, research approval number UNIV-2017-0056.

3.10.2. Informed consent

Informed consent is legal procedure to ensure that a participant knows all the risks and costs involved in participating in a study.

An information sheet (Annexure: 3), written in English language was given to all participants having established participants were able to read and understand English. It was written manner that will be easily understood the participant, followed the guidelines of the Ethics Committee of the University and was administered in such a way that participants had enough time to consider participating in the study. The purpose of the study, potential benefits, and risks associated with participating in the study, time commitment, and explanations of the process and procedures were included. In addition, anonymity and confidentiality were discussed, and it was emphasized that participation was voluntary, and that participant would withdraw any time during the study and that it would not lead to any prejudices.

There were two consent forms – one for participating in the study (Annexure 4) and another giving consent to digital recording during the interview (Annexure 5). Participants for Phase 2 also provided with an information sheet and asked to complete consent forms to participate in the study. Experts were also provided with an information sheet (Annexure 8).

3.10.3. The principle of respect for persons

The principle of respect for persons implies respect for their human dignity. It means appreciating the individual's autonomy and freedom to make their own decisions where there are no external influences. Respect for persons can be violated by withholding information and misinforming the participants about the purpose of the study (Grove & Gray, 2018; Polit & Beck, 2010; Brink et al., 2012). It is important to understand an individual's right to self-determination.

The fulfilment of participant's right to self-determination and full closure were met through the following actions:

- The participants were informed that participation in the study was voluntary.
- They had the right to withdraw at any time from the study – this was communicated to the participants.
- The participants were made knowledgeable of the purpose of the study.
- Participants were treated with respect throughout the study.
- There were no benefits or rewards promised to the participants for them to participate in the study.
- Participants were encouraged to ask questions for clarification about the research.

3.10.4. The principle of beneficence

Beneficence involves acting in such a way to benefit participants while promoting their welfare and safety as well as protecting them from exploitation. Any information provided by participants through their study involvement must be protected (Barrow, 2019).

Participants were informed that participating in the study would not result in any form of discomfort or harm, their comfort was assured during the interview and, in order to ensure there was no breach in confidentiality, the researcher transcribed the data himself.

3.11. CONCLUSION

The research design and the methods were discussed in this chapter, and the findings of the study will be outlined in the next.

CHAPTER FOUR

RESULTS OF FOCUS GROUP INTERVIEWS WITH FAMILY MEMBERS

4.1. INTRODUCTION

In this chapter, the results of the study are presented. A content analysis of the FGIs with the family members of patients in the critical care was done according to Braun & Clark's (2013) seven stages of Thematic Analysis, namely: transcription, reading, and familiarization, coding, searching for themes, defining and naming themes and report writing.

4.2. PHASE 1: RESEARCH FINDINGS

4.2.1. Demographic information

The family members comprised this group of participants. They were all adults and were mainly females. The size of the sample comprised of eighteen (18) family members in six (6) family groups. There were no specific criteria for selection of the participants other than that they should be adult family members of the patients in the Critical Care Units. Of the eighteen family members, three were men, fifteen (14) were women and one (1) did not disclose his/her gender. The family members of all the participants who responded in this category had spent more than 1 day in CCU.

4.2.2. Discussion of the themes

Two themes were produced during this process namely 1. Information needs, 2. Family support. Eight categories emerged from the two themes. These are reflected in Table 4.1.

Table 4.1 Themes and Categories

Themes	Categories
1. Information needs	1.1 Condition of the patient 1.2 Critical care environment – machinery and alarms 1.3 Treatment and care 1.4 Timing of information
2. Family support	2.1 Communication - Verbal - Non verbal 2.2 Counselling 2.3 Empathy 2.4 Accommodating family needs - Visiting times - Lodging - Comfort - Privacy

4.2.2.1. Theme 1: Information needs

In this study, the participants acknowledged that there was a gap in their knowledge about certain aspects related to their relative, the patient, and needed that information to solve a problem – whether real or imagined. This theme has four categories, namely condition of the patient, critical care environment – machinery and alarms, treatment and care, and timing of information.

- **Condition of the patient**

In this study, the participants needed to be informed in the manner that they understand the condition of the patient. Participant 2 stated that she wanted the information about the condition of the patient and not what the doctor will be called in for. *"All I want to know is how the patient is doing, in terms of the blood pressure, is it high or low? What is happening at the time?"* the information about the condition of the patient should be explained in simplest terms which the family members should understand.

Participant 3 elaborated, *"We need people who are able to explain like nurses in CCU, they must not go deeper with terms that the family does not understand, like words used in medicine, and such words should be simplified to our level, for our understanding."* The family of the patient in the critical care unit should be informed of the condition of the patient as in getting better or not, she said, *"It can be better that the nurses can tell us whether the patient is getting better or not and it should not only be when we ask them to."*

- **Critical care environment**

Critical care units (CCUs), sometimes called intensive care units (ICUs) are specialist hospital wards that treat patients who are seriously and critically ill and in need of continuous monitoring (Anandociva, 2020). The families of the patient find the critical care unit very frightening when they find their relatives admitted to the critical care units, having invasive devices like endotracheal tubes, nasogastric tubes for feeding and drainage, tracheostomies, central and arterial lines and being connected to the machines.

Participant 4 *"It is also very important that the nurse explains what the machines, which are attached to our relatives, are doing, as well as the alarms, which are scary at times, in this environment. If they explain, and give us information, then it helps us to keep calm."*

Some of the family members of the patients in the critical care unit were happy that they were informed of the environment in which their loved ones were taken care of, and this helped to allay their anxiety and reduced their stress as well their frustrations. Participant 7 said, *“OK……..in terms of the help and information that the nurses have given to us, we were happy, they have given us all the information that we needed upon getting to the ICU. She explained to us about the environment, and that the doctor has been in to see the patient, prescribed medications, and that the patient has had breakfast and tolerated it. This was good indeed.”*

- **Treatment and care**

This study highlights how important it is to include family members of patients in the critical care unit, regarding their contribution in the treatment plan and their support. Family members play an important role in supporting patients in decision making about managing medication and negotiating communication exchange with health professionals (Manias, 2013).

Participant 3 stated that it would be better to be informed of the treatment plan and the care of the family member in the critical care unit. *“We need people who can raise and re-enforce the need for nurses being trained in counselling family members,”* Participant echoed, *“I think that there should be a counselling training program for nurses in the critical care unit, which will help in allaying our anxiety and fears.”* In order to effectively support family members, nurses need to learn the perceived needs of family members in order to meet them.

Family support enhanced through assurance, enables the family to cope with the crisis situation they encounter when a patient is in a critical condition. Participant 11 added, *“I think that we need someone who will give hope, even if it is hopeless……..and if it is hopeless, the nurses have got to tell us, and this will prepare us for the worst.”* Educating families about patient’s diseases, treatment and physical status helps to prepare them for what they will encounter when they visit the patient.

Most patients and family members need their spiritual support structures and care, while in the critical care units (Willemse et al, 2018). Allowing pastors and church ministers in Christian centered communities help supporting families spiritually, as well as traditional healers and leaders. Participant 4 echoed *“The nurses need to identify the family support structures such as those members in the community, other than the family members, who are close to the patient, who associate with the patient or the family. Such members who are attached to the patient, such as pastors, church members, community leaders are very important family support structures which need to be involved in the care of the patient.”*

4.2.2.2. Theme 2: Family Support

In this study, the family support was identified as an important need for them. This theme comprised of four categories: Communication (Verbal & Non-verbal), Counselling, Empathy, and Accommodating family needs.

- **Communication**

Communication refers to an act of transferring information from person, place or group to another. Communication is more than simply the transmission of information.

Participant 2 stressed the importance of communicating to the families at home, through sending a picture. *"They need to allow us to use our cell phones to takes pictures to communicate with the rest of the family outside the intensive care unit."* This requires an element of success in transmitting or impacting a message, whether information, ideas or emotions. This includes face to face, telephone, documentation and media.

Participant 9 stressed the importance of communication in relieving stress and stabilizing emotions when family members are admitted to the critical care units. *"Honestly I think it's all about communication. I am shy to go to them and ask questions, and I stress a lot when my family members are hospitalized. Personally, I would like it that they come to me and explain what is happening."* There may be more than one recipient, and the complexity of communication means that they may receive a slightly different message.

Communication also covers body language, gestures, how we dress or act, where we stand, and even our scent. There are many subtle ways that we communicate (perhaps even unintentionally) with others. For example, the tone of voice can give clues to mood one of voice or emotional state, whilst hand signals or gestures can add to a spoken message. Participant 1 stated that it would not only be a matter of verbal communication, *"At times I only need somebody to hold my hand………..eh! and tell me that it will be better someday."*

Participant 2 added, *"We just need the spirit of 'Ubuntu' which is about humanity, and good personality. Nurses in the intensive care unit should be welcoming and this is what makes us feel free of stress and frustrations."* Nurses working in the critical care unit, use curative communication skills to provide new information, encourage understanding of patient's responses to health troubles, explore choices for care, help in decision making, and facilitate patient wellbeing (Yoo, Lim, & Shim, 2020).

Communication is a two way process, one person can speak and the other one listens. It can also occur between people of different cultures. Culturally sensitive communication in the intensive care unit (ICU) has the potential to influence patient and family experiences. Cultural competence is crucial in acute and critical care, where emotions are running high, there is a sense of alarm and urgency, there are high-stakes decisions being made, consent may be problematic (Benbenishty & Biswas, 2015). Key decisions, progress and bad news need to be effectively communicated and expectations managed in what, for many, is a protracted, and often stormy course.

Culturally sensitive communication is important because populations are becoming increasingly diverse. Cultural diversity relates to a person's country of birth and ancestry, languages spoken, religious affiliation, ideas and belief systems, customs, and social behaviours. Communication should also consider cultural diversity, in populations which are diverse and dealing with families of different cultural backgrounds (Brooks, Bloomer, & Manias, 2019). Participant 3 confirmed this two-way process: *"I think it is very important to have nurses who listen to you and to let you express yourself and carefully identify what your problems are, unfortunately these nurses will leave you with buried emotions."*

- **Counselling**

In this study, participants suggested that nurses be trained in counselling family members of patients in the critical care unit. Counselling referring to the provision of professional assistance and guidance in resolving personal or psychological problems.

Participant 8 stressed the need for counselling. *"I think that there has been a great support in terms of emotions, a bit more emphasis is on the family support. I think that there has to be some counselling in our situation."* Counselling can often be provided to family members of patients in the critical care unit through pastoral care or social workers.

Participant 12 added and commented about the need for nurses being trained in counselling family members, *"I think that there should be a counselling training program for nurses in the critical care unit, which will help in allaying our anxiety and fears."*

- **Empathy**

The ability to share someone else's feelings or experiences by imagining what it would be like to be in that person's situation.

Participant 2 stated, *"First impressions last, I think that nurses should be empathetic and should make us feel comfortable and accepted as patient's relatives."* Empathy is further defined as an attempt to better understand the other person by getting to know their perspective. It is broken down into the following three categories. Cognitive, the ability to understand how a person feels and what they might be thinking. Emotional, which is the ability to share feelings of another person, and compassionate empathy, is being able to take action, and to help however one can. In the prevailing COVID 19 pandemic, masks and other protective equipment hamper the ability of health-care professionals to express empathy and provide fine-tuned communication, to the patients and their families in the critical care unit (Azoulay & Kentish-Barnes, 2020).

Participant 4 who had an experience of losing a loved one in the critical care unit, said, *"I think offering a tissue to someone who is crying, or holding someone's hand can be an act of empathy, and this helps family members to feel comfortable and less stressed."*

Participant 11 added, *"When it was all hopeless, the nurse organized a counsellor to come and comfort us, and she even prayed with us, she would even say, 'we will make it through this.' She would also organize the church members to come and pray with us."*

- **Accommodating family needs**

The needs of family members are varied, and nurses working in the critical care units must become attuned to these and acquire skills to direct interventions more appropriately to meeting these needs.

While providing holistic care, acute life-threatening illnesses represent a crisis situation not only for the individual patients but also for the family members who remain for long hours in the critical care waiting room. When arriving to the unit for the first time, family members are exposed to a high acuity environment as well as circumstances foreign to them.

- **Visiting times.**

This refers to visiting loved ones in the critical care unit and is thus an important and integral part of family care, especially since the patient-centered and family care has been increasingly encouraged to improve the quality of care has been increasingly encouraged to improve the quality of care and the satisfaction of patients and their families. The patient-centered ICU paradigm recognizes the patient-family unit as inseparable and supports visitation designed to meet the needs of patients and patients' families (Rileyet al, 2014)

Admission to intensive care units is potentially stressful and usually goes together with disruption in physiological and emotional function of the patient. Participant 1 *"If they can allow more family members and more time for us to be with our family members, and also to visit at night, this can help us feel better and less frustrated."* Participant 5 added, *"Eh….Most of the time it's nice to go to the hospital, and find a nurse who is friendly and would allow you to have some time with your relative."*

The role of the families in improving ill patients' conditions is important and the health service team works in a patient and family orientated system (Khaleghparat et al, 2015).

Participant 9 said, *"I find it a bit hard to understand why we are only allowed two per time, especially with our visiting time being limited. I don't have time to looking after him because I am working, I would understand if we could be told why we should not be staying for a longer time."*

Flexible and open visiting policy can have a positive effect of the patient's condition and eventually their families and help them cope with this crisis and be more satisfied, however more literature is still required to clear the uncertainty (Castro & Paranhos, 2019) Participant 1 said, *"If they could allow more family members in the intensive care unit and allow more time, for us to be with our family member. They must allow me to visit, sometime at night, when I need to see my loved one. That will make me cope and more satisfied."* Nurses must be aware of the significance of open visiting for patients and their families' benefits and consequently visitors must be aware of the patients' privacy, current geographical space for care provision and their ability to help patient care (Bell, 2011). Open visiting hours reinforce the trust in the families concerned and result in better communications between hospital staff and family members.

When the rules and policies of the critical care unit are explained to the family, there is a plan to put them into place, in terms of making arrangements for visiting their loved ones. Hospital visits are limited and to some extent, prohibited to ensure that relatives do not contaminate other family members, patients, or health-care professionals (Azoulay & Kentish-Barnes, 2020). Participant 6: *"We started to organize ourselves, and if someone is coming, we would work it out that one stays five to ten minutes and you are out, so that the next person would also spent the next ten minutes, We can't be upset because of the rules, we have to face the fact, it is ICU and they have a job to do."*

Lodging

When family members are caring for a loved one who is critically ill in the critical care unit, it is very important that their needs are considered. For many people, the long distances which have to be travelled to reach the hospital, is a very serious problem, in terms of transport, safety and exhaustion. Participant 9 said, *"Some of us are from far away from the hospital, and they should accommodate us here to be close to the patient, and even allow us to visit at night."*

Some critical care units have limited provision for the overnight stay for the family members of patients for who are staying long as a result of disease conditions. Some family members would want to stay overnight because they live a long distance from the hospital or because they want to be close to the patient.

Comfort

Comfort refers to a sense of relief of discomfort, a state of tranquillity and satisfaction or any feeling that makes life easy or pleasant. Promoting comfort through welcoming practices should be understood as the right of a family that has a relative in the critical care unit. The promotion of comfort in this dimension demands interdisciplinary actions, and an integrated teamwork based on a humanistic philosophy in which a nurse has an important role to play. The identification and recognition of the importance and priority of family members' needs enable nurses to timely provide appropriate information and support for family members (Bandari, Majideh, & Nahid, 2015) Participant 2 stressed that it is comforting to be next to a welcoming nurse, *"Nurses in the intensive care unit should be welcoming, and that is what makes us feel free, accepted as part of the team and comfortable. You also feel that your relative is in good hands."*

For the family, comfort is promoted on the first encounter with the nurses at the entrance and in the critical care unit, when they are treated kindly, treated with tranquillity, greeted with a smile or approached with a conversation. The attitude of staff is important as a way of showing interest in their needs and accompanying them to the bed of the relative, providing them with an explanation of the cause of the visit delay, and ensuring the replacement of the lost time. This all means comfort to the family. Family members of intensive care unit (ICU) patients are sometimes highly distressed and report lower satisfaction with communication and emotional support from staff (Carlson et al, 2015).

Physical and personal support

Participant 8: *"Eh…….yes, yes, yes, whenever we walked to that ICU, there are chairs, and even before we walked into the chairs are organized. I am aging 89, and I can't stand for an hour without assistance. There is no discomfort I could experience."*

Privacy

Patient's family members need to be given a moment to be with their loved ones, alone, if they want to discuss some private matters and when they want to pray. Participant 4 stated, *"Privacy to a family member is important, and families should be allowed to discuss some private matters and also when they want to talk to the patient, not in front of the nurse. A nurse needs to give a bit of space, and allow the family and the patient to catch up. Even some of the prayer sessions need privacy. Some of the nurses are not actually much calculative in the sense that the family need to talk in privacy."*

The nurse safeguards the family and the patient's right to privacy. The need for health care does not justify unwanted intrusion into the family and the patient's life. The nurse advocates for an environment that provides for sufficient physical privacy, including auditory privacy for discussions of a personnel nature and policies and practices that protect the confidentiality of information.

Participant 11 added, *"I think some nurses would give you space during visiting time to be next to the child (patient), whereas some would not give you that space you need next to the child, that also makes one uncomfortable. Sometime, you need a private prayer with your God, and some of the nurses would not give you some space. They would continue making some noises around you until you lose your trend of thinking in what you are saying to God, but some of them will give you that space you need, and would say: 'I am right here if you need me'."*

4.2.3. Research findings and discussion

In this section, the findings of the study will be discussed in relation to the support for the findings in the literature.

4.2.3.1. Information needs

Information need is often understood as an individual or group's desire to locate and obtain information to satisfy a conscious or unconscious need. The most relevant needs for family members in the ICU are related to safety and information (Padilla-Fortunatti et al, 2017).

Identifying the degree of importance of family needs will allow the health team to improve its relationship with families in ICUs. An effort to meet informational needs of families is a major goal for intensive care workers (Gaeeniet al, 2014). According to Sankpal and Punwatkar (2015), information need is a factual situation in which there both a desire to know and a need to be informed of what is happening.

According to Alsharari (2019), the unanticipated admission of a patient to the intensive care unit (ICU) can be particularly frightening and stressful for their family members. This situation leaves the family members of such patients in a frustrated, stressed and unstable state. Such family members need information regarding the condition, treatment and care rendered to their loved ones (Almutar et al, 2013).

Acutely ill patients as well as their families in an acute critical care environment, have considerable information needs. When families of patients in the critical care unit are well, and timely informed, of the patient's condition, and an acute critical setting, their stress, fear and anxiety associated with hospital admission can be alleviated (Kynoch et al, 2019).

Information needs for the family of patients in the critical care unit, is of paramount importance as the patient's life and prognosis (Pascal & Gabrielle, 2020) has changed leaving the rest of the family in panic state with questions to be answered. Family members have an even higher need for information, during the withdrawal of life sustaining therapy (Vanderspank-Wright et al, 2011) when they are not getting any responses from their loved ones, who may have been sedated or passed away (Velasco et al, 2018). The fact that most patients assisted at Intensive Care Units (ICU) are unable to communicate for themselves makes their families the main speakers in the information process (Velasco et al, 2018). This happens frequently in a CCU situation due to patients being sedated, on mechanical ventilation and having a decreased level of consciousness.

de Beer and Brysiewicz (2016) support the findings of this study that the need for information is not only about the condition of the patient, but also about the environment in which the patient is cared for. The patient's family should be enabled to understand the patient's environment as a result of information they receive from the health professionals. According to Chhetri and Thulung (2018), Critical care unit, with an array of equipment, medications and noises tends to become very unfamiliar to the family of admitted patients, with more emotional stress. Traumatic experience gets triggered when a member of the family is admitted to the critical care unit as an emergency admission which is unplanned. Family members are not psychologically prepared for their patient's critical illness and change of condition; their lives get disorganized, adding more stress. Nurses need to give timely information and support (Kang et al, 2020; Ocak & Avsarogullari, 2019; Schmollgruber, 2019)

4.2.3.2. Support

It is clear from the literature that support and information needs are closely related as much support is actually provided by giving information.

Hashim and Hussin (2012) indicate that support can be given in the form of words, by communicating either telephonically or in person and that this helps family members face the crisis. Fateel and O'Neill (2015) point out that nurses need to consider the family's individual needs carefully and to understand them on an individual basis in order to provide support. This idea is supported by de Beer and Brysiewicz (2019) who suggest that consideration of cultural diversity is an important aspect when providing support. These authors also indicate that allowing family members to visit the patients in an essential part of support. This aspect was identified by family members in this study where the data collection took place prior to the Covid epidemic. The impact of not being able to visit has been well described by Rose et al (2020), who refer to the issue as a "moral injury" to staff members who depend on family support of the patients as much as the patients themselves do. The presence of family at the end of life reduced the risk of deeply embedded grief.

An important aspect of support raised by Jordan (2018) is spiritual care to both the patients and the family members when the patients are in critical condition. Spiritual support from the church ministers and pastors helps family members stabilize during the admission of the loved in the critical care unit.

Gibaut et al (2013) refer to the family member's need for "comfort" which includes the need to be respected, accepted, valued, heard and understood by the team, as well as the perception that the team was concerned with the family suffering and with possibilities to minimize it. This latter point supports the finding of this study that empathy was an identified family need.

Some of the family members come from a distance and need to be accommodated and supported by the hospital staff through the hospital facilities. Wiruh (2016) refers to the need to have satisfactory waiting rooms, but the need in South Africa seems to go beyond this. The practice of providing accommodation for parents of hospitalized children is well described but the provision of accommodation for adults appears to be neglected (Franck et al, 2015).

Anecdotal evidence is that in the private sector, efforts are often made to inform family members of nearby accommodation on a fee-paying basis but no evidence could be found of the hospitals providing accommodation except in the case of paediatric hospitals.

4.3. PHASE 2: RESEARCH FINDINGS

This phase involved the development of the workshop to address the needs of family members.

4.3.1. Demographic information

Three CCU (3) nurses had between two- and five-years' experience, three (3) stated that they had more than 5 years' experience and three (3) did not give this information. Twenty-two (22) participants' responses were included in the data set. Of these ten (10) were CCU nurses, seven (7) were educators and five (5) were family members.

One (1) participant was younger than 30 years, fourteen (14) were between 30 and 40 years, six (6) were 30 to 40 years of age and two (2) were more than 40 years of age.

4.3.2. Research findings and discussion

To plan for the workshop, a content analysis of the FGIs with the family members of patients in the critical care units was done according to Braun and Clark's seven stages of Thematic Analysis. The process followed in the development of the workshop is discussed in the next chapter.

4.4. CONCLUSION

In this chapter the findings of the interviews with family members have been discussed and supported by the literature. In the following chapter the development of the workshop to address the needs of family members will be discussed.

CHAPTER FIVE

DEVELOPMENT OF THE WORKSHOP

5.1. INTRODUCTION

In the previous chapter, the results of the study were presented. A thematic analysis of the interviews with the family members of patients in the critical care units was done according to Braun and Clark’s seven stages of Thematic Analysis as described in the Data Analysis Chapter.

In this chapter, the development of a workshop was based on the findings of Phase One of the study, using the ADDIE model to guide the development. The ADDIE model is an instructional design tool that was developed for the U.S. Army by the Centre for Educational Technology at Florida State University (Molenda, 2015) and has subsequently undergone various revisions but has been widely accepted as a model for instructional design. Kurt (2017) points out that the sequence should not be seen as a linear process, and that the developer should feel free to revise decisions if necessary in an attempt to achieve the intended outcomes. The model consists of five phases namely: Analysis, Design, Development, Implementation and Evaluation (ADDIE). The development of the workshop will be described under each phase of the ADDIE Model.

5.2. ANALYSIS

The analysis phase of the model is used, firstly, to identify the probable causes for a performance gap (by the nurses) in meeting the needs of the family members of the patients in Critical Care Units. In this study, determining this performance gap was done by means of interviewing the family members of patient in the critical care units to establish, from their point of view, what their needs were. The performance gap in this case was therefore to establish what changes in performance or behaviours and attitudes were needed on the part of the nurses to meet the needs of the family members. This Analysis Phase (of the ADDIE Model) is the foundation for all other phases of instructional design. During this phase, the problem and its source are defined and a possible solution is determined. Kurt (2017) refers to this phase as the “goal setting stage” where the focus of the designer is on the target audience, in this case, the nurses who work in the critical care unit. It is important during this phase to determine the existing knowledge of the nurses to ensure that duplication does not occur during the workshop and to give them the opportunity to explore new knowledge and competencies.

The findings of this Phase 1 of the study were explained in the previous chapter, but to recap, they were (1) Information needs which included a need to know about the condition of the patient; the critical care environment with an emphasis on machinery and alarms; treatment and care patients, and also the timing of the giving of that information and (2) Family support which included communication – verbal and non-verbal; counselling; empathy and accommodation of family needs.

The outcome for this workshop was therefore:

Critical care nurses will be able to recognize and respond constructively to family needs related to information and support.

The second step in the analysis phase is to conduct an analysis of the learners, who, in this case are the nurses working in the critical care unit.

In Coronary care unit, there are six (6) registered nurses who are qualified in critical care nursing science. Seven (7) registered have done a short course (Elementary course in in critical nursing science). Five (5) registered nurses who have not yet done the specialist training, and seven (7) enrolled nurses who have followed a non-formal orientation programme. Cardiothoracic care unit, with acuity of 30 beds, has (30) thirty registered nurses who are qualified in critical care nursing science, (5) five registered nurses have done a short course (elementary course in critical nursing science. (8) Eight new registered nurses who have not yet done the specialist training, then (10) ten Enrolled nurses. Trauma critical care unit has (15) registered nurses who are qualified in critical care nursing science, (5) five registered nurses have not yet done a short course (elementary course in critical nursing science) and (8) eight enrolled nurses.

All the professional nurses, whether specialized or not, function under the Scope of practice of persons who are registered under the Nursing Act 50 of 1978. The acts and procedures they perform are, diagnosing the health need, prescribing a program of treatment, execution of a program of treatment, care of and administration of medicines to a patient, monitoring of vital signs, prevention of diseases, and promotion of health, promotion and maintenance of hygiene, physical comfort and reassurance of the patient, facilitation of the maintenance of nutrition, supervision and maintenance of elimination by a patient, facilitation of communication by and with a patient in the execution of the nursing regimen, and co-ordination of the health care regimen provided for the patient by other categories of health personnel (SA Nursing Council, 1984).

These professional nurses (the majority of whom qualified after successfully completing the bridging course for Enrolled Nurses leading to registration as a General Nurse) are provided with an opportunity to undergo the six-month short course known as “Elementary Critical Care course” offered by the employer. This program entails the theoretical and clinical components related to critical care nursing. The overall aim of the program is to ensure the safety of the patients admitted to the critical units.

This Elementary program has the following intended learning objectives.

- Describe the pathophysiology, clinical manifestations, and treatment modalities of cardiovascular, respiratory and neurological diseases and conditions in the intensive care units.
- Acquire knowledge in the health assessment and monitoring of critically ill patients.
- Analyze common laboratory findings of patients for making nursing judgments, identify the clinical problems.
- Participate in the nursing management for critically ill patients on non-invasive and invasive mechanical ventilation.
- Participate in the nursing management for critically ill patients in shock, including the transportation of critically ill patients.

As can be seen from the above objectives, they are all aimed at clinical care, and therefore patient safety, but do not provide any education relating to psycho-social skills which means that the competencies of the professional nurses in this regard are based on those mastered in their basic training, in continuing professional development sessions they may have attended and on life skills learned during their lives.

5.3. DESIGN

In this phase, the focus is based on the learning objectives, content, subject matter, lesson planning, assessment instruments used and media selection. Chueng (2014) states that this includes choosing the optimal methods of teaching and creating useful, action-oriented learning objectives to guide the learning. Drljača et al (2017) indicate that in this phase, the information gathered during the analysis phase is used to find the optimum way of facilitating learning to enable the participants of the workshop to meet the outcomes.

The next step in the design phase is to choose the optimal method(s) of instruction and to create specific outcomes to guide the learning (Cheung, 2014).

As explained during the analysis section, the family members had to broad needs, namely:

1. Information needs which included a need to know about the condition of the patient; the critical care environment with an emphasis on machinery and alarms; treatment and care patients, and also the timing of the giving of that information and

2. Family support which included communication – verbal and non-verbal; counselling; empathy and accommodation of family needs.

When translating these into specific outcomes for the workshop these became:

- By the end of this workshop, the critical care nurses will recognize, and act timeously upon, the needs of family members:
- To have information regarding the patient’s condition, his treatment and care.
- To understand the purpose of the CCU equipment
- By the end of this workshop, the critical care nurses will be able to support family members through communication, provision of comfort and advice in an empathetic manner

In deciding on the method of instruction, the initial plan had been to run an on-site workshop. This method was chosen as it allowed small groups of staff members to leave the unit to attend at one time, so leaving sufficient staff on duty to care for the patients. It was, however, important that the workshop was run on-site and near the CCU in case of emergency and the staff members having to return at short notice. As the nurses were already stressed it was thought important to have the workshop during on duty time which also enabled nurses who work together, as a team in the critical care unit (Alotaibi et al, 2016) to attend and to provide for a consolidated approach to resolving the problems identified by the family members. A workshop also allows for interaction, sharing and reflecting on present practices, in line with the constructivist approach to learning.

To summarize, the criteria that guided the choice of learning method were:

- Participants must have the opportunity to interact with one another and participate in active learning

- The workshop must be presented so it does not inconvenience the staff or interfere with quality patient care
- The workshop should not be an additional burden on the nurses.

The material for the attendance workshop had already been developed when the Covid-19 pandemic affected South Africa and had a particular impact on the health services. As a result, the material was reworked to allow for it to be used in a no contact environment and in the absence of a facilitator. The original criteria were used to guide the development of the online material.

5.4. DEVELOPMENT

Having set the specific outcomes and decided on the method of instruction, the next step was to create and organize the actual learning material to be used in the workshop. The workshop was developed by the researcher and subsequently approved by the researcher's Supervisor. A map of the workshop was first developed to guide the development of the specific material to be used. It has been designed so that each activity can be presented individually, but in sequence, to enable participants to join for relatively short periods at a time. It would be ideal to run the entire workshop in a morning but it is recognized that this may not be feasible.

Table 5.1. Map of Workshop

Objective for activity (rising from phase 1 findings)	Planned activity
To expose the participants to the evidence related to family needs.	Background of the research study
To assist participants to recognize and act upon the needs of the family	Case study. Use You Tube video to identify issues raised in research findings
To assist participants to convey information about patient's condition, treatment and care	Videos of vignettes demonstrating positive and negative communication with family members of various cultural backgrounds
To assist participants to explain the purpose of CCU equipment	Creation of a poster to explain equipment commonly used
To encourage participants to communicate and advise in an empathetic manner	Creation of personas for strengthening empathetic communication

To enable participants to share lessons learned and commit to change (if appropriate)	Wrap up

The next step of the development phase is to construct the actual learning material. In this phase, the instructor/facilitator develops all media needed for the instruction, and any supporting documentation. It is also important that, before putting all the designed ideas into action, the instructor/facilitator needs to tests them so as to check if there are no grammatical and spelling errors, including the mechanics of the course (Quigley, 2019; Apostolopoulos, 2018).

Table 5.2. Lesson plan for workshop

Time	Activity	Rationale & Resources	References
O8:00	**Ice breaker: Sharing feelings through a mask**. Each participant to draw a face on the paper plate given to them to indicate how they are feeling today. **Instructions to participants**: You have each been given a paper plate and some Koki pens. Draw a life size shape of your face and cut out the mouth and eyes if you wish. Decorate the card face to show what you think people see/know/believe about you i.e. on the outside. The other side represents what you feel about yourself i.e. things going on the inside, what people do not necessarily know or see. If you wish to, show your mask to another member of the group.	Paper plates, Koki pens & scissors Nurses will have come from a stressful situation and this gives them a chance to debrief, laugh and share which should make them more receptive to the content of the workshop and to build rapport with one another. It may also assist them to be more understanding of family members "masks".	Cserti, 2019.

08:15	**Slide presentation on findings of research study** The facilitator will present slides of the findings of the first phase of the study where he explored the needs of the family members. Each slide is accompanied by a short narrative to explain the slide further where necessary. This narrative will be read / spoken by the facilitator. It can be found in the notes section under each slide. **Instructions to participants:** I will now share the findings of my research with you which determined what the needs are of family members of patients in CCU. The workshop is based on these needs and each activity that you will engage in explores how we can meet their needs.	PowerPoint slides (in assessors' folder labelled "Research findings" or use this link – click on the blue writing) As this entire workshop is based on the findings of the first phase of the study, it is important to share these findings with participants which includes sharing the family members' voices" with them through the quotes that are included.	Garner, 2013
08:30	**Group discussion on findings** The facilitator will ask, "What challenges do we as nurses have in trying to meet these needs?" **Instructions to participants**: As we share our responses to the question, please write your concerns and	Flip chart and pens. CCU nurses are often burnout and feel they cannot do more so may be resentful when asked to deal with needs of family members on top of what they see as a heavy workload. This exercise gives them the opportunity to air these issues but by putting them in	van Blankenstein et al, 2011

	challenges on the flip chart. We will use this as a "parking lot" and leave the concerns and challenges on the board as we work through the various activities. At the end of the workshop we will revisit the parking lot and see if there are any concerns or challenges there that we have not dealt with during the workshop.	the parking lot rather than trying to deal with them, it is less likely to derail the workshop.	
08:40	**You Tube video of "Lindsay's Story".** The facilitator will show the video which takes 12 minutes. **Instruction to participants**: This is an American video but I am sure you will identify with the people involved. While you watch it, please look for opportunities both taken and missed where staff members could have met the needs of the family in the video. Write your ideas on separate pieces of paper which have been given to you. When you are done, I will pass round a box. Please place your pieces of paper into the box. I will then pass the box around and ask you each to take one piece of paper out of the box and explain to the group what you think	Laptop, data projector, speakers and screen for easy viewing. Pieces of paper approximately A5 in size. Make sure the participants have pens. A box to collect the papers afterwards. This activity is designed to reinforce the findings of the study. By viewing a video, it is hoped the participants will engage and feel empathy towards the family members as well as seeing some good practice related to family needs.	https://www.youtube.com/watch?v=gUNvdCL6sEk Wong & Wong, 2019

	the writer was saying when she wrote on that piece of paper. I will put the slide that you have already seen that shows a summary of the findings of my study. - Do the ideas of the participants match with the findings at all? - Do they show ways we could meet the needs of the family members?		
09:10	Comfort break		
09:20	**Clip from e-TV – cultural groups in RSA** The facilitator will show this short video lasting 2 minutes and 20 secs which examines prejudices and compliments regarding some of the cultural groups in South Africa. **Instruction to participants:** Everyone in the video in Lindsay's Story appeared to be from the same cultural group. As you watch this short video, think about how	Laptop, data projector, speakers and screen for easy viewing. During the data collection phase of the study it became clear that cultural diversity and norms impact on the nurses' ability to meet family needs. This short video is a sensitization exercise which leads onto the next activity.	https://www.youtube.com/watch?v=1cgDgheT1ZI&t=3s

	cultural differences impact on our abilities to meet family needs in Johannesburg.		
09:25	**Pairs discussion – conveying information to family members** The study showed that family members have a need for nurses to communicate with them. **Instruction to participants:** I would like each of you to think of a family member you have recently had contact with. I would like you to work in pairs. Please share your family members "profile" with your partner. Together discuss the best way of conveying information about their relative's (the patient's) condition, treatment and care to this family member. You should write down "lessons learned" from this exercise and stick it on the wall for others to see.	Paper / cards, pens and Prestik. By thinking of a family member who they have recently engaged with, and with the culture video fresh in their mind, it is hoped that the participants will use their insights to share with one another "good" ways of communicating despite any challenges. Working in pairs is less threatening than sharing in a big group but the lessons learned will be available to all.	Barkley,et al (2014)
09:50	**Feedback from exercise** The facilitator will encourage sharing of lessons / get feedback from each pair and group similar "lessons" together on the wall. The facilitator will refer to the	The feedback will assist not only in looking at what to tell the family members but how to do this.	Barkley,et al (2014)

	summary slide of the study and see if lessons have been learned about each aspect of information needs of the family members and encourage sharing of how to convey information to different family members.		
10:20	Tea break		
10:50	**Poster creation – explaining equipment** Family members expressed a need to know more about equipment used in the treatment and care of their relatives. **Instruction to participants:** In the box here, you will find cards, each with one type of commonly found pieces of equipment in CCU. Choose a card and then create a poster to explain the piece of equipment to a lay person. You may use any of the materials provided to assist you. Please remember this is not an art project so it does not matter if you cannot draw well. It is designed to get you thinking about how to explain equipment that we use all the time to people who are not familiar with it. The cards include the following types of equipment:	Poster paper, crayons, old magazines, glue, Prestik By actively involving participants they are most likely to engage. They will inevitably feel a bit uncertain as family members are in CCU, which may encourage empathy as they are being asked to do something they have not previously had to do. Sharing the posters may assist in gaining more information for themselves about the equipment as well as assisting them to share such information in an understandable manner. Critical care unit and services rely on complex equipment (Anandociva, 2020).	Bracher, 1998

	• ECMO machine • Ventilator • CVP line • CPAP system • Patient monitor • Endotracheal Tube • Intravenous Infusion Pump • Syringe Driver / Syringe Pump • Nasogastric Tubes (NG Tube) • Indwelling Urinary Catheter (IDC) • Blood warmer • Defibrillator When you are done, stick your poster on the wall with the Prestik provided and then “tour” the gallery of posters and write any comments (compliments and suggestions) on the post-it notes which you should then stick onto the relevant poster. Once this is done, the facilitator will invite feedback and then show the explanations given on the website below which demonstrates an easy way of having information		

	to hand for family members – for example, it could be placed in the waiting room.		
11:30	**Use of personas to encourage empathetic communication** Family members not only required information but wanted nurses to show empathy. The use of personas assists in encouraging engagement with individuals which in turn encourages empathetic communication. A single card with one persona on it is given to each participant. For ease of reference, the link is provided here to view all 10 personas. **Instruction to participants:** Choose a partner. Each of you have been given a card with the photograph of a person and a scenario relating to the scenario. Read it carefully and spend a few minutes thinking about the persona's situation. Then role play what you would say to him/her to your partner who will play the role of the persona.	Cards with personas Personas are a "narrative representation of a … client that is grounded in the philosophy of user-centeredness. Van Rooij, 2012). They are used to integrate empathy into professional education.	Van Rooij, 2012

11:45	**Debriefing after exercise with Personas** The facilitator then debriefs the participants using the following questions: • What factors did you consider when planning what to say to the persona? • Why did those factors make a difference to the way you approached him/her? • How does it help to know about the person? • How can we be more empathetic in real life towards family members? (Give full attention, look for verbal and non-verbal cues, set aside your own assumptions, acknowledge the person's feelings, allow an emotional connection, take positive action) **Instruction to participants:** In order to help remember the key points of empathy, I am giving you a card with the points written on one side. It is designed to be small enough for you to carry in your pocket.	Having engaged with the personas, the debriefing is designed to link the role play back to the theory of empathy and to encourage participants to use empathy more effectively. Key point of empathy cards.	Dinkins & Cangelosi, 2019

	On the other side of the card, I would like you to write what you will do differently after today relating to family members.		
12:00	**Wrap up** The facilitator will "visit" the "parking lot" created in the first activity and discuss whether participants have gained any assistance in meeting family needs during the workshop related to the specific issues raised. **Instruction to participants:** As a last exercise, and while you help yourselves to a drink and a snack, I would like you to complete an "exit card". You should answer the question, "What were three key points or 'take-aways' from today's workshop?" When you have done this, please stick the cards on the wall with Prestik and then walk around and view one another's (anonymous) cards.	Blank cards and pens. The exit cards provide the facilitator with immediate information that can be used to assess participants' understanding, monitor their questions, and gather feedback in order to improve the workshop for the next groups of participants.	Lang, J. (2016)

5.5. IMPLEMENTATION

The implementation phase is the level of delivery of the instruction and ensuring that the maximum efficiency and positive results are obtained (Kurt, 2018). The instruction designer also focuses on redesigning, updating and editing the course in order to ensure that it is effectively delivered. This phase also promotes the participants' understanding of material; it also supports the participants' mastery of objectives (McGriff, 2015). In this phase, procedures are developed in order to implement instruction and continuous evaluation is enhanced to ensure further improvement.

The original intention when designing the research study was to run the workshop for a group of CCU nurses and for a group of experts to attend and evaluate the workshop. Due to the Covid-19 pandemic, it was not possible for the researcher to gain access to the research site to offer the programme and at the time it was equally impossible for the unit managers to release nurses to attend the workshop.

For these reasons, the number of experts used to evaluate the workshop was increased to gain a broader perspective and as a result it was possible to use basic descriptive statistics to conduct a more in-depth evaluation than was envisaged in the original design of the workshop.

5.6. EVALUATION

This is the stage where the instruction is finally tested and focuses on the accomplishment of the goals and objectives of the project. It is of vital importance that each step or phase is evaluated to ensure that goals are achieved and that materials meet the learner's needs (Quigley, 2019).

The workshop lesson plan (as seen in table 5.2 above) was emailed to all the experts. The lesson plan was written in detail so that the experts could read exactly what the researcher intended to do in the workshop. Links to all the media to be used were provided and all experts were provided with an information sheet, the workshop lesson plan and the evaluation tool. They were also given the workshop material in separate files in a zipped folder in case they were unable to access the links.

The results of the evaluation are presented in the next chapter.

5.7. CONCLUSION

This chapter has presented the development of the workshop which was based on the findings of phase 1 of the research study. The results of the evaluation of the workshop are presented in the following chapter.

CHAPTER SIX

ANALYSIS OF FEEDBACK ON THE WORKSHOP

6.1. INTRODUCTION

In the previous chapter a full explanation was given of how the workshop was developed and evaluated. This chapter describes the findings of the evaluations – both the quantitative data and the qualitative data.

The demographic data is presented first. After this, in order to enhance readability, a short description of each activity is given followed by the analysis of quantitative data, and then the qualitative data of each activity and brief discussion on the findings related to the specific activity. A summary of the findings is then given consisting of a comparison of the scores for the various activities and the scores in relation to the evaluation of the overall workshop.

6.2. DEMOGRAPHIC DATA

Twenty-two (22) participants' responses were included in the data set. Of these ten (10) were CCU nurses, seven (7) were educators and five (5) were family members. Three participants were men, eighteen (18) were women and one did not disclose his/her gender.

One (1) participant was younger than 30 years, fourteen (14) were between 30 and 40 years, six (6) were 30 to 40 years of age and two (2) were more than 40 years of age.

Three CCU (3) nurses had between two- and five-years' experience, three (3) stated that they had more than 5 years' experience and three (3) did not give this information. Inclusion criteria for the critical care nurses were that they had at least one year's experience as a CCU nurse.

Five (5) representatives of family members were included. The family members of all the participants who responded in this category had spent more than 1 day in CCU. Inclusion criteria for family members were that a family member had been with a patient in the CCU for at least 24 hours to ensure they had sufficient experience of the CCU environment.

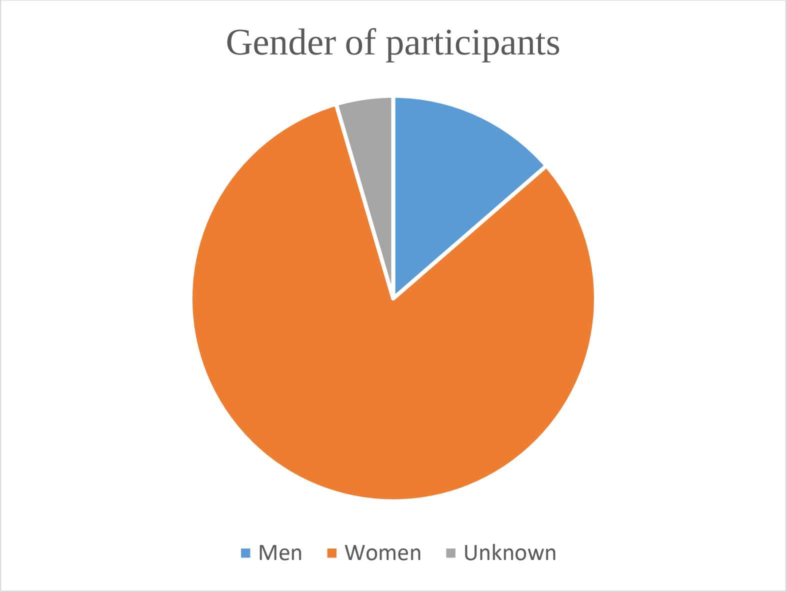

Figure 6.1. Gender of Participants

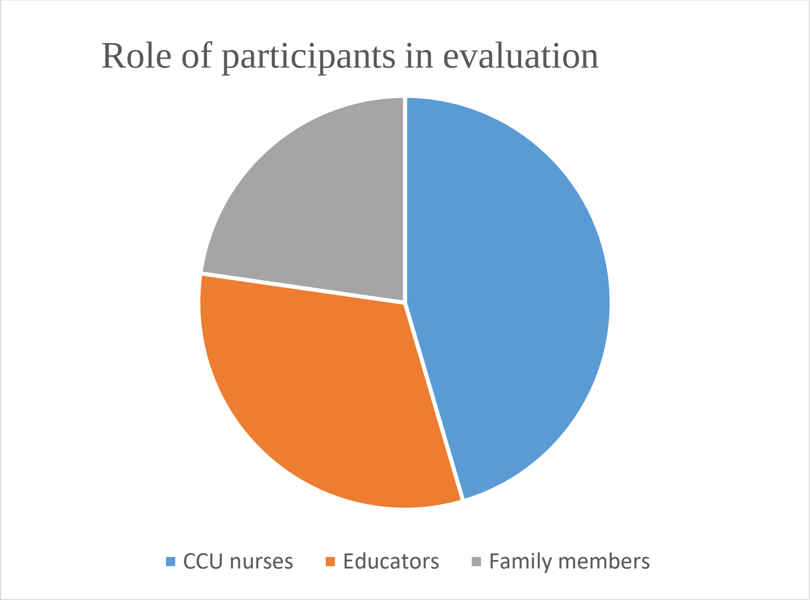

Figure 6.2. Role of Participants in evaluation of Workshop

6.3. ICEBREAKER SESSION

6.3.1. Description of the activity

During the icebreaker session participants are given a paper plate each and they are asked to draw a face on the paper plate to indicate how they are feeling today. If they wish, they can share it with another participant and explain it further.

6.3.2. Quantitative evaluation

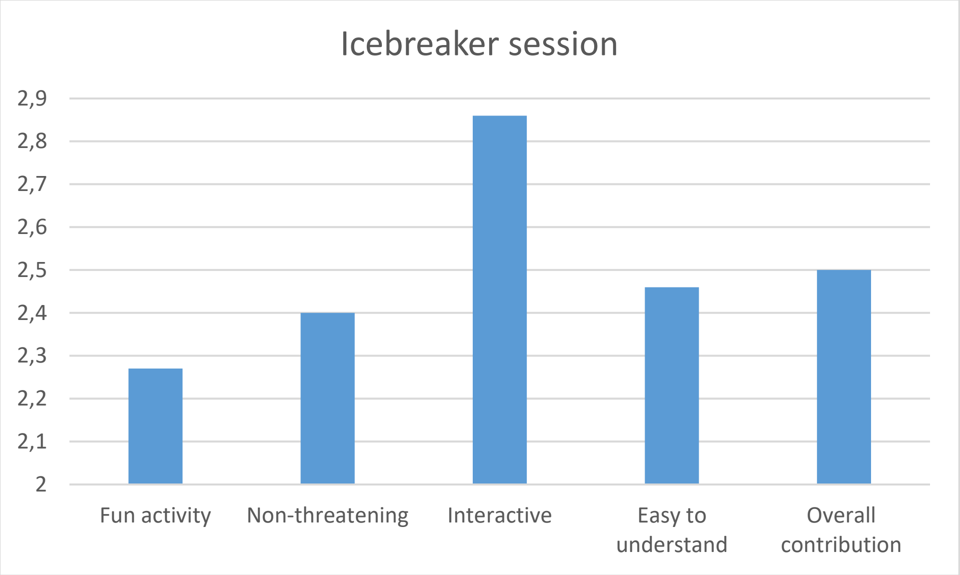

Figure 6.3. Evaluation of Icebreaker session

The quantitative evaluation shown in figure 6.3 showed that the ice breaker session according to participants, encouraged interaction for the participants in the workshop and scored 2.86 (95.32%). Overall contribution to the workshop scored 2.5 (83.3%), ease of understanding 2.46 (82%). The criteria where participants were asked to assess whether the activity was non-threatening scored 2.4 or 80%. Fun activity scored the lowest at 2.27 (75.6%) according to the participants.

6.3.3. Qualitative evaluation

Eighteen (18) of the participants commented on the ice-breaker exercise. Of these, six (6) were educators, four (4) were family members and eight (8) were CCU nurses.

Most comments were positive saying that the workshop was useful to help the nurses "switch" off from the stressful environment in the units so they could participate in the workshop. Others felt it assisted the participants to communicate with one another and feel freer to share.

A family member (F21) said, "The icebreakers assisted to get the participants work together to as a team in promoting meeting the needs of family members of patients and enhanced interaction."

The CCU nurses felt it assisted in getting them to participate in the workshop as mentioned by CCU7 who said, The ice breaker got me into the workshop and I realized I needed to open up to the rest be able to participate."

Only one academic (A23) had reservations about the icebreaker and said, "I think that the ice breaker is too intense for the participants, I don't think it will encourage them to relax and feel safe in the space".

6.3.4. Discussion on evaluation

The term "ice breaker" refers to an activity or game designed to welcome attendees and facilitate the conversation among participants in a meeting, class teaching or team building (Heathfield, 2020). Icebreakers help participants to interact comfortably with each other, and the time taken to build a foundation as participants get to know one leads to a successful workshop (Cserti, 2019). This could help build the participant's confidence about starting a conversation as well as increasing their knowledge of geographical locations of communities (Durey et al, 2017).

In this case of this workshop, it was designed for CCU nurses actively involved in patient care who, the researcher believed, needed time to "de-stress" and "switch off" from the challenges of the unit in order to concentrate on the workshop. It was therefore important to provide a light-hearted activity and to enable participants to feel included, and provide a bridge into the workshop itself.

The results indicate that the activity succeeded in getting participants to interact and participate but it does not appear to have been as entertaining and light hearted as it was intended and could have been viewed as being threatening to some. On reflection, while making of paper plate masks might have been fun as it involved drawing and colouring in, the activity probably evoked serious issues as they were asked to draw a mask on the outside to show how they appear to outsiders, but record what they were feeling inside on the inside of the "mask". It did however enable the candidates to debrief prior to commencing the workshop and assisted participants to open up, encouraged sharing, and think out of the box.

6.4. THE SLIDE PRESENTATION

6.4.1. Description of the activity

The facilitator presented slides of the findings of the first phase of the study where he explored the needs of the family members.

6.4.2. Quantitative evaluation

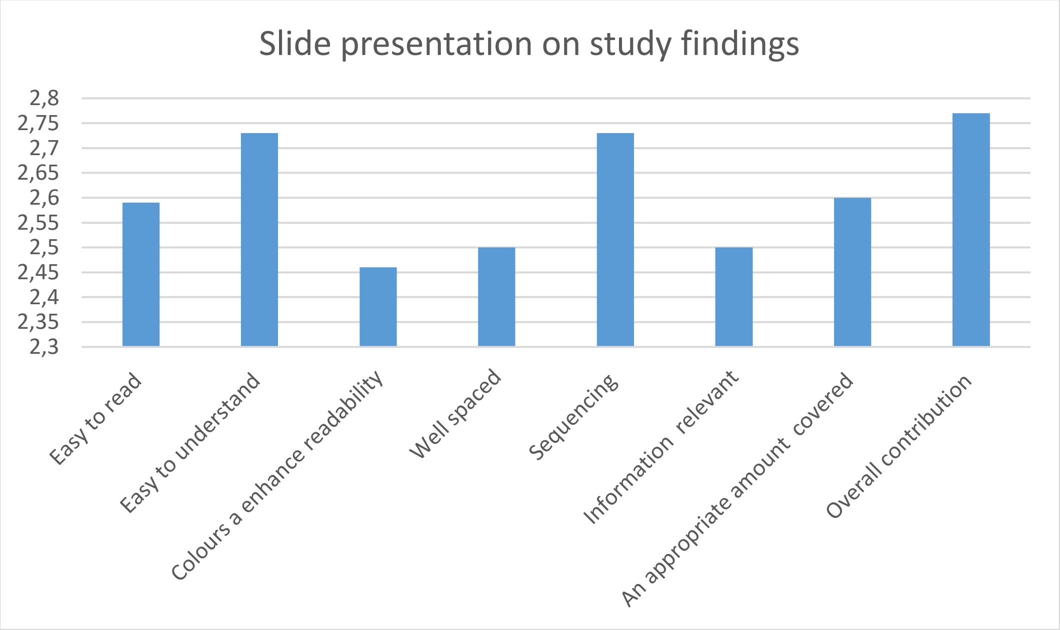

Figure 6.4. Evaluation of slide presentation on study findings

Figure 6.4 shows that participants scored the overall contribution to workshop as the highest, 2.77 (92.3%). Sequencing and ease of understanding scored 2.73 (91%); the appropriateness of the amount of the material covered scored 2.6 (86.7%). Easy of understanding scored 2.73 (91%) and the use of colour to enhance readability scored the least at 2.46 (82%), however the ease of reading itself scored a higher score of 2.59 (86.3%). The relevance of the information presented scored 2.5 (83.3%).

6.4.3. Qualitative evaluation

Seventeen (17) participants commented on the slide presentation. Five (5) of these were educators, four (4) were family members and eight (8) were CCU nurses. The respondents were complimentary about the slides themselves saying they were “colourful” (C1, C2, A11, C16 and C17); relevant (C1, A11, C17, C20 and C21); appropriate (F4, A13, C16, F21, F22); understandable (F6, C7 and A8) and clear (A9, A11, C16, F21).

A family member (F21) stated that, “Slides had an impact in changing the way the nurses work in the critical care unit.”

The CCU nurses spoke mostly about the relevance and content of the slide presentation. A CCU nurse (C7) said, “This presentation contributed to widening of our awareness in terms of meeting the needs of the family of patients in the critical care units. Very much understandable”

Educators commented mainly on the technical aspects of the slides, but A8 said, “They were also eye openers to the participants of the workshop. These contributed to the success of the workshop and will also add to the change in the nurses in terms of meeting the needs of the family members of the patients in the critical care unit.”

6.4.4. Discussion on evaluation

The purpose of a slide presentation is to communicate information to the audience Donohoe (2020). Slides keep the audience focused during the presentation and provide additional information. Slides follow each other during the presentation, either at a set time or when the presenter advances slides manually. It is generally accepted that good presentations should consist of 10 to 12 slides to get a message across, however it may sometimes be necessary to have more depending on the complexity of the subject Russell, (2020).

There were twenty-four (24) slides in the presentation used in this workshop which exceeds the above advice. Participants indicated however that the presentation was easy to follow and the technical aspects of the slides generally received a positive rating. On reflection, it may assist to break the presentation into two sections and to space the writing on the slides and intersperse it with an activity but the researcher’s concern is that this would break the flow of the presentation which was designed to provide a background so participants understood the purpose of the workshop and that it was based on evidence gathered from the family members in their units.

The slides appear to have contributed to the widening of nurses awareness of the needs of family members. Findings in the presentations helped participants of the workshop understand how nurses can best meet the needs of families in the critical care unit.

It was clear from the evaluation that this feedback from the research was one of the success factors in the workshop.

6.5. THE GROUP DISCUSSION ON THE FINDINGS OF THE RESEARCH STUDY

6.5.1. Description of the activity

In this activity, participants were asked the question, *"What challenges do we as nurses have in trying to meet these needs?"* The intention was to given them an opportunity to react to the research findings as the researcher acknowledged that the family members might wish for certain things to be done but they might prove challenging in the CCU. Group discussion gives a chance to all participants for an extended speaking and listening practice (Abhishek et al (2017). They were asked to write their responses on a flip chart and the plan was to leave those responses visible throughout the workshop as it was hoped that some solutions to those challenges might be found during the course of the workshop. Another feature of this activity was that the opportunity was given at the end of the workshop to revisit any issues not dealt with and this flip chart was referred to as the "parking lot" to ensure that concerns not dealt with during the workshop could still be addressed.

6.5.2. Quantitative evaluation

The quantitative feedback seen in figure 6.5 shows that participants valued the need to debrief 2.6. (86.7%) but were less sure that the activity contributed to the workshop 2.46 (82%) and the questions rated scored 2.41 (80.3%). With regard to the idea of having a parking lot for aspects that needed to be addressed at the end of the workshop, this scored 2.46 (82%).

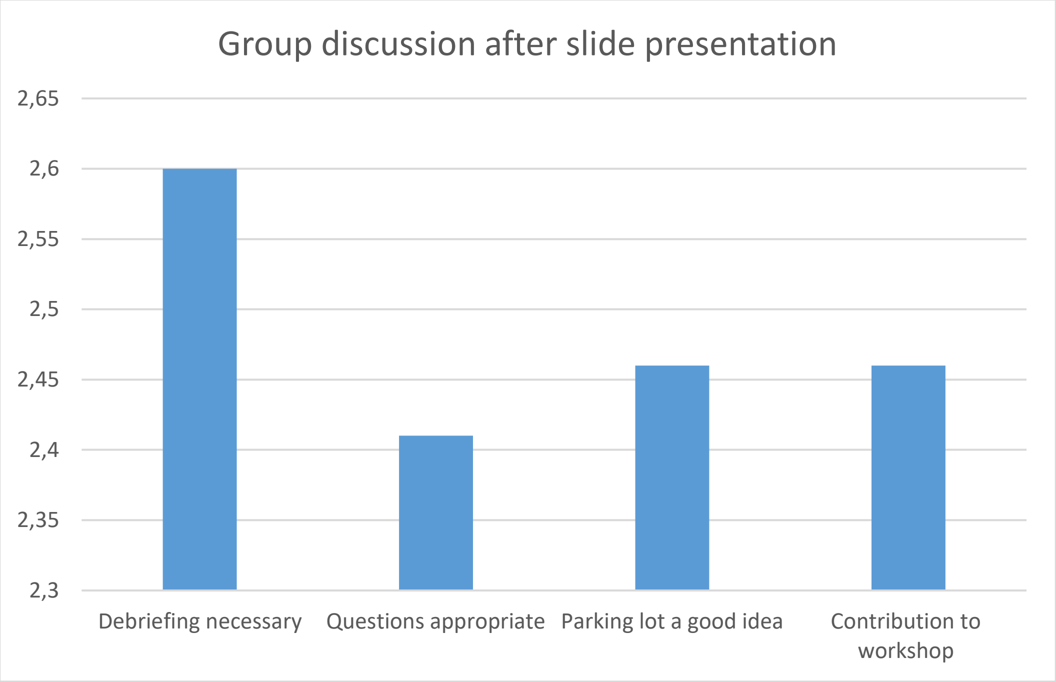

Figure 6.5. Evaluation of group discussion after slide presentation

6.5.3. Qualitative evaluation

Thirteen (13) participants made comments on this aspect of the workshop. Seven (7) were educators; two (2) were family members and the remaining six (6) were CCU nurses.

All but one participant (an educator, A23) considered the group discussions at least important (C2, F6), helpful (C2 and F4) necessary (C18).

One educator (A11) made a specific comment about the "parking lot" commenting that by "Parking the concerns till the end was very important in running the workshop in smooth manner"

One family member (F6) commented specifically that the questions were appropriate and an educator (A5) said they were "well addressed "on the questions posed saying they were appropriate.

Most of the participants agreed with the sentiment of A13 who said, "Group discussions opened ways to interact in the workshop, and added value sharing information."

The one participant (A23) who had concerns thought that the discussions would have been more useful at the end of the workshop.

6.5.4. Discussion on evaluation

Group discussion can take place in a number of different formats, ranging from very informal ones such as a discussion between friends, to a highly structured and challenging one (John, Mythilli, & Arthi, 2017). In the case of the workshop, the discussion was planned to be relatively informal with participants allowed to comment either to one another or within the big group as they saw fit, but to have the facilitator present to ensure everyone had a chance to participate and that those who did not wish to speak could simply write their thoughts on the flip chart.

The evaluation indicated that the group discussion was valuable although it appears strange that while the participants thought the debriefing was important, they were less sure about its contribution to the overall success of the workshop. This appears to be a bit of an anomaly to the researcher.

While the researcher has included this exercise as he felt that CCU nurses are often burnout and feel they cannot do more so may be resentful when asked to deal with needs of family members on top of what they see as a heavy workload, none of the comments made reflected this. They were however given them the opportunity to air these issues and it is possible that this very act of allowing or encouraging them to talk about it may have been valuable.

6.6. YOU TUBE VIDEO ON LINDSAY'S STORY

6.6.1. Description of the activity

An American video was shown of a young woman who was admitted to the CCU (https://www.youtube.com/watch?v=gUNvdCL6sEk)

They were asked to look for opportunities both taken and missed where staff members could have met the needs of the family in the video and write down their ideas which were then shared.

Participants were asked to watch the video and answer the questions:

- Do the ideas of the participants match with the findings in the study at all?
- Do they show ways we could meet the needs of the family members?

6.6.2. Quantitative evaluation

The contribution of the video to the workshop scored the highest 2.77 score (92.3%), A high score was also obtained for assisting participants to meet family needs with a score of 2.73 (91%). The choice of video being appropriate to the workshop scored 2.56 (85.3%) and both the length of video and the method of feedback scored 2.50 (83.3%).

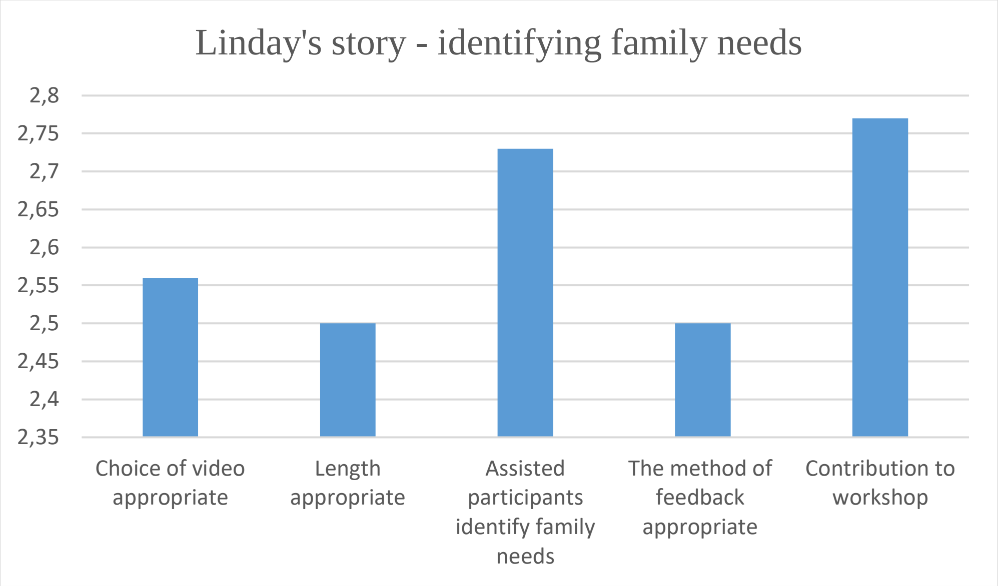

Figure 6.6. Lindsay's story – identifying family needs

6.6.3. Qualitative evaluation

Eighteen (18) participants commented on this video. Of these six (6) were educators, four (4) were family members and the remaining eight (8) CCU nurses.

The overwhelming response from participants was that the video evoked many emotions. One CCU nurse (C1) said, “The video has touched the hearts of many”. Family members seemed to have similar reactions with F4 saying, “This was a touching video and it made us see that we are just human and we can be in a critical state at any given time.” Three of the educators also used the word “touching” to describe the video (A5, A8 and A9).

Apart from evoking emotional reactions, the video seems to achieve the objective of getting nurses to understand family needs. C20 said, “This video made empathy knock at our doors as nurses work in the critical care unit.” C2 said, “The video “Lindsay’s story” helped me see through the lens of the family members, and made me see what the family members go through when their loved ones are admitted in the critical care unit.” This was echoed by C7 who said, “The video triggered our innermost being, and we realized how little time we have, and quick it is that we can simply get into the critical state, and sometime may even die. We could see how much work was required to sustain the human life. I personally realized how much I didn’t do meet the needs the family of patients in the critical care unit where I work every day.

6.6.4. Discussion on evaluation

The fact that this video sparked so many emotions may indicate that it was very effective in that the participants could identify with the content. The researcher has some concern, however, that as it could solicit negative emotions. It was interesting to note that although the video was considered very useful in terms of the objectives of the workshop, the actual choice of the video, although gaining a relatively high score, scored less than the overall score. This may have been because it was an American video. This led the researcher to think that it will be important to obtain a similar South African video for future use.

6.7. MANAGING CULTURAL DIVERSITY

6.7.1. Description of activity

As the previous video was based in the USA where all the role players were of the same cultural group, this short video was added to the workshop as a sensitization exercise which encouraged participants to think about how cultural differences impact on our abilities to meet family needs in Johannesburg.

6.7.2. Quantitative evaluation

This was a very short video i.e. less than three minutes which the participant appeared to appreciate giving the only really high score to this aspect 2.87 (95.6%). Scores for the other three criteria were 2.53 (84.3%) or less.

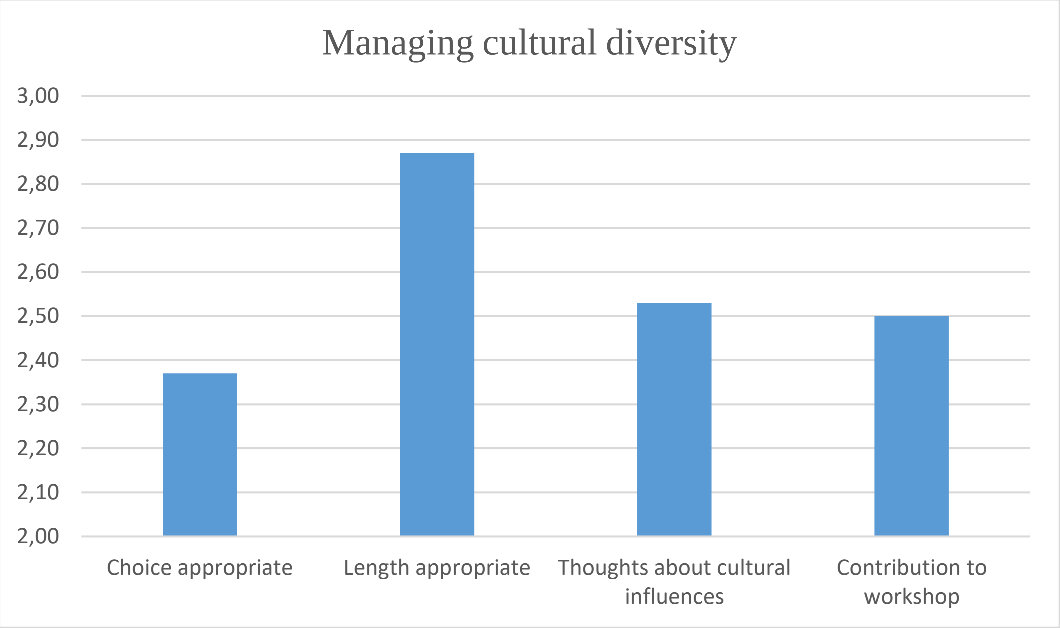

Figure 6.7. Managing Cultural Diversity

6.7.3. Qualitative evaluation

Eighteen (18) participants commented on this aspect of the workshop. These included six (6) educators; four (4) family members and eight (8) CCU nurses.

One educator (A23) commented that she did not believe that the cultural diversity issue was part of the research findings and could not therefore understand why it was included.

Seven of the participants made comments about cultural diversity rather than addressing the activity as such so it was not possible to gauge from the comments whether they thought it was worthwhile or not. The response to the activity was less than enthusiastic.

Most comments referred to the need to treat all people in the same way (C1, C3, F4, A5, 6F, C7, A8, A9, C18, F21 and F22). A11 and A18 thought that the video helped create awareness of the need for cultural sensitivity and C20 stated that "Cultural diversity needed to be at the level where we all understand the need for the family members of patient in the critical care unit" indicating he/she had understood the purpose of this activity.

6.7.4. Discussion on evaluation

The intention of this video was to encourage participants to see beyond cultural differences and to see family members of patients as sharing common needs and therefore requiring similar care and concern. The researcher felt it was important to include an aspect of cultural diversity into the workshop.

While the qualitative evaluation indicated that the video did succeed, the quantitative evaluation was less convincing. On reflection, had it been possible to find a South African video instead of "Lindsay's story" discussed in the previous section, this video would not have been needed and could be omitted from the workshop in future.

6.8. PAIRS DISCUSSION – COMMUNICATING WITH FAMILY MEMBERS

6.8.1. Description of activity

This was a pair's discussion where participants were asked to discuss the best way of conveying information about their relative's (the patient's) condition, treatment and care to this family member. They were asked to write down "lessons learned" from this exercise and stick it on the wall for others to see.

6.8.2. Quantitative evaluation

The appropriateness of the method was rated the highest and scored 2.64 (88%), the ease of following instructions scored 2.63 (87.6%), contribution to the workshop score 2.55 (85%), opinion on whether it enhanced the value of the previous cultural video enhanced activity scored 2.46 (82%) and the activity's ability to assist participants to communicate also scored 2.46 (82%).

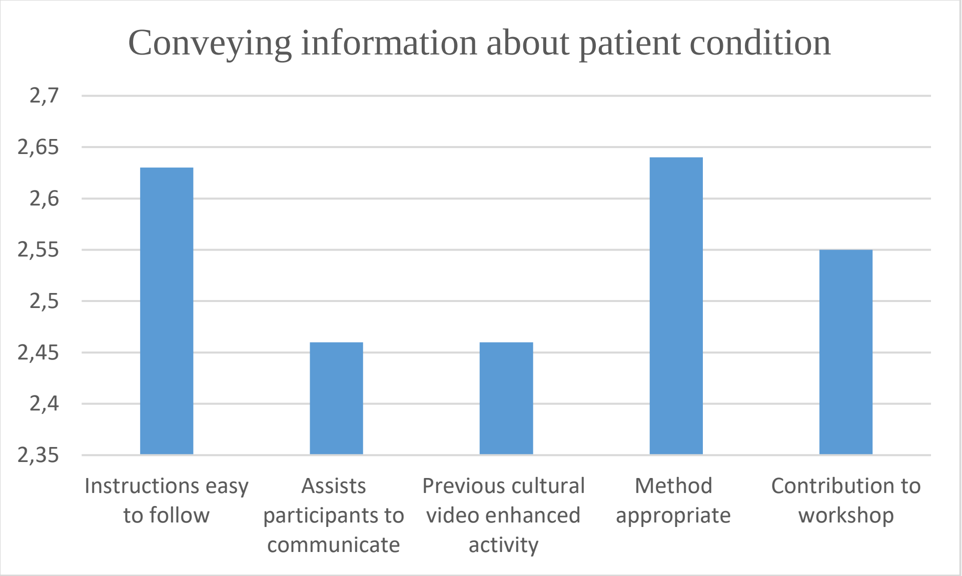

Figure 6.8: Conveying information about patients' condition

6.8.3. Qualitative evaluation

Eighteen (18 participants commented on this aspect of the workshop. These included six (6) educators; four (4) family members and eight (8) CCU nurses.

Four of the comments (F4, A5, C18, and C20) related to the importance of communicating with family members and did not address the activity. Five participants (A5, C7, A13, C16, and C17) commented on the fact that the instructions were easy to follow rather than referring to the content or the purpose of the activity. Of those who did comment on the worth of the activity, C2 said, "This has increased my awareness regarding the gap I had in terms of giving information to the family of patients in the critical care unit"; C3 said, "the exercise is of value in making it easy for participants to communicate, we were therefore made aware that communication forms the basis in making the family of patients feel that they are important to their loved one while they are in the critical care unit"; A8 said, ". Information is very valuable to the families of patients during their journey with the patient in CCU." And F21, "This (will lead) to an improvement in the manner how nurses communicate to the family of patients in the critical care unit."

6.8.4. Discussion on evaluation

While the method was considered appropriate, the quantitative evaluation did not rate the purpose of the activity as high which would seem, at least to some extent, negate the purpose of the activity. Only four of the participants made specifically comments that indicated this was a useful exercise. In reflection, if considering reducing the time for this workshop, this activity might be one to consider removing.

6.9. POSTER CREATION ON CCU EQUIPMENT

6.9.1. Description of activity

Participants had to choose a card with the name of commonly found equipment in the CCU. They were then asked to create a poster to explain the piece of equipment to a lay person.

6.9.2. Quantitative evaluation

The contribution to the workshop scored the highest 2.75 (91.7%), the ease of following instructions 2.73 (91%), cost effectiveness 2.55 (85%) and the appropriateness of the poster method 2.36 (78.7%).

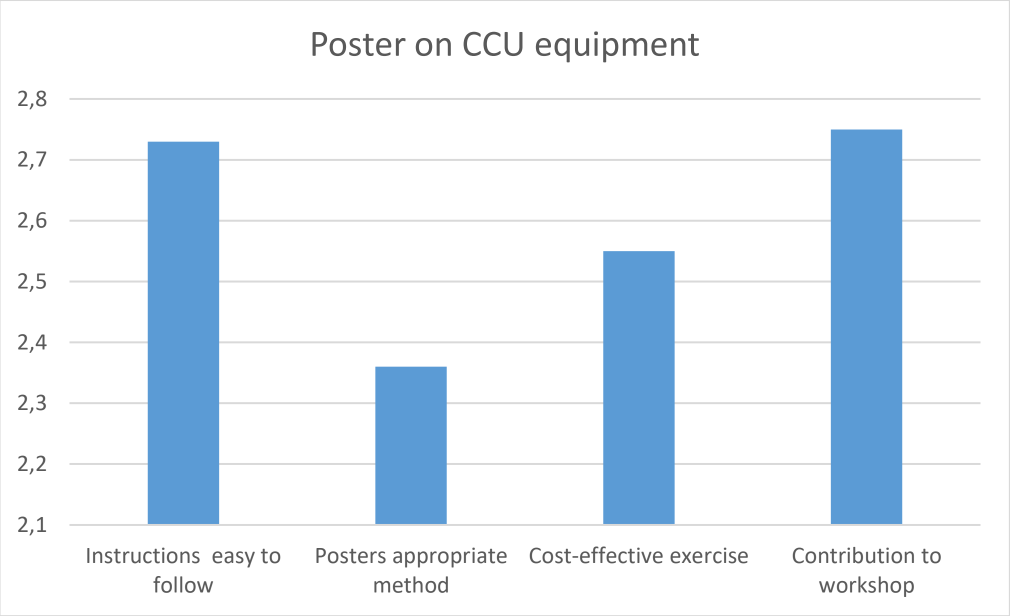

Figure 6.9: Poster on CCU equipment

6.9.3. Qualitative evaluation

The same eighteen participants as commented most of the activities commented on this one namely six (6) educators; four (4) family members and eight (8) CCU nurses.

This activity was generally well received, particularly in relation to the cost-effective nature of conveying appropriate information (F6, C7, A8, A11, A13, C17, and F21). C1, C2, F4 and F22 commented that this activity would meet the needs of family members in terms of acquiring information which would allay their fears.

6.9.4. Discussion on evaluation

The appropriateness of the poster method scored a relatively low score despite the fact that the method was scored as a cost-effective method. The quantitative results therefore led the researcher to think that there may be a better way of conveying this information although this idea was not supported by the comments which indicated it is an effective way of meeting the objective. The ambivalence of these responses means that the activity would need to be repeated in a future workshop and re-evaluated before a decision is made to modify it or not.

6.10. THE PERSONAS FOR ENCOURAGING EMPATHETIC COMMUNICATION AND DEBRIEFING

6.10.1. Description of the activity

There are 10 personas provided each with a photograph and a scenario of the person's situation. Each participant had to choose one. They were then asked to find a partner and role play what they would say to him/her to their partner who was asked to play the role of the persona.

6.10.2. Quantitative evaluation

The score for the ease of being able to follow the instructions and contribution to the workshop scored the highest 2.68 (89.3%) The criterion related to being appropriate for the purpose scored 2.55 (85%), the relevance of the activity scored 2.44 (81.3) and the appropriateness of the debriefing questions scored 2.41 (80.3%).

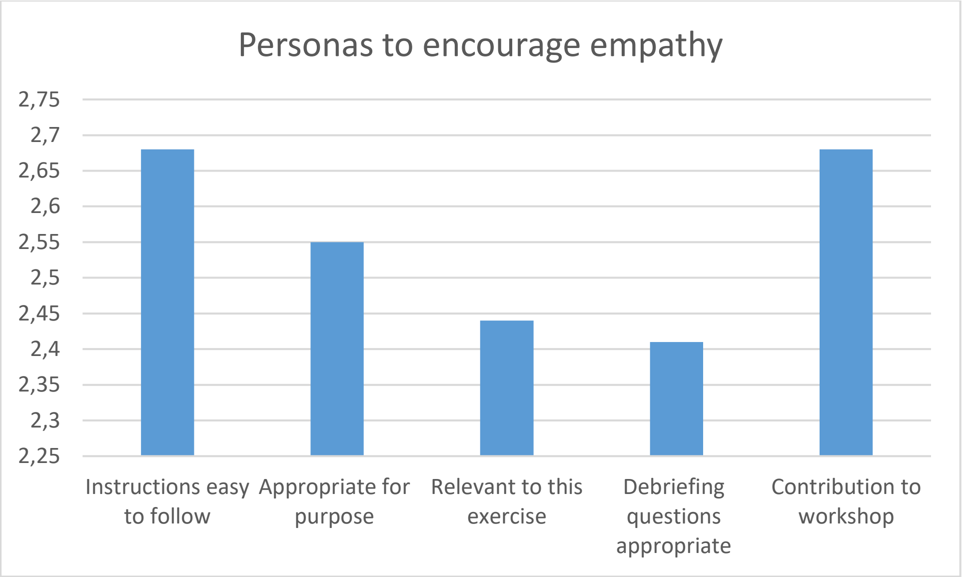

Figure 6.10. Personas to encourage empathy

6.10.3. Qualitative evaluation

Once again, the same eighteen (18 participants commented on this aspect of the workshop. These included six (6) educators; four (4) family members and eight (8) CCU nurses.

Seven of the participants (C7, A8, A9, A11, A13, C16 and F21) mentioned how close to reality the personas were.

Participants were most complimentary about the persona activity using words such as "meaningful" (C1); "appropriate" (C2)); "relevant" (F21); "excellent" (A23); "so good" (A9); "very important" (A11); "effective" (A11) and "powerful" (A23).

Both C1 and C2 made it clear that the purpose of the activity which was to address the importance of empathy was met. They said: *"Personas made the workshop meaningful and made the participant walk in the shoes of the patient families in the critical care unit. It was very important to debrief participants as the workshop got the point of stress and emotions."* (C1) and *"The personas were appropriate and brought memories of what one dealt with in our daily nursing activities. We could also see how much we missed when it gets to empathy."*

6.10.4. Discussion on evaluation

The overall indication was that personas were appropriate for the workshop in that they assisted participants to feel empathy towards patient's family members. The personas brought meaning to the workshop as they were considered to be "real". It is difficult to interpret the difference in the quantitative results between appropriateness and relevance which seem similar in meaning and yet solicited different scores from the participants. The researcher believes that the evaluation of this activity indicates it was worthwhile and should remain as planned in future workshops.

6.11. WRAP UP

6.11.1. Description of activity

Participants were asked to write on a card, three key points or 'take-aways' from today's workshop. They were then asked to stick them on the wall and visit one another's cards before leaving.

6.11.2. Quantitative evaluation

The criterion relating to the appropriateness of the questions scored 2.81 (93.6%). The contribution to the workshop scored 2.77 (92.3%) and the criterion relating to whether the exit cards would add value to the workshop scored 2.55 (85%).

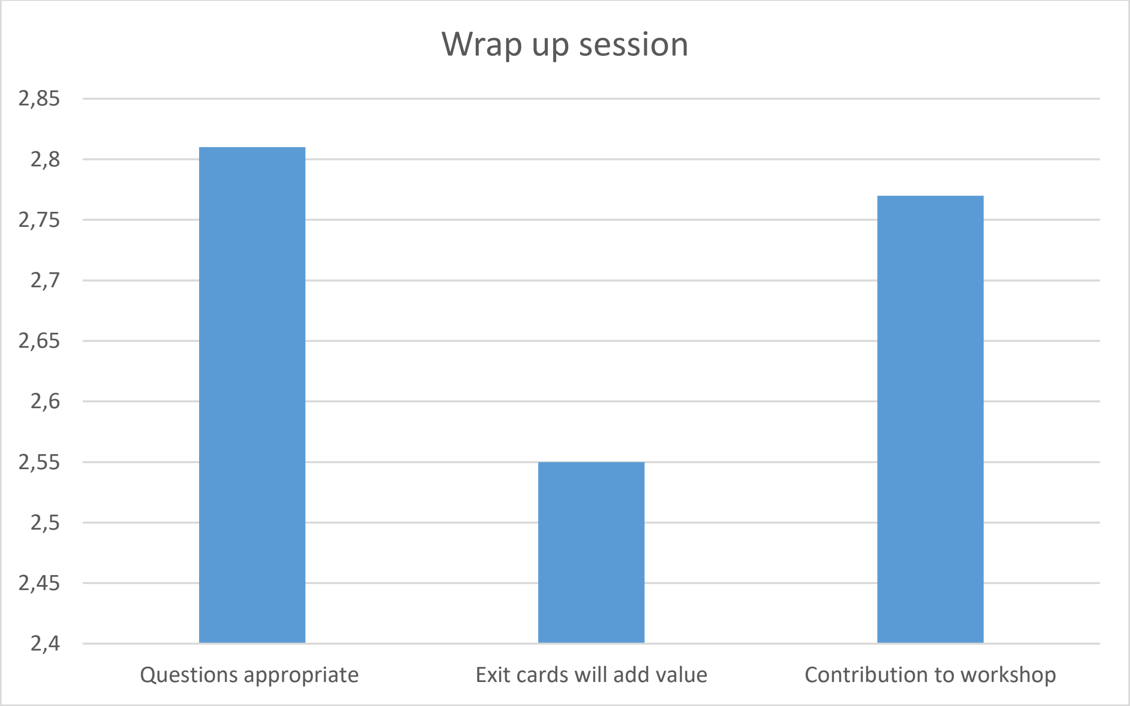

Figure 6.11. Wrap up session

6.11.3. Qualitative evaluation

Seventeen (17) participants commented on this activity. Six (6) were educators, eight (8) were CCU nurses and three (3) were family members.

Nine of the participants referred to the appropriateness of the questions asked in this activity (C1, C2, F4, C7, A8, A13, C18, C20, and F22).

Five (5) participants (A5, C7, A13, C16 and C17) commented that the use of the exit cards was useful; A23 disagreed and thought the feedback should rather be given verbally to bring about a change in the types of activity used. She said, "Your participants will have stuck a lot of things on the wall by now, an idea would be to get them to verbalize their messages to the group."

6.11.4. Discussion on evaluation

Wrap up means to bring to a successful conclusion or to finish something completely. It is a summary or a final action. This is a common way to end a meeting and means to bring something to an end, often with a short summary. According to Frisch & Greene (2016), a quick post-meeting wrap-up with attendees before they leave the room goes a long way to ensuring the gathering achieved what it set out to, and that future get-togethers will also prove successful. The use of the exit cards seemed to be the least popular aspect of this activity and, guided by the responses of the participants, the researcher believes it would be more appropriate in a future workshop to allow participants to take the exit cards hoe rather than sticking them on the wall for others to see. This may assist in reinforcing what has been learned in the workshop.

6.12. OVERALL COMMENTS ON THE WORKSHOP

There were two sections providing feedback on the overall results on the workshop. The first looked at criteria relating to the quality of the workshop – both the relevance and the technical aspects. The second one compared the various activities.

6.12.1. Overall quality of the workshop

6.12.1.1. Quantitative evaluation

Three of the technical aspects of the workshop: Length 2.92 (97%); Timing of activities 2.84 (94.7%) and Organization of the workshop 2.82 (94%) received the highest ratings in the overall evaluation of the workshop. Relevance of the workshop scored the next highest score of 2.64 (88%), followed closely by Usefulness 2.59 (86.3%). Helpfulness however scored the lowest: 2.32 (77.3%).

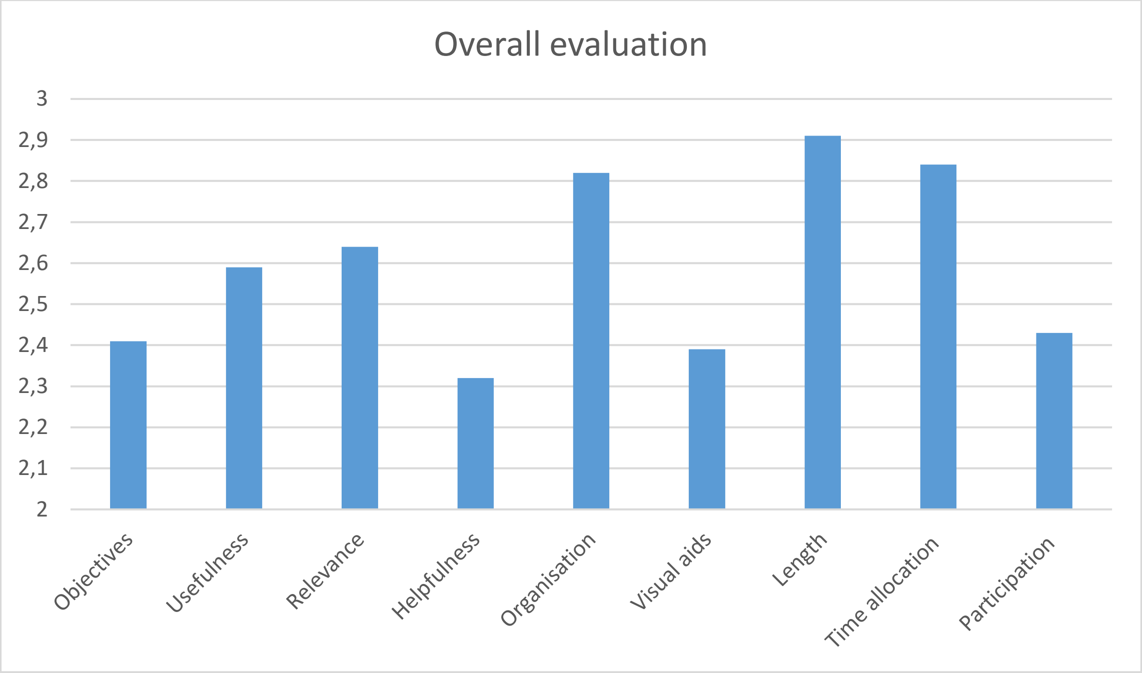

Figure 6.12 Overall evaluation of the Workshop

6.12.1. 2. Qualitative evaluation

Seventeen (17) participants gave their overall opinion of the workshop. Six (6) of these were educators; three (3) were family members and eight (8) were CCU nurses.

The overall evaluation was positive with participants saying it was relevant (C1, A13, A23); well organized (A8, C16, C18, C20), fruitful (A8); the length of time was appropriate (C1, C3, A8 and C17), the visual were good (F4 and A5).

There were no overtly negative comments, but A23 thought that aspects from the research had been left out of the workshop. She said, *"A relevant workshop, it is a pity you left out (what I think) are important findings from your research as mentioned, visiting hours, comfort and privacy that will help nurses address the family needs and make a meaningful change in family members interaction with nurses."*

All three groups of experts, namely: the educators, the CCU nurses and the family members made favorable comments about the workshop indicating it would be useful:

"There were experiences picked up from the workshop which would benefit all in the critical care units". C17

"This will make it easy for the critical care nurses to best meet the needs of family members of patients in the critical care unit". C20

"The workshop helped to helped nurses to best attempt to meet the needs of the family members of patients in the critical care units". A13

"The experience from the workshop will contribute to the success in (the) day to day activities in the critical care unit, as nurses interact with the patients and their families." F6

6.12.1.3. Discussion on evaluation

As a developer of the workshop, the researcher was particularly interested to know whether participants thought the workshop was relevant to their needs and the needs of the family members. As such the criteria on whether the workshop met the objectives for the workshop, the helpfulness and the usefulness as well as the relevance were important. It is important to note that all these criteria scored more than 2.32 or 77.3%. Participants gave the score related to meeting the objectives of the workshop 80.3% so overall it was well received and the qualitative comments were positive with regard to its usefulness.

6.12.2. Comparison of the activities

The poster activity explaining equipment (2.75 or 91.7%), Lindsay's story (2.77 or 92.3%), the slide presentation (2.77 or 92.3%) and the wrap up (2.77 or 92.3%) scored highest followed closely by the activity relating to the personas (2.68 or 89.3%. The other activities, namely the conveying information about the patients' condition (in pairs) the video on managing cultural diversity and the ice breaker exercise scored 2.55 (85%) or less.

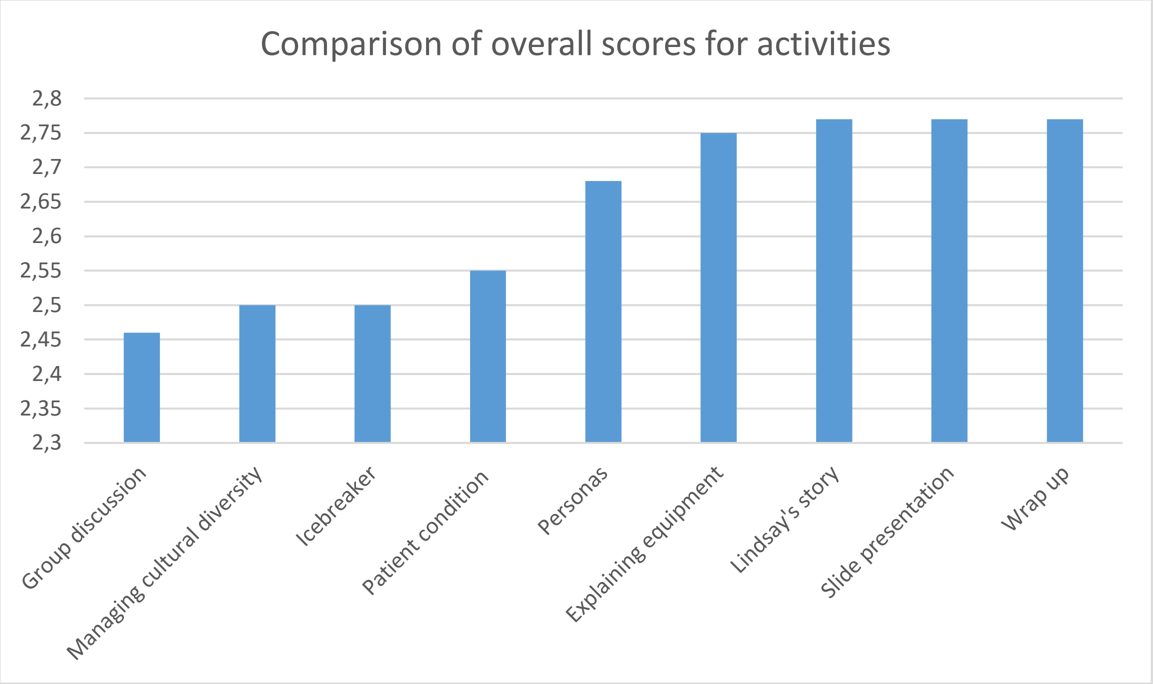

Figure 6.13. Comparison of overall scores for activities

Judging by both the scores and the qualitative assessment, it would be important rather than to remove these activities, to find a way of making the activity more interactive and appealing. The exception to this may be the cultural video, which, as explained above could be removed if a South African version of "Lindsay's story" can be found.

6.13. CONCLUSION

This chapter has dealt with the evaluation of the workshop by the experts. The qualitative results were mainly very positive in all aspects. While the quantitative results were largely positive, there were elements that were not as well received. The researcher did wonder whether there was some social desirability bias in the comments as it would seem that most participants who chose to comment did so as they wanted to convey positive ideas whereas those who chose not to comment may not have had as favorable view of the activities.

The evaluation was largely positive and will assist the researcher to make some adjustments to the workshop before rolling it out once the Covid-19 epidemic is over. Certainly, feedback indicated the importance of the workshop and the fact that it will assist in meeting the family member's needs.

The following chapter will describe the overall findings, the recommendations which emanated from this study and the limitations of the study.

CHAPTER SEVEN

MAIN FINDINGS, LIMITATIONS, RECOMMENDATIONS AND CONCLUSIONS

7.1. INTRODUCTION

In the previous chapter, the findings of evaluations were described. In this final chapter of the research report, the main findings are summarised, limitations of this research and the recommendations for nursing education, research and nursing practice as well as the conclusions that were drawn from the study are presented.

7.2. SUMMARY

The purpose of the study was to develop a workshop to assist nurses to meet the needs of family members of patients in the Critical Care Unit in a private hospital in Gauteng.

The research question was: *"How can nurses best be prepared to meet the needs of family members of patients in the critical care unit, in the private hospital in Gauteng in order to provide a family-centred care?"*

This study used a qualitative, descriptive research design in two phases. In the first phase semi-structured interviews were used to explore the perceptions of family members of how nurses can meet their needs. The second phase consisted of the development of a workshop designed to assist nurses to meet family needs. This was done according to the principles of the ADDIE model and endorsed by means of an expert review.

7.3. MAIN FINDINGS

In the first phase of the study, the two broad themes of needs of family members were identified as information needs and the need for support. The qualitative results were mainly very positive in all aspects.

The participants needed to be informed about the condition of the patient in a manner that they understand on an ongoing basis and immediately if their family member's condition deteriorated. Participants also revealed the need to be orientated to the critical care environment as it is very frightening when their relatives are admitted and have invasive devices and are attached to machines.

They also wished to be consulted regarding the treatment plan and to be supported regarding any decisions they needed to take.

With regards to the need for support, family members expressed the need for communication and assurance which enables the family to cope with a crisis situation. Counselling and empathetic communication were considered important as were the more practical needs such as being allowed to visit, be provided with lodging, comfort and privacy.

The second phase of the study consisted of the development of a workshop designed to assist nurses to meet family needs. While applying the steps of the ADDIE model it became clear that a constructivist approach was most appropriate to assist nurses to meet the needs of family members. The workshop was therefore designed for maximum participation and provided opportunities to engage with the research material to ensure the learning was relevant. The workshop was then evaluated by a group of experts who consisted of family members, CCU nurses for whom the workshop was designed and nurse educators. As a developer of the workshop, the researcher was particularly interested to know whether participants thought the workshop was relevant to their needs and the needs of the family members. As such the criteria on whether the workshop met the objectives for the workshop, the helpfulness and the usefulness as well as the relevance were important. It is important to note that all these criteria scored more than 2.32 or 77.3%. Participants gave the score related to meeting the objectives of the workshop (80.3%). Overall, it was well received.

While the quantitative results were largely positive, there were elements that were not as well received. The researcher did wonder whether there was some social desirability bias in the comments as it would seem that most participants who chose to comment did so as they wanted to convey positive ideas whereas those who chose not to comment may not have had as favourable view of the activities. The evaluation was largely positive and will assist the researcher to make some adjustments to the workshop before rolling it out once the Covid-19 epidemic is over. Certainly, feedback indicated the importance of the workshop and the fact that it will assist in meeting the family member’s needs.

7.4. LIMITATIONS

Grove et al (2013) defines limitations as constraints that limit a research study which can have an impact on whether the findings can be generalized or nor. Limitations are potential weaknesses, restrictions and constraints that are usually out of the researcher's control, and are closely associated with the chosen research design, statistical model constraints, and funding constraints (Theofanidis & Fountouki, 2019).

The study lacks external validity as a result of data being collected from only one hospital. The researcher used one private hospital for his study and therefore the findings cannot be generalized to include family members of patients in the critical care units at other private or public hospitals. The other limitation is that the researcher developed the workshop without input from other stakeholders. This would have added more value in the development process.

Data from the family members of patients in the critical care unit was only collected by focus group interviews and no triangulation took place.

During the Phase One data collection, the researcher interviewed family members of patients in the critical care units after visiting time. Some of the family members were exhausted and frustrated by their experiences during their visits to their loved ones which may have influenced their perceptions of the needs of the patients and the care they were receiving.

In Phase Two, experts were used to evaluate the workshop. The original intention had been to run the workshop and to ask the panel of experts to observe and evaluate the workshop. Due to the overwhelming COVID-19 pandemic, CCU nurses could not be released from the units to attend a workshop. They, and the other experts were therefore sent the workshop material electronically. While the researcher made an attempt to be as inclusive as possible, he was obliged to use convenience sampling so the results may not have reflected the opinions of a wider circle of experts. The advantage of the modified process was that family members could be included as experts and their input was valuable. Some of the experts did not provide any comments on the activities and clearly wished to answer the questionnaire as quickly as possible which may also have affected the validity of the data obtained from them.

Access to the units provide a problem for the researcher as the initial study site was undergoing renovation and he was asked to use an alternative, but nevertheless relevant site within the hospital group. While this constraint caused difficulties and delays, the researcher was well received and was able to conduct the research although it was subject to delays as a result of this and the Covid-19 epidemic.

These constraints and limitations may have affected the study design and the results.

7.5. RECOMMENDATIONS

7.5.1. Nursing education

Education needs to be provided for all staff members of the health care facility (not only the nurses) related to communication. This should commence by including this aspect in orientation programmes, which focus on workplace communication, information dissemination and empathy to the family members of patients in the critical care units.

With specific reference to recommendations for the workshop:

- While the needs of family members are incorporated in most Critical Care curricula, the “voice of the family members” should be part of the teaching of this aspect of the curriculum. The CCU nurses in the study found this meaningful and are more likely to retain the information than if it is included in a lecture.
- This important message needs to be repeated regularly to ensure CCU nurses are reminded of the family members’ needs. This should be done by regular updates as part of the continuing professional development programme.
- Practical ways of meeting needs of the family members should be included in these sessions.
- Based on the feedback from the experts, it is recommended that all CPD sessions are interactive in nature and employ a variety of educational activities.

7.5.2. Nursing research

It is recommended that the workshop be presented in person to all the critical care units in the hospital group once the Covid-19 epidemic eases and that the workshop be re-evaluated after each workshop by a group of experts to assess validity of the in-person workshop.

Once this is feasible, it is recommended that a longitudinal study be conducted to assess the long-term impact of the workshop on the nurses’ ability to meet the family needs.

It is recommended that further research be conducted to determine the differences between family members’ and nurses’ viewpoints with regard to family needs.

7.5.3 Nursing practice

The gap between identified and unmet family needs should be reconciled. This could be done by selecting aspects in this study that can be addressed in the short term and these could be dealt with while working on a longer-term strategy to address those that are more difficult or costly to implement.

The consistent and fair implementation of policies regarding the needs of family members of patients in the critical care units can ultimately and positively impact on staff turnover, productivity and patient care.

Recognition of the needs of nursing personnel and development of methods to measure whether they are met or unmet should be done to ensure that CCU nurses are enabled to practice holistic nursing care, which includes family members.

7.6. CONCLUSIONS

Caring for the families of critically ill patients in the critical care unit, is an essential component of the nurse's role and is a professional obligation. Although the critical care nurses are being held responsible for meeting the needs of the families, little is known about how to support and assist the nurses to carry out this obligation in the existing stressful environment of the CCU.

Family members visiting their loved ones in the critical care units have elevated levels of needs related to assurance, proximity, and information that need to be addressed. The study gave the family members an opportunity to express their needs which they appreciated. The study showed the importance of listening to family members, even if meeting their needs was sometimes difficult.

The findings of this study support what is already known about information and support needs of family members of patients in the critical care units, and the study confirmed that the needs of family members in the private hospital CCU were no different to those in other environments. A common approach to meeting these needs should therefore be explored and shared.

The development of the workshop to assist CCU nurses to meet to these needs was an attempt to commence this dialogue and provide a practical tool for doing this.

The researcher, as an experienced critical care nurse and newly qualified nurse educator found that this study have him insight into the inter-connectedness of nursing education and practice and how one is essential to improve the quality of the other.

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ANNEXURE 1

Focus Group Interview Guide

Experts have shown the needs of family members of patients in CCU fall into four categories, namely cognitive needs, social needs, and practical needs.

I am going to ask four questions, one of each of these categories, but before asking the question, I will read to you what group of researchers (Verhaeghe et al, 2005) have said about the about the need and then ask you to comment.

The cognitive needs include : the need for information: family members expect information about the daily care of the patient, about the reasons for particular treatments, about the ICU as such, the equipment and the various disciplines present in the unit, about what they can do at the bedside of the patient and transfer plans if any.

Questions 1: How do you think the nurses in the unit could have helped you with your cognitive needs?

Emotional needs include the need for hope and reassurance and the needs for spiritual support. It also includes one's own dealing with the situation e.g. speaking about negative feelings.

Question 2: How do you think the nurses in the unit could have helped you with your emotional needs?

Social needs include all the needs that concern relationships between people. This can be the relationship between the patient and his or her family members as well as the relationship between family members and friends. It includes the needs to be close to the patient, and to have other friends and family members nearby.

Question 3: How do you think the nurses in the unit could have helped you with your social needs?

Practical needs generally concern the family member's feeling of comfort, in which material and non- material matters can play a role. In category of the non-material needs, flexible visiting hours are at the top, followed by help with financial or family problems and explanations of what family members can do at the bedside of the patient and how they can contribute to the patient's care. Material things include a waiting include a waiting room and a toilet and a bathroom near the ICU.

Question 4: How do you think the nurse in the unit could have helped you with your practical needs?

ANNEXURE 2

Workshop Evaluation tool.

1. Socio demographic data of experts

Please indicate with an “X” or highlight the most applicable answer/s:

Category of expert	Educator	Family member of patient who was in CCU	CCU nurse	Academic
Years’ experience (not for family members)	< 1 year	1 – 2 years	Between 2 years one month and 5 years	>5 years
If a family member, how long was your relative in CCU?	<1 day	1 day	>1day	
Gender	Male	Female		
Age	<25 years	Between 25 and 30 years	Between 30 and 40 years	>40 years

2. Evaluation of sessions in workshop

Please view the learning material for each of the sessions and then answer the questions related to the session below:

2.1. Ice breaker session

Criteria	Strongly agree	Agree	Disagree	Strongly disagree
The icebreaker is a fun activity				
The icebreaker is non-threatening				
The icebreaker is interactive				
The icebreaker is simple and easy to understand				
The icebreaker will contribute to the overall success of the workshop				

Optional comments about the activity:

……………………………………………………………………………………………

2.2. Slide presentation on findings of research study

(Please remember to read the notes under the slides which represent what the facilitator will say when presenting the workshop.)

Criteria	Strongly agree	Agree	Disagree	Strongly disagree
The slides are easy to read				
The slides are easy to understand				
The colours and background of the slides enhance readability				
The content is well spaced				
Sequencing is logical				
Information is relevant				
An appropriate amount of material is covered in the time available				
The presentation will contribute to the overall success of the workshop				

Optional comments about the activity:

……………………………………………………………………………………………

2.3. Group discussion following slide presentation

Criteria	Strongly agree	Agree	Disagree	Strongly disagree
The opportunity to "debrief" after the presentation is necessary				
The question posed to the participants is appropriate				
Putting their concerns in a "parking lot: to come back to at the end of the workshop is a good idea				
The activity will contribute to the overall success of the workshop				

Optional comments about the activity:

……………………………………………………………………………………………

2.4. The video "Lindsay's story"

Criteria	Strongly agree	Agree	Disagree	Strongly disagree
The choice of video is appropriate				
The length of the video is appropriate				
The video assisted participants to identify family needs				
The method of obtaining feedback is appropriate				
The activity will contribute to the overall success of the workshop				

Optional comments about the activity:

………………………………………………………………………………………………

2.5. Managing cultural diversity

Criteria	Strongly agree	Agree	Disagree	Strongly disagree
The choice of video is appropriate				
The length of the video is appropriate				
The video assisted participants to think more deeply about cultural influences				
The activity will contribute to the overall success of the workshop				

Optional comments about the activity:

………………………………………………………………………………………………

2.6. Conveying information about patient condition and feedback session

Criteria	Strongly agree	Agree	Disagree	Strongly disagree
The instructions are easy to follow				
The exercise assist participants to learn how to communicate better				
The 'cultural' video in the previous exercise enhanced this activity				

The method of obtaining feedback is appropriate				
The activity will contribute to the overall success of the workshop				

Optional comments about the activity:

…………………………………………………………………………………………………

2.7. Explaining equipment to family members

Criteria	Strongly agree	Agree	Disagree	Strongly disagree
The instructions are easy to follow				
The creation of posters is appropriate in meeting the objective of this activity				
Poster creation is a cost-effective exercise when used for this purpose				
The activity will contribute to the overall success of the workshop				

Optional comments about the activity:

…………………………………………………………………………………………………

2.8. The personas for encouraging empathetic communication and debriefing

Criteria	Strongly agree	Agree	Disagree	Strongly disagree
The instructions are easy to follow				
Personas are appropriate in meeting the objective of this activity				
The personas are relevant to this exercise				
The debriefing questions are appropriate				
The activity will contribute to the overall success of the workshop				

Optional comments about the activity:

…………………………………………………………………………………………………

2.9. Wrap up

Criteria	Strongly agree	Agree	Disagree	Strongly disagree
The questions asked of the participants appropriate				
Viewing of the exit cards will add value to the workshop				
The activity will contribute to the overall success of the workshop				

Optional comments about the activity:

……………………………………………………………………………………………

3. OVERALL EVALUATION OF THE WORKSHOP

Criteria	Strongly agree	Agree	Disagree	Strongly disagree
The objectives of the workshop are clearly defined				
This workshop experience will be useful in the CCU nurse's work				
The workshop is relevant to the needs of nurses working in CCU				
The activities are helpful in meeting the objectives of the workshop				
The content is well organized				
Visual and multimedia aids are effective				
The length of the workshop is appropriate for CCU nurses				
The time allocated for the workshop was sufficient				
Participation and interaction is encouraged				

Comments:

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ANNEXURE 3

Information Sheet for Focus Groups

Good day, my name is Nicolas Molelengoane. I am an MSc Nursing student in the Department of Nursing Education. I am undertaking a research study entitled, “

DEVELOPMENT OF A WORKSHOP TO ASSIST NURSES TO MEET THE NEEDS OF FAMILY MEMBERS OF PATIENTS IN THE CRITICAL CARE UNITIN A PRIVATE HOSPITAL IN GAUTENG.”

I would like to invite you to participate in the research study. Before agreeing to participate, it is important that you read and understand the following information about the purpose of the study, the study procedure and your right to withdraw at any time. This information sheet is to help you decide if you would like to participate. You need to understand everything before you agree to take part in this study.

The purpose of the study was to develop a workshop to assist nurses to meet the needs of family members of patients in the Critical Care Unit in a private hospital in Gauteng.

I will ask you to answer four questions relating to your needs as a family member of a person in our critical care unit. You will participate in a group discussion with other members of your family unit with whom you agree to be interviewed. If you prefer to be interviewed alone I will do this.

Before the start of the interview I will ask for your permission to record the interview, which will later be transcribed. The interview is expected to last less than an hour.

The interview will be tape- recorded. Data, including tape recordings, will be stored securely in the Department of Nursing Education at the University of the Witwatersrand for a minimum of two years after publication, or six years in the absence of publication. The results of the research will be confidential. No names will be used during the interviews, and each transcript will be assigned a code to ensure anonymity. Should quotations of your input be utilised in the report or publication, these will be designated a code so that it will not be possible to identify you in any way.

ANNEXURE 4

Consent Form for Focus Groups

I hereby confirm that I have been informed by the researcher, Nicolas Molelengoane, about the nature of his study entitled “Development of a workshop to assist nurses to meet the needs of family members of patients in the critical care unit in a private hospital in Gauteng.”

I have received, read and understood the written information sheet regarding the study.

I am aware that the result of the study will be anonymously processed into a study report and all information will remain confidential.

I may, at any stage, without prejudice, withdraw consent and participation in the study.

I have sufficient opportunity to ask questions and of my free will, declare myself prepared to participate in the study.

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

ANNEXURE 5

Consent to Digital Recording during Focus Groups

I……………………………….., consent to be interviewed and I understand that this interview will be recorded for the sake of accuracy and reliability. I understand that the content is voluntary and that once these records are completed for its use towards this research, they shall be destroyed. I further understand that if any of my comments made during the interviews are used in the research report, the quote will be anonymous.

Participant's signature………………………………………

Date……………………………………………………..

ANNEXURE 6

Information Sheet for Workshop Participants

Good day, my name is Nicolas Molelengoane. I am an MSc Nursing student in the Department of Nursing Education. I am undertaking a research study entitled, **"DEVELOPMENT OF A WORKSHOP TO ASSIST NURSES TO MEET THE NEEDS OF FAMILY MEMBERS OF PATIENT IN THE CRITICAL CARE UNIT IN A PRIVATE HOSPITAL IN GAUTENG."**

I would like to invite you participate in the research study. Before agreeing to participate, it is important that you read and understand the following information about the purpose of the study, the study procedures and your right to withdraw from the study at any time. This information sheet is to help you decide if you would like participate. You need to understand everything before you agree to take part in this study.

The purpose of the study was to develop a workshop to assist nurses to meet the needs of family members of patients in the Critical Care Unit in a private hospital in Gauteng.

If you agree to participate, you will take part in an interview workshop where you will learn how to better meet the needs of family members of patients in CCU. The workshop will last approximately 2 hours and will be offered during on-duty time. A group of nursing education experts will evaluate the workshop and you will also be asked to complete the same evaluation form to help improve the workshop. No one apart from the other participants and the members of the expert team and the researcher will know how you performed or what you did during the workshop and there is no mark attached to the workshop.

Participation will not be of any direct benefit to you personally but may benefit patients in the future. You may withdraw your participation from the study at any time without any prejudice to yourself or negative consequences.

Should you have any questions about your rights as a study participant, or questions or concerns about any aspects of this study, please call the Ethics Department of the University of the Witwatersrand on +27 11 717 1234 or my supervisor, Dr Sue Armstrong. The contact details are listed below.

Dr Sue Armstrong (supervisor), Department of Nursing Education, School of Therapeutic Sciences, Faculty of Heath, University of the Witwatersrand, 7 York Road, Parktown,2193, Johannesburg, South Africa.

Sue.armstrong@wits.ac.za

Professor P. Cleaton-Jones, (Chairperson, HREC Medical), Tel: +27(0)117171252

Zanele.ndlovu@wits.ac.za

Thank you for your cooperation

Nicolas Molelengoane

Tel number 0743647086

Email address: nicolas.molelengoane@gmail.com

ANNEXURE 7

Consent Form for Participation in a Workshop

I hereby confirm that I have been informed by the researcher,

(Name of researcher) Nicolas Molelengoane, about the nature of this study entitled, "Development of a work to assist nurses to meet the needs of family members of family patients in the critical care unit in a private hospital in Gauteng."

I have received, read and understood the written information sheet regarding the study report and all information will remain confidential.

I may, at any stage, without prejudice, withdraw consent and participation in the study.

I have had sufficient opportunity to ask question and of my free will, declare myself prepared to participate in the study.

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

ANNEXURE 8

Information Sheet for Experts

Good day, my name is Nicolas Molelengoane. I am an MSc Nursing student in the Department of Nursing Education. I am undertaking a research study entitled, "DEVELOPMENT OF A WORKSHOP TO ASSIST NURSES TO MEET THE NEEDS OF FAMILY MEMBERS OF PATIENTS IN THE CRITICAL CARE UNIT IN A PRIVATE HOSPITAL IN GAUTENG."

I would like to invite you to participate in the research study. Before agreeing to participate, it is important that you read and understand the following information about the purpose of the study, the study procedures and your right to withdraw from the study at any time. This information sheet is to help you decide if you would like to participate. You need to understand everything before you agree to take part in this study.

The purpose of the study was to develop a workshop to assist nurses to meet the needs of family members of patients in the Critical Care Unit in a private hospital in Gauteng.

If you agree to participate, you will be asked to complete an on-line evaluation of the workshop I have developed based on the focus groups held with family members of patients in the Critical Care Units (CCU). The workshop material will be made available to you, and you are asked to work through the material – a process that should take 1 to 2 hours. The evaluation form which has been supplied to you is divided into sections for each activity and, in addition, there is section for you to evaluate the overall workshop. Experts include people with experience of their family members having been a patient in the CCU, academic, educators and nurses working in the CCU. Completion of the evaluation form assumes you have consented to participating in the research study.

Participation will not be of any direct benefit to you personally but may benefit patients in the future. You may withdraw your participation from the study at any time without any prejudice to yourself or negative consequences.

If you have any concern over the way the study is being conducted, please contact the Chairperson of this Committee who is Professor Clement Penny, who may be contacted on telephone number 011 717 2301, or by e-mail on Clement.Penny@wits.ac.za. The telephone numbers for the Committee secretariat are 011 717 2700/1234 and the e-mail addresses are

Zanele.Ndlovu@wits.ac.za and Rhulani.Mukansi@wits.ac.za or my supervisor Dr Sue Armstrong, Department of Nursing Education, School of Therapeutic Sciences, Faculty of Health Sciences, University of the Witwatersrand, 7 York Road, Parktown, 2193, Johannesburg, South Africa. Email address sue.armstrong@wits.ac.za, Tel: +27(0)11488 4272.

Thank you for your consideration.

Nicolas Molelengoane

Tel number 0743647086

Email address: nicolas.molelengoane@gmail.com

ANNEXURE 9

Human Research Ethics Committee (Medical) – Clearance Certificate No. M170655

R14/49 Mr N Molelengoane

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)
CLEARANCE CERTIFICATE NO. M170655

NAME:
(Principal Investigator) Mr N Molelengoane

DEPARTMENT: School of Therapeutic Sciences
Division of Nursing Education
Medical School
University

PROJECT TITLE: Development of a workshop to assist nurses to meet the needs of family members of patients in the Critical Care Unit in a private hospital in Gauteng

DATE CONSIDERED: 30/06/2017

DECISION: Approved unconditionally

CONDITIONS:

SUPERVISOR: Dr S Armstrong

APPROVED BY: CB Perry
Professor CB Penny, Chairperson, HREC (Medical)

DATE OF APPROVAL: 08/09/2018

This clearance certificate is valid for 5 years from date of approval. Extension may be applied for.

DECLARATION OF INVESTIGATORS

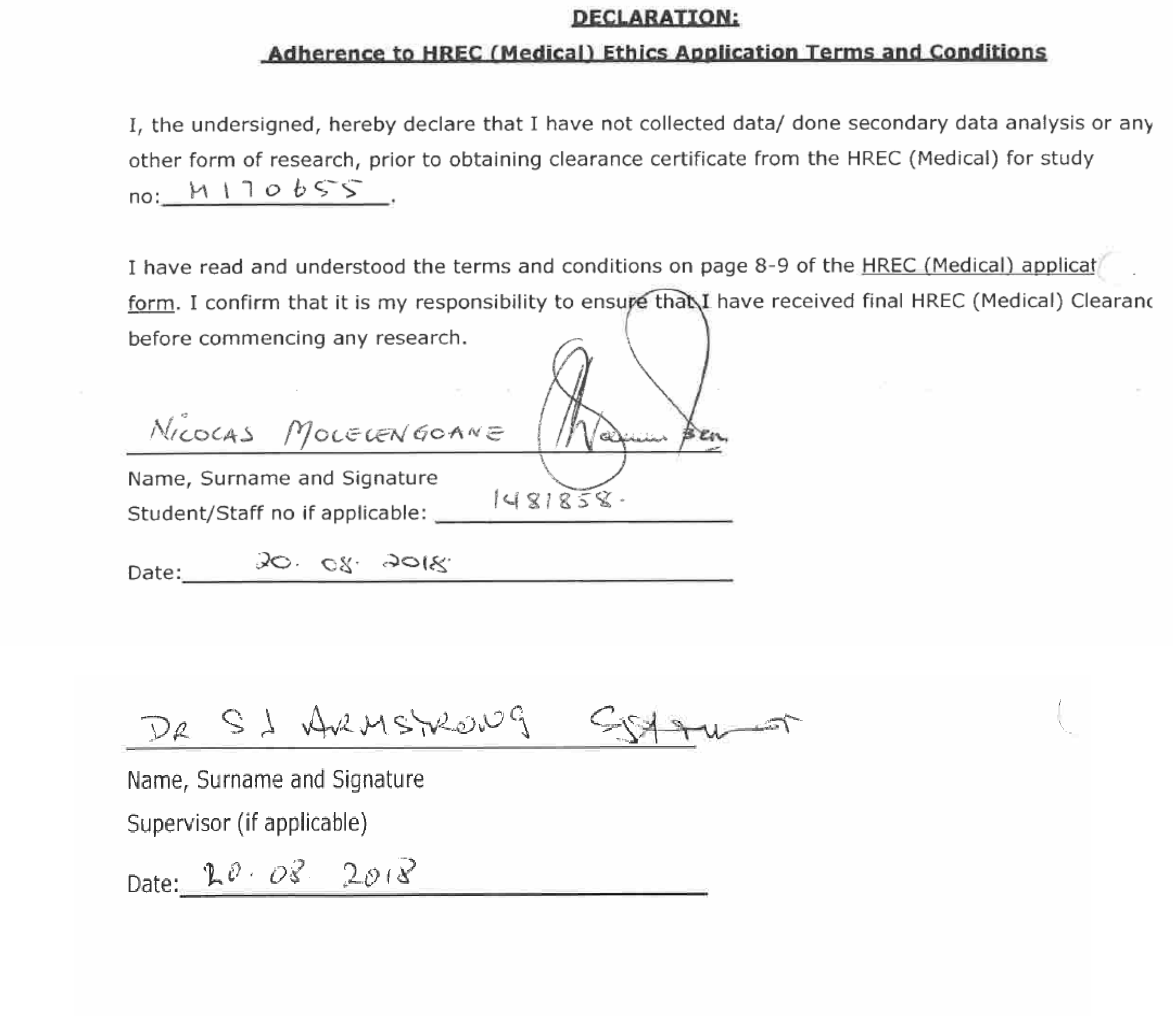
To be completed in duplicate and **ONE COPY** returned to the Research Office Secretary on 3rd floor, Ph lo V Tobias Building, Parktown, University of the Witwatersrand, Johannesburg
I/We fully understand the conditions under which I am/we are authorised to carry out the above-mentioned research and I/we undertake to ensure compliance with these conditions. Should any departure be contemplated from the research protocol as approved, I/we undertake to resubmit to the Committee. I agree to submit a yearly progress report. When a funder requires annual re-certification, the application date will be one year after the date of the meeting when the study was initially reviewed. In this case, the study was initially reviewed in June and will therefore reports and re-certification will be due early in the month of June each year. Unreported changes in the application may invalidate the clearance given by the HREC (Medical).

__________________________ ____________________
Principal Investigator Signature Date

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES

ANNEXURE 10

Declaration - Adherence to HREC (Medical) Ethics Application Terms and Conditions



DECLARATION:

Adherence to HREC (Medical) Ethics Application Terms and Conditions

I, the undersigned, hereby declare that I have not collected data/ done secondary data analysis or any other form of research, prior to obtaining clearance certificate from the HREC (Medical) for study no: M170655.

I have read and understood the terms and conditions on page 8-9 of the HREC (Medical) applicat form. I confirm that it is my responsibility to ensure that I have received final HREC (Medical) Clearanc before commencing any research.

NICOLAS MOLELENGOANE

Name, Surname and Signature

Student/Staff no if applicable: 1481858.

Date: 20. 08. 2018

DR S J ARMSTRONG

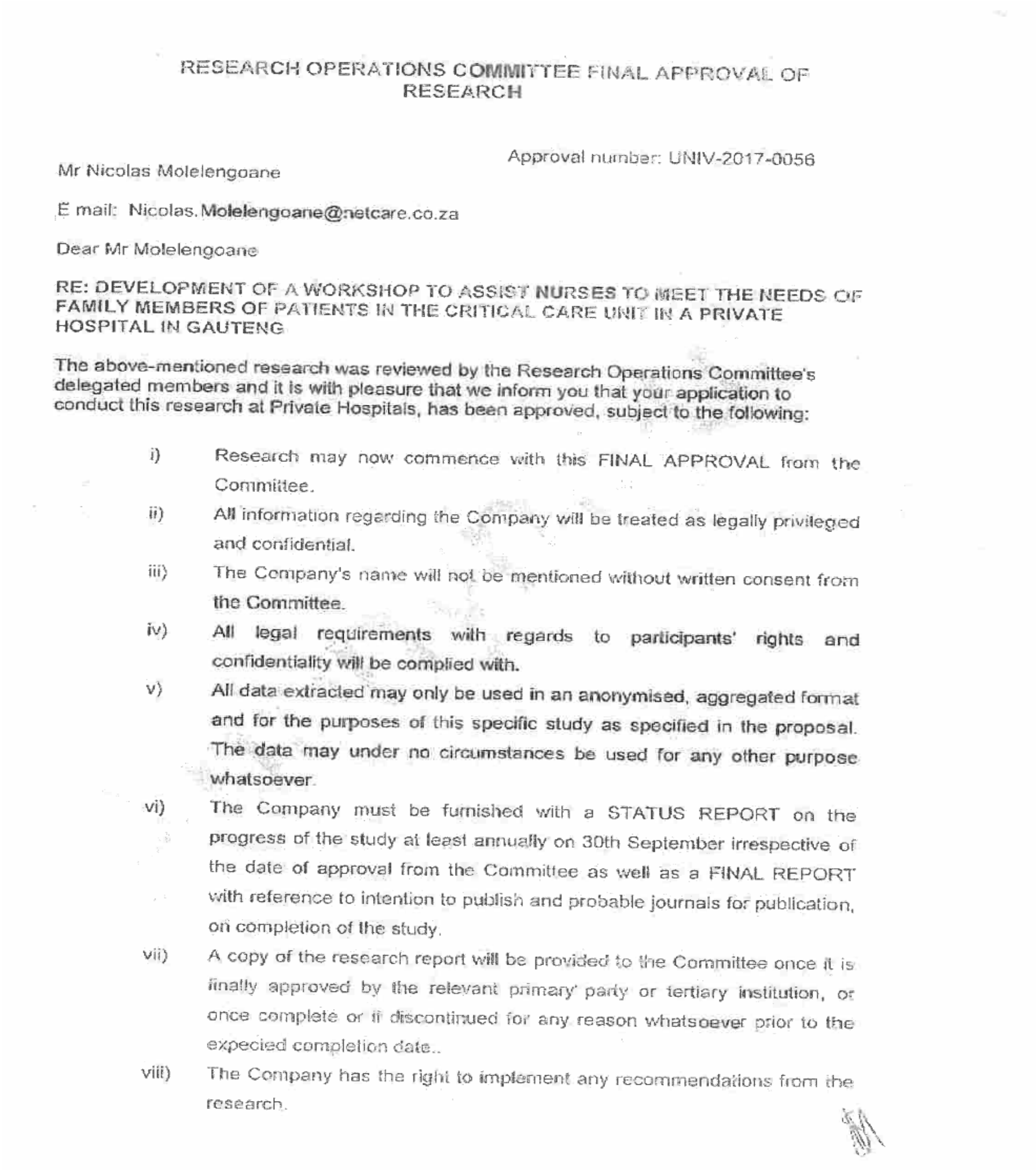
Name, Surname and Signature

Supervisor (if applicable)

Date: 20. 08. 2018

ANNEXURE 11

Approval Letter to conduct research from the Private Hospital Group Research Operations Committee



RESEARCH OPERATIONS COMMITTEE FINAL APPROVAL OF RESEARCH

Approval number: UNIV-2017-0056

Mr Nicolas Molelengoane

E mail: Nicolas.Molelengoane@netcare.co.za

Dear Mr Molelengoane

RE: DEVELOPMENT OF A WORKSHOP TO ASSIST NURSES TO MEET THE NEEDS OF FAMILY MEMBERS OF PATIENTS IN THE CRITICAL CARE UNIT IN A PRIVATE HOSPITAL IN GAUTENG

The above-mentioned research was reviewed by the Research Operations Committee's delegated members and it is with pleasure that we inform you that your application to conduct this research at Private Hospitals, has been approved, subject to the following:

i) Research may now commence with this FINAL APPROVAL from the Committee.

ii) All information regarding the Company will be treated as legally privileged and confidential.

iii) The Company's name will not be mentioned without written consent from the Committee.

iv) All legal requirements with regards to participants' rights and confidentiality will be complied with.

v) All data extracted may only be used in an anonymised, aggregated format and for the purposes of this specific study as specified in the proposal. The data may under no circumstances be used for any other purpose whatsoever.

vi) The Company must be furnished with a STATUS REPORT on the progress of the study at least annually on 30th September irrespective of the date of approval from the Committee as well as a FINAL REPORT with reference to intention to publish and probable journals for publication, on completion of the study.

vii) A copy of the research report will be provided to the Committee once it is finally approved by the relevant primary' party or tertiary institution, or once complete or if discontinued for any reason whatsoever prior to the expecied completion date..

viii) The Company has the right to implement any recommendations from the research.

ix) The Company reserves the right to withdraw the approval for research at any time during the process, should the research prove to be detrimental to the subjects/ Company or should the researcher not comply with the conditions of approval.

x) APPROVAL IS VALID FOR A PERIOD OF 36 MONTHS FROM DATE OF THIS LETTER OR COMPLETION OR DISCONTINUATION OF THE STUDY, WHICHEVER IS THE FIRST.

We wish you success in your research.

Yours faithfully

1/2/18

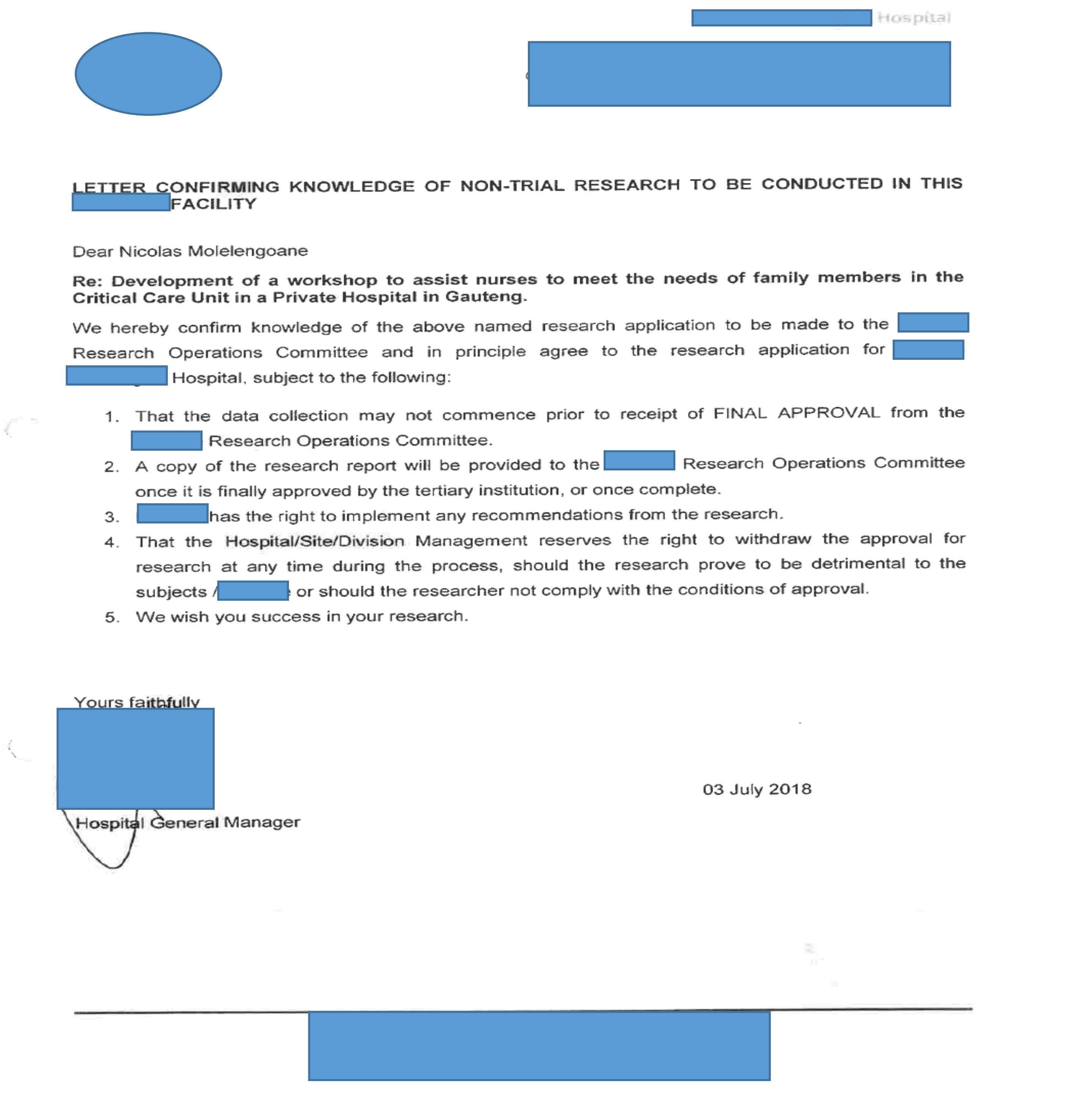
Prof Dion du Plessis
Full member: Research Operations Committee & Medical Practitioner evaluating research applications as per Management and Governance Policy

Shannon Nell
Chairperson: Research Operations Committee
Date: 27/9/2018.

This letter has been anonymised to ensure confidentiality in the research report. The original letter is available with author of research

ANNEXURE 12

Acknowledgement Letter from a Private Hospital Group



[redacted] Hospital

[redacted]

[redacted]

LETTER CONFIRMING KNOWLEDGE OF NON-TRIAL RESEARCH TO BE CONDUCTED IN THIS [redacted] FACILITY

Dear Nicolas Molelengoane

Re: Development of a workshop to assist nurses to meet the needs of family members in the Critical Care Unit in a Private Hospital in Gauteng.

We hereby confirm knowledge of the above named research application to be made to the [redacted] Research Operations Committee and in principle agree to the research application for [redacted] [redacted] Hospital, subject to the following:

1. That the data collection may not commence prior to receipt of FINAL APPROVAL from the [redacted] Research Operations Committee.
2. A copy of the research report will be provided to the [redacted] Research Operations Committee once it is finally approved by the tertiary institution, or once complete.
3. [redacted] has the right to implement any recommendations from the research.
4. That the Hospital/Site/Division Management reserves the right to withdraw the approval for research at any time during the process, should the research prove to be detrimental to the subjects / [redacted] or should the researcher not comply with the conditions of approval.
5. We wish you success in your research.

Yours faithfully

[redacted]

Hospital General Manager

03 July 2018

[redacted]