

NEEDS OF FAMILY MEMBERS OF PATIENTS ADMITTED IN TWO
INTENSIVE CARE UNITS IN WINDHOEK

A THESIS SUBMITTED IN FULFILMENT OF THE REQUIREMENTS FOR
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EDITH HAMUKWAYA

(200729098)

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MAIN SUPERVISOR: PROF L.F. SMALL (UNAM)

CO-SUPERVISOR: MRS L. VAN DER WESTHUIZEN (UNAM)

ABSTRACT

The admission of a relative to an intensive care unit (ICU) is a stressful experience for family members because most admissions are urgent and unexpected. Hence, it is imperative for health care professionals to be knowledgeable about their needs to promote optimal outcomes for both the patient and family members during admission for critical illness.

The purpose of this study was to describe and compare the needs of family members of patients admitted in the ICU in a private and state hospital in Windhoek, Namibia. A quantitative, descriptive and comparative design was used to describe and compare the needs of family members of patients in ICU at a state and private hospital respectively for comparison. Family members (n=130) were recruited using the random sampling method. A 43 point questionnaire that was adopted from the critical care family needs inventory (CCFNI) was used to collect data. The participants identified various needs for the family during the patient's admission in ICU and rated the level of importance on a four-point Likert scale from 1= not important to 4=very important.

From the findings, it emerged that assurance was the most important need (72.1%) followed by the need for information (54.5%), proximity (34.7%), support (30.79%) and lastly comfort (29.8%). A comparison was also made between findings from the private and the state ICU. There were no statistically significant differences between the results from both hospitals.

These results offer an understanding for nurses and other health care professionals of the important needs that must be considered when addressing family members of

patients in ICU. Recommendations were made and submitted to the Ministry of Health and Social Services, the Roman Catholic Hospital and areas of further research identified.

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It may be a cliché to say I didn't do this alone, but it's also true. First and foremost, I would like to express my sincere gratitude to the almighty God for the gift of life and for blessing me with a spirit of hard work, endurance and strength to soldier on despite all the circumstances.

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DEDICATION

This thesis is dedicated to my sons **Lionel Amunyela** and **Tarsh Simaneka Shagandjua**. As you read this book later in life find it as a source of inspiration and motivation to work hard, aim high and be determined to succeed in every sphere of your life. I'm also dedicating this thesis to my patients and their families whose lives I have touched, especially those whom against all odds willingly decided to participate in this study.

God bless you!

DECLARATIONS

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

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LIST OF ABBREVIATIONS

The following is the list of abbreviations used in the study:

AACN	American Association of Critical Care Nurses
ICU	Intensive Care Unit
CCFNI	Critical Care Family Needs Inventory
RCH	Roman Catholic Hospital
MoHSS	Ministry of Health and Social Services

OVERVIEW OF THE STUDY

1.1 Introduction

Critical illness is a disease where death is possible or imminent. Critical illness occurs with no warning and the patient is often left with little or no time to prepare. Affected by this is not only the patient, but also their family members who often have to deal with the crises, stressful decision-making and a possible death (De Beer, 2016). These patients with serious life-threatening conditions are nursed in the intensive care unit (ICU).

Vincent (2017) describes an ICU as a specialised area of the hospital that provides critically ill patients with a degree of advanced organ support, intensive monitoring and high nurse-patient ratios that is not available in general wards. It is a complex clinical setting where the focus is on the clinical needs of the patient, hence, less attention is given to the family needs. The family is, however, believed to play a vital role in promoting the overall well-being of the patient as well as in the patient centered care and the clinical outcomes of critically ill patients (Urden, Stacy & Lough, 2017). The notion of holistic patient care also requires nurses to take care of the patient as a whole including his or her family members.

Over the past two decades, several studies have been conducted globally to explore the needs of family members of intensive care unit patients using critical care family needs inventory (CCFNI). Worldwide there are family-centred care initiatives that were created based on the explorations of family needs and fulfilment of the needs of a patient's family members. The American Association of Critical Care Nurses (AACN) also came up with a patient centered care initiative to fulfil the needs of family members of the critically ill (Davidson et al., 2017).

Illness is a family affair, and it is believed that enquiring about another's health and expressing sympathy for the sick are important aspects of social interaction (Urden et al., 2017). People make an effort to visit the sick to show support and to wish them better health. This notion led to the establishment of patient family centered care facilities in nursing care, as well as exploring family member needs.

An American nurse, Molter Nancy as early as 1979, developed a list of 45 need statements of family members whose relatives had been admitted into an ICU (Munyiginya & Brysiewicz, 2014). According to Leske (1991) as cited in Shorofi et al. (2016), a section with open-ended questions was added to this tool and developed CCFNI. This tool consisted of five main categories or themes namely assurance, comfort, information, proximity and support.

Assurance refers to being guaranteed that the best possible care is being given to a patient and to feel that there is hope as well as having questions answered honestly and in an understandable manner (Shorofi et al., 2016). Comfort refers to emotional and physical wellbeing the hospital staff and facilities offer. This includes a waiting room with comfortable furniture, a bathroom and good food (Amany, Safaa & Gehan, 2017). Information, also known as communication, means the sharing of the patient's condition, treatment and prognosis. It entails which healthcare professional shares it, how regularly information about the sick one is shared and how interactive the process of communication is. It enables families to cope with the crisis at hand by ensuring hope is rendered.

The theme proximity takes into account the family's access to their critically sick loved one (Botes & Langley, 2016). Lastly, support does not only refer to support

offered by staff but also whether the nurses recognise and allow for the family to make use of their own social support structures like pastors to offer spiritual care.

1.2 Problem statement

The World Health Organization states that in order to provide quality care and improve standards of patient care, the needs of family members accompanying the critically ill patients should be determined (Nolen, 2013). Most of the documented studies however have been conducted in Eurocentric cultures in critical care, and the evidence available shows that no documented studies have been done in Namibia, a developing country, In addition in Namibia two groups, defined by economic status, co-exist. The one group utilises the intensive care facilities of the private sector, while the other group is provided for by the intensive care unit of the government (state hospital).

The nursing services manager at a private hospital stated that several negative remarks, related to possible negative experiences or unmet needs, were made by family members upon their visits to the ICU (Shipanga, 2017) These remarks and /or experiences were, however, not documented.

This left the researcher with the following questions: “What are the needs of family members of patients admitted in the intensive care units in the private hospital in Windhoek, and are there any differences in the needs of families of patients in this hospital and other hospitals like the state hospital”?

1.3 Purpose of the study

The purpose of the study was to describe and compare the needs of family members of patients admitted in the intensive care units in a private hospital and in a government (state) hospital.

The specific objectives were to:

- Describe the needs of family members of patients admitted in the intensive care unit in a private hospital in Windhoek;
- Describe the needs of family members of patients admitted in the intensive care unit in a government (state) hospital in Windhoek;
- To compare needs identified by the family members of these two intensive care units.

1.4 Paradigmatic perspectives

Thomas Kuhn, a philosopher, was the first to use the term “paradigm” for science. He suggested that scientific research does not progress towards truths, but it is subject to dogma and clinging to old theories. The word “paradigm” like many other scientific terms, comes from the Greek, and means example (Shuttleworthy, 2013). Since the publication of Kuhn’s “the structure of scientific research” in 1970, the term paradigm has been used with increasing frequency in the scientific community. He further defines paradigm as a discipline’s structuring of reality.

Brink, Van der Walt and Van Rensburg (2006), describes a paradigm as a set of assumptions about the basic kinds of entities in the world, about how these entities should interact and about the proper methods to be used for constructing and testing of theories of these entities. In essence, a paradigm frames the way in which these disciplines concerns is viewed and the direction that a project takes. The researcher based the study on the following meta-theoretical and methodological assumptions:

1.4.1 Meta-theoretical assumptions

Meta-theoretical assumptions include a broad spectrum of assumptions, for example, ontological and axiological assumptions. Meta-theoretical assumptions with regard to

person, health, environment and nursing were also considered. In this study, person/individual is the family member of a patient admitted in the ICU. Health is the state of physical, psychological and emotional well-being of a person. The environment includes the ICU where the critically sick are admitted, while nursing includes the activities performed by nurses in the assessment of the patient's haemodynamic functioning and determining priorities for interventions to restore and maintain health. In total, these last four assumptions make up the meta-paradigm of the discipline of nursing (Wangombe, 2013).

1.4.2 Ontological assumptions

Ontological assumptions are those that are concerned with the nature of the research objects in its various manifestations. Ontology is the study of being, that is concerned with what constitutes reality (Scotland, 2012). Ontological assumptions are embedded in our understanding of human nature and society. Therefore, in this study, it was important to obtain an understanding of the needs of family members upon visitation in the ICU and the personal and social reality in which they live.

1.4.3 Methodological assumptions

The methodological assumptions focus on analysis of the methods used in acquiring the data (Cohen, Manion & Morrison, 2001). Botma et al. (2010) state that methodological assumptions explain what the researcher believe is good scientific practice and how the best evidence can be obtained. These include the researcher's conclusions and suppositions, which are reflected in the execution of the whole research process. In this study, a quantitative descriptive and comparative study was conducted. Chapter 3 discusses the process in detail.

1.5 Significance of the study

The term significance means one or all of the following terms namely ‘justification, contribution of the study, or importance of the study’ (De Vos et al., 2016, p 107).

The findings of this study will contribute to meeting the needs of families by healthcare professionals as well as prioritising the most important needs, thus assisting them to cope with the anxiety and distress faced due to unmet needs. Nurses will be able to provide humane and dignified care to family members by considering their needs during critical illness.

1.6 Limitations of the study

The study was conducted at one private hospital ICU and one government (state) hospital in Windhoek. The findings are not national representative, therefore all state and private hospitals in other regions of Namibia.

1.7 Delimitations of the study

This study was limited to family members of patients admitted in the ICU (Roman Catholic and Windhoek central Hospitals), who are 18 years and older.

1.8 Definition of concepts

The definition of concepts is derived from the title: “The needs of family members of patients admitted in two intensive care units in Windhoek”.

- Patient: this refers to any person who requires and is receiving medical care due to a potentially life-threatening physiological alteration (Urden et al, 2017). In this study, a patient is any person admitted and who is receiving medical treatment in a private ICU and in a government (state) ICU.
- Family members: This is a basic social group consisting of parents and their children (Shorofi et al., 2016). In this study, a family member is a spouse,

child, parent, sibling, uncle, aunt, life partner and or any other relative (older than 18 years) of a patient in the ICU.

- Intensive care unit (also known as critical care unit): This is a section of a hospital where special medical equipment and services are provided for patients who are seriously injured or ill (Urden et al., 2017). In this study, it is the ICUs of one private hospital and one government (state) hospital.
- Critical Care Family Needs Inventory - A list of needs of families with a patient admitted to the intensive care unit, developed by Molter in 1979 and subsequently updated by Leske (1991). There are 43 need items grouped into five categories labelled as needs for support, information, proximity, assurance and comfort (see Annexure F).

1.9 Chapter organization

This study was presented in five chapters, which are aligned as follows:

Chapter 1: Background and introduction of the study

Chapter 2: Literature review

Chapter 3: Research design and methodology

Chapter 4: Data analysis and discussion of study findings

Chapter 5: Conclusion, Limitations and Recommendations.

1.10 Summary

This chapter covered the introduction to the research study, problem statement as well as study objectives. The paradigmatic perspective was provided and definitions of selected concepts from the title were also included. The next chapter covers a review of related literature that is relevant to the study.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

The previous chapter gave an overview and background of the study. A layout of chapters of the study was also presented. This chapter discusses relevant literature on the needs of family members of patients admitted in the intensive care unit.

A literature review involves findings, reading, understanding and forming conclusions about the published research and theory as well as presenting it in an organised manner (Burns & Grove, 2011). According to Cohen et al. (2012), the purpose of a literature review is to help a researcher avoid unnecessary and unintentional duplication of work. In addition, literature review forms a basis within which research findings are to be interpreted, and it demonstrates a researcher's familiarity with the existing body of knowledge. Moreover, the aim of a literature review is to seek similarity between recent or past studies conducted locally or internationally on the needs of families of patients admitted in the intensive care unit. A literature review also helps in identifying gaps between what is already known and what is not known and to agree on the facts by ascertaining available information sources that would be relevant to cite and, where possible, to critically oppose or support the previously recognised findings.

De Vos et al. (2010) pointed out that literature reviews assist researchers to encapsulate more information than just reviewing and is a platform where researchers equip themselves with the knowledge on how best they can set out their research topics.

For the purpose of this study, an intense review of literature related to the needs of family members of patients admitted in the intensive care unit was done and summarised. With assistance from the librarian from the School of Nursing, the following databases were accessed: these were MEDLINE via PUBMED, GOOGLE and GOOGLE SCHOLAR. References of articles and books were used to identify and search for relevant primary sources. The review is presented in the following order:

- The psychosocial impact of critical illness on family
- The needs of families of ICU patients
- The ICU environment as a source of stress
- Family-centred care initiatives
- Demographics and family needs
- Meeting the needs of families of families of ICU patients
- Possible obstacles in attending to the needs of family members

2.2 The psychosocial impact of critical illness on the family

The Concise Oxford English Dictionary (2011) describes psychosocial as the interrelation of social factors on the individual thoughts and behaviour. It includes both the psychological and social aspects. The sudden admission of a loved one to an ICU leads to chaos, worry and stress for both the patient and family members. This results in a limited ability to adapt to the situation, as family members are faced with a scary, unexpected and difficult situation, which is further compounded by shock and uncertainty of not knowing whether the outcome for their loved one will be survival, disability or death (Botes & Langley, 2016).

Hospitalisation of critically ill patients to an ICU represents a moment of crisis for them and their family members. This may result in many physiological and psychosocial problems because they are not adequately prepared for such a stressful situation. For nearly three decades, nursing research has demonstrated that the presence of the family at patients' bedside in the ICU promotes the physical and emotional well-being of both patients and family members (Jahrsdoerfer, 2014). Both the patient and family feel it is important to have a representative from the family act as a primary intercessor or intermediary between the patient and doctor (ibid). The family of ICU patients experienced increased levels of stress, anxiety and depression and required support to help them cope with emotional reactions (Karlsson, Tisell, Engstrom, & Andershed, 2011).

Most families are psychologically unprepared for the patient's admission to the ICU because the majority of admissions were urgent and unexpected (Kreutzer, Devany Serio & Bergquist, 1994; Kentish-Barnes et al., 2009). Another study suggests that this emergent situation (unpredicted and severe illness followed by hospitalisation) throws family members into disequilibrium and renders them uncertain as to how to respond. Disruption in the daily activities and roles of family members may occur, forcing them to reorganise and change roles to regain equilibrium (De Beer & Brysiewicz, 2016).

Family members act as guarantors of the rights of critical patients, assuming responsibility for decisions related to their care and treatment (Karlson, 2011). This means that they are expected to make decisions on the treatment on behalf of the patient, which may sometimes leave them with a feeling of guilt and unease when things go wrong (De Beer & Brysiewicz, 2016).

The uncertain trajectory of chronic critical illness exposes the patient's family to heightened levels of psychological distress. Symptoms of psychological distress affect more than half of family members exposed to the patient's chronic critical illness. Although symptoms often dissipate over time, a significant proportion of family members will remain at moderate to high risk for psychological distress well after the patient's death or discharge from the intensive care unit (Hickman & Douglas, 2010). Family members of chronically critically ill patients are often involved in the decision-making for the patients. Irrational or uninformed decision making can occur when family members experience high levels of psychological distress. Attention to the psychological needs and provision of support to family members enhance the formulation of treatment decisions consistent with the patient's preferences and mitigate unnecessary resource use.

The impact of critical illness on family members causes a risk of depression, anxiety, and post-traumatic stress disorder. From the onset of critical illness, family members are likely to report symptoms of depression that slowly abates over time. The uncertainty associated with critical illness contributes to states of anxiety among family members. During critical illness, family members search for cues that signal improvements or deterioration in the patient's condition. However, when informational cues are absent or not easily comprehended, family members are likely to manifest symptoms of anxiety related to the psychological stress of uncertainty. The uncertainty of the patient's critical illness is often exacerbated by fluctuations in the patient's condition as well as during transitions in the patient's care (Hickman & Douglas, 2010).

Post-traumatic stress disorder, once a psychological disturbance associated with veterans and individuals exposed to traumatic life events, is emerging as a

psychological concept of interest in studies of family members exposed to a patient's critical illness. A precursor to post-traumatic stress disorder, acute stress disorder (ASD) is a cluster of symptoms experienced by family members during and up to four weeks after a traumatic event. The inability to recall information, "being in a daze", emotional numbness, disturbing flashbacks of their experience, and insomnia are a few symptoms associated with acute/post-traumatic stress disorder. (Hickman & Douglas, 2010). At the onset of a patient's critical illness, ASD can have pronounced effects on family members. Hyper arousal and re-experiencing their ICU event through flashbacks or nightmares are also some of the symptoms of posttraumatic stress disorder.

The family may also be asked to make difficult treatment decisions on behalf of their family member, which they often may not understand. Gundo (2010) claims that this may cause further distress to the family and guilt feeling when things go wrong. Moreover, during critical illness, there is a shifting of roles and responsibilities the moment a family member becomes hospitalised. The impact of this varies depending on how primary a role the patient had in the family unit. For example, there will be more of an adjustment for the rest of the family if the hospitalised patient was the wife and mother of four dependents (Gundo, 2010). If the mother falls sick and had the role to care for the children, someone (most likely to be the spouse) has to then take her role to transport the children to school, prepare meals and make sure that homework is done and this person still needs to be visiting the patient at the hospital.

Illness is a family affair, and it is believed that enquiring about another's health and expressing sympathy for the sick are important aspects of social interaction (Urden et al., 2017). People make an effort to visit the sick to show support and to wish them

better health. This notion led to the need and establishment of patient family-centred care facilities in nursing care, as well as exploring family member needs. Family-centred care initiative is an approach that is respectful of and responsive to individual family's needs (Urden et al., 2017). These needs will be discussed next.

2.3 The needs of families of ICU patients

Nancy Molter, an American nursing scholar, did a ground-breaking study on the needs of families of ICU patients. A list of needs statements was then developed through a survey of a number of graduate students during that study (Molter, 1979). The order of the need statements was then revised into CCFNI. It has been used unrevised ever since, with only small adaptations to suit a particular research study (Welch, 2017; White, 2011).

The unmet needs of family members range from information ambiguities, unclear prognosis, fear of death of a loved one, financial needs, and disruption of daily programmes as well as the unfamiliarity of the environment.

Several quantitative and qualitative studies were done to describe the needs of family members of ICU patients. One such was a study by Gundo (2010) to compare the perceptions of nurses and family needs of ICU patients. The CCFNI tool was used for data collection. It emerged from these studies that the need for assurance and the need for information received high rankings. Botes and Langley (2016) also used the CCFNI in their quantitative study to examine the needs of families accompanying injured patients into the emergency department in a tertiary hospital in Gauteng. In this Southern African study, similar findings regarding the importance of the need for assurance and information were reported.

A review of literature by the researcher indicated that subsequent studies using CCFNI have confirmed the five needs categories, the need for assurance, comfort, information, proximity and support (Lee & Lau, 2003; Maxwell et al., 2007). These needs will be discussed next.

2.3.1 Need for assurance

Assurance, as defined by the Oxford Online Dictionary (2017) is a positive declaration intended to give confidence and or encouragement, in other words, a promise. It gives a sense of hope and encouragement to the families of the critically ill (Loghmani, Borhani, & Abbaszadeh, 2014).

Assurance includes several items in the CCFNI. They are honesty, being given understandable explanations, knowing details of the progress and prognosis of the patient as well as the feeling of hope. Talking about the possibility of the patient's death where necessary is also regarded as an item under assurance.

Assurance is ranked as the most important need by patient's families. This was in a study by Lee and Lau (2003) where family members of adult intensive care patients in Hong Kong rated the need for assurance very high. A more recent study was conducted by Omari (2009) in the same country with a sample of 138 families. The results showed that the needs that were highly rated as important were also related to assurance and information category. Along similar lines, a quantitative study conducted at a hospital in Malawi on a comparison of nurses and families' perceptions on critically sick patient's needs, it emerged from the results that both the nurses and patient's families have rated the need for assurance as very important (Gundo, 2010). Similar conclusions regarding the importance of assurance were reported by several researchers (White, 2011; Welch, 2017).

2.3.2 Need for comfort

Comfort refers to a state of physical ease and freedom from pain or constraint (Urden et al., 2017). This involves alleviation of a person's feelings of grief or distress. In this study, comfort also includes physical aspects like comfortable furniture in the waiting area or room, food being served at the hospital as well having a bathroom near the waiting area. In addition, comfort refers to the feeling of relief when you know that healthcare professionals truly care for the patient.

The need for comfort for family members has been under scrutiny in research for several decades. This is evident from the findings of several studies since about three decades ago, which states that the family spends countless hours in the vicinity of the ICU and there is a need for physical and environmental comfort such as a separate waiting room, telephone access, comfortable ambient temperature and lighting, and restful furniture (Leske, 1992; Hupcey, 2000; Welch, 2017).

Comfort related to perceived safety needs of the patient has been identified as an issue for family members (Hupcey, 2000). It is believed that once the family members see that the patient is in a safe environment in the ICU, where health care workers care for the patient, they feel accepted and hence increase trust and comfort which makes it easy for them to leave the hospital at any time (White, 2017).

Several studies on the need for comfort have been conducted and the results have been documented. Giving comfort to the family of the patient is one of the communication behaviours of the nurse in facing with the critical needs of the patient and family (Welch, 2017; Nolen, 2013). Gundo (2010) states that comfort includes welcoming practices performed by hospital staff to make families feel welcome and accepted. The nurse by some behaviours like being friendly and respecting the

patient and showing empathy with the needs of the patient's family members is believed to reduce the feeling of discomfort.

These results provide confirmatory evidence that the need for comfort has been rated important due to the fact that families put the patient's health needs first before their comfort (Welch, 2017; Gundo 2010; Óttir, Sævarsdóttir & Halfdánard, 2011; Jahrsdoerfer, 2014).

2.3.3 Need for information

The need for information, also known as the need for communication, includes the imparting or exchanging of information by speaking, writing, or using some other medium. In the ICU context, information or communication entails knowing the medical condition, treatment being given as well as to know why the patient has to undergo various procedures. Knowing which healthcare should give what type of information and speaking to doctor are some of the items under information. Information also includes being told about the available services in the ICU, as well as the policies and procedures in the ICU (Nolen, 2013).

Communication barriers may be related to the patient being intubated, mechanically ventilated, or neurologically compromised due to trauma, sedation, or stroke, hence they are unable to inform or communicate to their family members. Thus, both nurses and physicians turn to the family to speak on behalf of the patient to help in the decision-making process. Respectively, the family has informational needs they require to help them understand why the patient is in critical condition, to understand the patient's current status, and to understand the long-term patient prognosis. High quality family communication is the backbone of the art and science of nursing

(Urden, 2017). It has a significant impact on patient well-being as well as the quality and outcome of nursing care and is related to patients' family overall satisfaction with their care (Jahrsdoerfer, 2014).

There is overwhelming evidence on the notion that the need for information is the most highly ranked need on the CCFNI. This is proven by findings from studies done worldwide where the results showed that family members indicated the need for information and communication as very important (Gundo, 2010; Jahrsdoerfer, 2014; Welch, 2017; Kluwer, 2017). However, contrary to this, research findings by Mohammad, Keyvan and Hashemizadeh (2015) appear to suggest that family members with low level or no education rate this need less important.

Available evidence seems to suggest that information affects the family member's emotions in both negative and positive ways. Different studies on the prevalence of families' psychological problems showed that incomplete information is among the risks factors for the development of anxiety, depression and post-traumatic stress disorders in relatives of a critically ill patient (Auerbach et al., 2005; McAdam & Puntillo, 2009). Research also revealed that in instances where communication is poor between the staff and patient's families, there is likely to be conflicts as well as tension. Information that is accurate, complete and comprehensible helps to relieve negative feelings and facilitates the development of realistic hope among family members (Verhaeghe, 2007).

Since about a decade ago, it has emerged from research that need for general information about the patient is typically not enough for the family. The family needs accurate, comprehensible information that leaves room for hope (Verhaeghe et al.,

2005). Using grounded theory, Verhaeghe et al. (2005) found that hope was a central theme in every single interview with family. In fact, they found that hope was dependent on information received about their loved one.

Researchers characterised different stages common to all family members as they learned to handle the information that was given to them (Loghmaniet al., 2014).

First, they passively tried to absorb fragments of information brought to them. Secondly, after they saw the patient, they tried to grasp their new reality. In the third stage, as they began to take in the strangeness of the ICU environment, they sought help to cope with the information and the environment around them. Hence, there is a distinct need for clear, concise, complete and understandable information daily from the doctors and nurses in the ICU.

In a quantitative study regarding communication with family, specifically when delivering bad news, Jurkovich and colleagues (2000) used a self-designed instrument to assess family members perceptions concerning feelings of how they received news of their loved one's death. The most essential elements of delivering bad news were summarised as; 'attitude' of the clinician providing the news ranked most important, 'clarity' of the message, privacy of the conversation, and the ability and knowledge to answer family questions. Throughout, communication with the family must be meaningful and presented in simple, clear language in order to increase comprehension and retention (Jurkovich et al., 2000).

2.3.4 Need for proximity or closeness

Proximity or closeness refers to being close or staying on the bedside of the patient. Seeing the patient frequently, helping with physical care as well as unrestricted visitation entails proximity (Gundo, 2010). Due to stringent visiting hours, the

proximity needs are often left unmet. Restrictive ICU visitation policies are currently imposed in most hospitals worldwide as it is believed that the presence of family members may increase the risk of infection for patients and disrupt patients' comfort and nursing care (Welch, 2017).

Open visitation access has been a topic of discussion in research. Welch, (2017) believes that current restrictions on visiting hours are a notable source of stress not only for families but also for patients; hence there is a need to allow open access to visitors. According to Chhetri and Thulung (2017), meeting the visitation needs of family members provides them with support, information, proximity, comfort, and assurance and increases their ICU experience. The family-focused care includes providing the families with reasonable opportunities to visit their ICU admitted patients (Jahrsdoerfer, 2014).

Jahrsdoerfer (2014) found that “family presence in the ICU helped instil hope, a sense of control, trust in providers, and the opportunity to have gaps in knowledge filled-in, all resulting in helping the patient to feel safe while in the ICU” (p 34). The presence and participation of the patient’s family is a key factor in helping patients feel supported during the intensive care unit stay.

Lolaty et al. (2014) examined the effects of family-friend visits on anxiety, physiological indices and the well-being of a patient with myocardial infarction in ICU. They concluded that family-friend visits could improve the family as well as the patients' sense of well-being, diminish their anxiety, and maintain their physiological indices within normal limits. The family-focused care includes providing the families with reasonable opportunities to visit their ICU admitted patients.

2.3.5 Need for support

Most hospital deaths occur during or after a stay in ICU, and two-thirds of ICU deaths involve an active decision to limit treatment. Since most ICU patients are not able to make their own decisions, family members must make these difficult decisions on behalf of their loved ones. When doing so, they may worry that their loved one has suffered or that they have given up too soon and they frequently harbour lingering feelings of doubt, regret, and guilt. During this vulnerable time, family members rely on health care professionals to guide and support them through the decision-making process (White, 2011).

The family provides the patient emotional support, physical care and advocacy (Lolaty et al., 2014). Emotional support includes listening to the patient's fears and concerns. Physical care includes tasks such as bathing the patient or swabbing the patient's mouth, applying Vaseline on the lips as well as getting direction on what to do at the patient's bedside. Advocacy means to be able to speak and be there for the patient. When involved in all of these activities, the needs for support are addressed.

The need for support also has other statements under its category. These include allowing family members to show emotions like crying, allowing them to talk about guilt or bad feelings and have alone time with the patient. Allowing other support services like priests or social workers to help with family problems or spiritual care also entails providing support for family members.

Although support is an important aspect on the needs, literature available from previous studies using the CCFNI has shown that the need for support is ranked low by some family members (Lee & Lau, 2003; Omari, 2009). After reviewing articles published between 1970 and January 2004, Verhaeghe et al. (2005) noted that these

social needs are equally important but they are lowly ranked because the families prioritise the needs of the patient before their own needs.

2.4 The intensive care environment as a source of stress

The intensive care unit, also called a critical care unit, is described as a special department of the hospital in which patients with life-threatening or potentially life threatening injuries or illnesses are treated and monitored. These patients are usually nursed and monitored by highly trained and specialised health care professionals. To preserve life, these patients are usually connected to high technology machines and have indwelling catheters and tubes inserted (Urden et al., 2017).

The Society of Critical Care Medicine (SCCM) (2016) describes intensive care as “medical care for patients whose illness requires close, constant watch by a team of specially trained caregivers”, It specifies, “any illness that threatens life requires critical care” and includes all category of illnesses that affect the functioning of major organs including the heart, brain, gastrointestinal tract, lungs and kidneys (SCCM, 2016b). The SCCM further states that ICU includes those patients who have experienced a stroke, have a systemic infection, have been involved in a major car crash, or have suffered a major fall, serious burns, a stabbing, or a gunshot wound.

Since 1972, researchers have described the physical environment in the ICU as a source of stress for patients and their families. Hay and Oken (1972) capture well the physical environment of the ICU as:

“A stranger entering an ICU is bombarded with a massive array of sensory stimuli. ... The greatest impact comes from intricate machinery, with its flashing lights and buzzing...monitors... One sees many people rushing around performing life-saving tasks. The atmosphere is not unlike that of the tension-charged ...war bunker” (p 19)

This quotation is still relevant today as many authors cite the especially stressful intrusion of bright overhead lighting and constant loud noise in the ICU (Fredriksen & Ringsberg, 2007; Wenham & Pittard, 2009; Lusk & Lash, 2005). Other researchers like Fredriksen and Ringsberg (2007) and Hupcey (2000) clarify that such intrusions are stressful in part because they diminish ICU patients' sense of control over their environment, adding to existing feelings of helplessness about their medical condition. Wenham and Pittard (2009) point out that the decibel level in ICUs often exceed recommended levels for hospitals and can cause patients to experience "noise-induced stress".

Apart from alarming machines and monitors, moans and groans from often-confused patients that may cause anxiety to the family members, Welch, (2017) identified other factors that might also cause stress and anxiety to the patients and family.

These factors include lack of privacy, sleep disturbances and disorientation. During ICU admission, visitations are often restricted and families are also forced to communicate to the patient in the presence of healthcare professionals or while being observed through the glass doors of the room (Nolen, 2013).

It needs to be mentioned that intensive care units in general do not contemplate the presence of patient relatives in the unit for long periods of time. These units are generally designed as closed entities, and their environmental conditions, characterised by high technology, noise and artificial lighting, do, in fact, enhance feelings of stress. All these lead to separation between the patient and family members. In addition, the generally restrictive visiting regimens further increase the negative experience for families visiting relatives in the intensive care unit (Kluwer, 2017).

2.5 Family-centred patient care initiatives

Family-centred care is defined as a partnership approach to health care decisionmaking between the family and health care provider (Yildirim & Özlü, 2018). Furthermore, Kluwer (2017) describes family-centred care initiative as a philosophical approach to care that recognises the needs of patients' family members as well as the important role that family members play during a patient's illness. Family-centred care simply takes patient-focused care to the next level, which is to include those persons who are important in a patient's life, especially family members.

From literature, it emerged that although significant progress has been made to incorporate nursing care from a patient-centred approach to one with an increased family-centred focus, it is more difficult in an ICU because of the intensity of the environment, where factors such as technology and complexity of care are prioritised over relational approaches (Welch, 2017; Gundo, 2010).

Confusion over family-centred care often gives way to frustrations for many staff members who think that family-focused care may not be in the best interest of either patients or nurses (Yildirim & Özlü, 2018). For example, family-centred care does not mean that patients lose their rights to privacy or control over their environment. Furthermore, this does not mean that families should interfere with the health care professionals' activities or routines but rather allowing and educating families to assist with some interventions, for example, helping with physical care or personal hygiene.

Patients who are able should always be asked to what extent (if any) they want their family to participate in care. Patients may, in fact, not want any visitors or any

information given out to family members. The important point that must be stressed here is that the needs, rights and choices of the patient are always the priority, even in a family-centred environment (Nolen, 2013).

Nurses' caring behaviour using a variety of skills, knowledge and caring attitudes helps to reduce the stress experienced by families (Pryzby, 2005). Along similar lines, Muhammad et al. (2013) claims that working with families has a positive impact on the patient's outcome. Results of this study showed that patients also feel good, comfortable and safe knowing that someone cares for them, hence reducing stress.

Several studies in nursing research have been done on the notion of family-centred care. From previous studies on the needs of families in ICU, it emerged that it is important to patients' family members to be assured that the patient is receiving the best possible care (Welch, 2017; Chhetri & Thulung, 2017; Nolen, 2013). Interventions such as having family members present during procedures like oral intubation and resuscitations, help to reassure family members that everything possible is being done for the patient (White, 2011). Meeting a patient's needs should always be the priority for both the patient's family and the nurse.

Patient family-centred care has been researched for decades and has been established in various care settings more readily than in critical care settings (Azoulay, Pochard, Chevret, & Lemaire, 2001). France et al. (2011) conducted a non-experimental, descriptive study that evaluated nurses' interpersonal communication and nursing care in relationship to patients and families. The researchers found a statistically significant positive correlation between nurse-to-patient communication and nurse-to-

patient caring. However, no significant correlations between nurse-to-family caring and nurse-to-family touch were found.

Factors that influence nurses' hesitation to implement patient family-centred care includes a sense of loss of control, drifting away from traditional practices, and interference with daily activities. These include healthcare professionals' attitudinal challenges of family-centred care such as healthcare professionals feeling that families are in the way. Families require a lot of time to answer all of their questions, families may have unreasonable requests, families observing and questioning skills that are performed, and families may misunderstand the information that is communicated during interdisciplinary rounds (Akhlak, & Shdaifat, 2016).

In an environment that places the patient at the mercy of their severe illness, ventilator support, analgesics, and sedation, communication and comprehension can be severely impeded and increase the reliance upon family members to act as decision makers for the care of the patient (White, 2011). Gundo (2010) cites critical care nurses as underestimating the needs of family members. Such underestimation of needs creates an environment laden with anxiety and depression.

2.6 Demographics and family needs

From literature, several demographic variables have been found to have an influence on the needs of family members. These include gender, family members' relationship to the patient, patient age and family members' educational level.

With the exception of the need for information, previous research has found that women report more needs than men (Bijttebier et al., 2000). Along similar lines, a study by Loghmani et al. (2014) set in one ICU found that family satisfaction with needs met increased if the respondent was female and if the patient had a higher

APACHE II (meaning the patient has a poorer outcome prediction) score. This study aimed to measure one ICU's ability to meet the needs of family and found a strong correlation between family satisfaction and their family members' relation to the patient. Siblings of the patients were more satisfied with their needs being met (Loghmani et al., 2014).

Another study reported on the association between age and needs being met. In that study McKiernan & McCarthy (2010) reported that older family members tended to indicate that their needs are being met.

Level of education of family members is another important factor for determining whether family needs are met. This is supported by findings from studies in intensive care settings where more educated people have fewer needs than the less educated (McKiernan & McCarthy, 2010). In short, despite the abundance of literature on ICU family needs, a few studies have been undertaken examining the relationship between demographic characteristics and family needs.

Findings from a study on the needs of families of ICU patients indicated that there was no difference on how family members who spoke different languages or had different religions rated the importance of the needs or how they were being met (Loghmani et al., 2014).

Another possible variable to consider is possible socio-economic differences between family members. In one study, relatives at the private ICU attribute more value to comfort needs than relatives from a non-private ICU (Freitas' Kimura' & Ferreira, 2007).

2.7 Meeting the needs of families of ICU patients

Health care professionals have begun to view family members as an integral part of the healing process and the well-being of patients in the intensive care unit. This means that nurses and doctors working in the ICU play a role in facilitating healing not only through scientific means but also by identifying the needs of families of the patients and meeting them (White, 2011).

The needs of family members may be varied, and nurses must become attuned to the family members' needs and acquire skills to direct interventions towards identifying and meeting those needs.

A holistic nursing care approach also requires nurses to care for their patients as a whole, including their families (Urden, 2017). This means that health care staff, especially nurses working in the intensive care unit, are responsible for meeting the needs of their patient's families. These needs are information, support, assurance, comfort and closeness.

The patients in ICU are the primary focus of staff; some virtually need continuous care. As a result, the needs of family and friends often go unnoticed. Several methods may be used to ensure that information is given to the families. In the modern world, an information screen may be displayed in the waiting area, where families may watch and be informed about the ICU environment, available services including support services like priests, several ICU personnel and their roles (Chhetri & Thulung, 2017). Another method includes distributing information leaflets. Inside these leaflets, families could receive information on unit policies, job specific information for healthcare staff, equipment, procedures, and resources available

(Nolen, 2013). This method has been found effective in establishing communication between family and unit staff. The leaflets increase the families' comprehension of the current situation, which in return increases their feelings of satisfaction with the staff (Nolen, 2013).

Several studies have been done on ICU visitation, aimed at meeting the need for proximity. The Institute for Patient and Family-Centred Care says 70% of hospital ICU policies restrict ICU visitation. Some ICU nurses believe that family visitation increases physiological stress in the patient and interferes with the provision of care and is mentally exhausting for both the families and the patient and contributes to infection (Carroll, Gonzales, 2010). However, evidence suggests that flexible visitation decreases anxiety and confusion for families, and makes the families feel more secure and contributes to better communication (Clochesy, Breu, Cardin, Whittake & Rudy, 1996).

2.8 Possible obstacles in attending to the needs of family members

Family members often feel helpless and powerless and are easily confused and unable to concentrate on details. Their perceptions of reality and normal daily events may be distorted. In addition to the critical illness itself, the hospital environment is stressful for the entire family. This dated statement by Hupcey (2000) is still relevant today.

The results are that the family members might experience difficulty with their usual cognitive coping mechanisms, and the nurses might find that supporting and assisting does not always seem to help. This is all due to a number of reasons. One reason could be a decreased ability to make decisions and solve problems. During a crisis,

people have difficulty in hearing and comprehending information. Ironically, it is during this time of cognitive confusion that they are overwhelmed with information.

The family's need for information, coupled with their inability to process it, leads them to repeat the same questions over and over again. They might even have a decreased sensitivity to, or awareness of the environment. They might also experience a decreased sense of personal effectiveness. They sometimes report that they feel less than helpful during the hospitalisation of a family member (Clochesy et al., 1996).

2.9 Summary

This chapter dealt with the review of literature related to the needs of families of ICU patients. The next chapter covers the research methodology.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

The previous chapter dealt with a review of the literature relevant to the study. The focus of this chapter is on the methodology and includes the research design, population, sampling, data collection, and data analysis as well as research ethics.

The specific objectives were to:

- Describe the needs of family members of patients admitted in the intensive care unit in a private hospital in Windhoek;
- Describe the needs of family members of patients admitted in the intensive care unit in a government (state) hospital in Windhoek;
- To compare needs identified by the family members of these two intensive care units.

3.2 Research design

Brink et al. (2012) defines research design as the overall plan for gathering data in the research study. McDaniel and Gates (2016) define research design as a plan for addressing research objectives. A quantitative, descriptive and comparative design was employed in this study. The motivation for this type of design will be discussed next:

3.2.1 Quantitative

Quantitative research is an approach for examining the relationships among variables. These variables, in turn, can be measured, typically on instruments, so that numbered data can be using statistical procedures (Creswell, 2014). This study used

quantitative research design because the researcher sought to quantifiable data on the following question: “What are the needs of families of patients admitted in the intensive care units in two hospitals in Windhoek?”

3.2.2 Descriptive

A descriptive study design is used when little is known about the topic and to explore the research question (Botma et al., 2010). In this study, the researcher sought insight on the question: what are the needs of families of patients admitted in the ICU?

3.2.3 Comparative

A comparative study refers to an investigation of a phenomenon in two or more groups and relations based on comparison (Botma et al., 2010). This study was comparative because the researcher wanted to compare the similarities or differences in the needs of family members of the patients admitted in the ICU of a private and state hospitals respectively.

3.3 Research settings

The research setting had been identified with the proposal, before approval: The research settings were two intensive care units, one in a private hospital and the other in a government (state) hospital.

3.4 Population

The study population refers to the target population in which the representative sample will be drawn (Botma et al., 2010). “*The population includes all elements that meet certain criteria for inclusion in a study*” (Burns & Grove 2003, p. 43). The population in this study were family members of patients admitted in the two intensive care units, that is, the family members of patients admitted to the private

hospital, and the family members of patients admitted in the government (state) hospital.

Statistics obtained from the Roman Catholic Hospital in 2016 indicated that bed occupancy rate at its ICU was 93% and the total number of patients admitted over a period of three months was 296 (De Klerk, 2017). Statistics obtained from Windhoek Central Hospital indicated that a total of 83 patients were admitted over three months (Stoffberg, 2017). The total number for the two populations was 379, calculated as one family member per patient admitted.

3.5 Sample and sampling

The total population derived over a period of three months was 379, as described under population. The sample size was calculated using the EpiInfo Statcalc for a descriptive study design, taking into consideration the population size, confidence interval of 95% and the confidence limit of 6.97. Therefore, the sample size, according to this computerised calculator was 130 participants. Simple random sampling was used to select participants 65 from each of the two intensive care units. Participants were asked to each pick a number between one and 10; those who picked an even number were then selected to participate in the study.

3.6 Inclusion criteria of the sample

All respondents should have been 18 years or older, be able to read and speak English. They should have been family members (as per definition) of a patient admitted in ICU. Each family chose an adult representative to partake in the study.

3.7 Exclusion criteria of the sample

Family members who were younger than 18 years. Potential respondents who could not read and speak English.

3.8 Data collection

Data collection is the systematic gathering of data using specific instruments (Brink, 2013). Data was collected using a questionnaire adapted from the CCFNI, with permission from the developers.

3.9 Research instrument

Research instruments, also called research tools, are the devices used to collect the data. Questionnaires may be used to measure knowledge levels, opinions, attitudes, beliefs, ideas, feelings and perceptions. Moreover, questionnaires may be used to gather factual information about respondents (Burns & Groove, 2011). A questionnaire was the most suitable method for this study because a large number of people could relatively easily be involved and would provide quantifiable answers, which is important in a quantitative approach.

The existing CCFNI developed by Molter in 1979, adapted in 1991, was modified. Permission to use and adapt the instrument was obtained from the developers (see Annexure D). The literature review gave more information about this instrument to assess its suitability for the study. The literature review was also used for the modification to suit the Namibian context.

3.10 Construction of the research instrument

The questionnaire of this study consisted of section A and section B.

Section A consisted of demographic data in order to understand the representativeness and the profile of the participants. This included the participant's age, gender, language, place of origin, level of education and relationship to the patient as well previous ICU visitation experience.

Section B was CCFNI, which was used to assess the perceptions of patient's family members about the importance of various family needs. The 43-item inventory consists of five main domains namely: assurance (seven questions), comfort (five questions), communication (nine questions), proximity or closeness (nine questions) and support (11 questions).

The instrument used a four-point Likert scale. An item rated as not important was given a score=1, slightly important=2, important=3 and very important=4.

Five other questions, one for each theme, were asked to determine if their needs were being met. These questions were rated on a five-point ordinal scale on how the family members perceived their needs have been met in that specific unit. The ordinal scale was collapsed to two levels, not met and needs met during data analysis. A score of 1 and 2 formed the needs not met while 4 and 5 formed needs being met. A score of 3, which was neutral, was disregarded. This was done in consultation with the statistician to facilitate presentation and interpretation of the results.

Scoring system: the score (1) means needs not being met, while (5) means needs totally being met.

3.11 Procedure for data collection

- (1) The researcher introduced the study to family members while they were waiting in the waiting area for visiting time and the doors to open.
- (2) The study was then explained to all family members present at that specific time.
- (3) The respondents signed a consent form after they agreed to participate.
- (4) Each person who gave consent and met the inclusion criteria then got a questionnaire.
- (5) Consent forms were issued for signing.

- (6) At least five respondents were selected per day.
- (7) Questionnaire completion took place in the Roman Catholic Hospital ICU waiting room and Windhoek Central hospital ICU waiting area.
- (8) Data was collected from January 2018 to April 2018. Table 3.1 shows the number of questionnaire per data collections per each ICU.

Table 3.0.1: Number of questionnaires per ICU [n=130]

	Number of samples collected per ICU	
	Roman Catholic Hospital ICU	Windhoek Central Hospital ICU
January 2018	20	No permission granted yet
February 2018	28	17
March 2018	30	24
April 2018	0	26
Total	71	67
Incomplete/missing	6	2
Total for all ICUs	130	

3.12 Pilot study

A pilot study is a small-scale implementation of the planned investigation in an attempt to bring possible deficiencies to the fore timeously (De Vos et al., 2010). A pilot study was carried out at both ICU's to test the research instrument (questionnaire) for any ambiguity, relevance and sensitivity as well as to estimate the amount of time spent answering the questionnaire. Ten questionnaires completed at each ICU formed part of the pilot study.

The purpose of the pilot study was to establish the overall quality and clarity of the instrument. The cover letter was read before distributing the questionnaires and respondents signed the consent form after they agreed to participate in the pilot study. Respondents were asked to write their remarks about the questions if they found that they were not clear or had any difficulty understanding them.

The pilot study included technical aspects and the time it took to complete a questionnaire. This testing included the respondent's ability to read and comprehend the content of the instrument. This supported the content validity of the instrument. The responses from the pilot study provided the researcher with information on whether all the respondents would understand the questions in the same way. The pilot study focused on readability, technical aspects and aspects of time.

The participants found the questionnaire to be clear and easy to understand. They did not identify challenges, flaws or gaps hence no adjustments were made on the tool. The average time taken to complete each questionnaire was about 10 minutes.

3.13 Testing validity of the instrument

Validity refers to the degree to which the instrument is testing what it is supposed to test (Brink, 2013). The following aspects of validity were taken into consideration during the study, namely content and face validity. Validity confirmation was done during the pilot study.

3.14 Content validity

Literature review was conducted for content validity. Content validity examined the extent to which the measurement method included all the major elements relevant to the construct being measured (Brink, 2013). As an existing instrument was modified and used, content validity was enhanced. The relevance of the modified instrument was confirmed through the literature review.

3.15 Face validity

The questionnaire was also assessed for face validity by obtaining the viewpoints of the supervisors, the unit managers and senior experienced nurses of the critical care units where the study was conducted. They found it clear and easy to read and

understand. The use of an established instrument widely used, further ensured face validity.

3.16 Reliability

Reliability refers to the degree to which an instrument can be depended upon to yield same results if used repeatedly over time on the same person or if used by two researchers (inter-rater reliability) (Brink, 2013). Reliability was measured using the Cronbach’s Alpha test, which rates constancy on a scale of 0 to 1 (0 being the lowest and 1 the highest). The instrument elicited an internal consistency between 0.88 and 0.98 in five studies (Leske, 1991), and in a later study in Malaysia similar results were obtained (Dharmalingam et al., 2016). The Cronbach's Alpha was 0.885, which indicates a high level of internal consistency for the scale. Thus, it can be concluded that the research instrument was reliable. The reliability statistics of the research instrument are depicted in Table 3.2.

Table 3.0.2: Reliability test for the research instrument

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	No. of Items
.885	.896	58

3.17 Data analysis

Data analysis refers to the processing, summarising and interpretation of raw data into meaningful information (Brink, 2013). Data was analysed with the assistance of a statistician, using the SPSS version 24 computer programme. Descriptive statistics were used to describe the collected data, in terms of means, and displayed in graphs

and tables. Analysis of variances was used to check group differences. The data analysis is described and presented in Chapter 4.

3.18 Ethical consideration of the study

Bogonko and Kathure (2015) define ethics as a branch of philosophy that deals with one's conduct and serves as a guide to one's behaviour. Researchers have an obligation to observe and respect all fundamental ethical principles throughout their studies. These principles are based on human rights that need to be protected during research. All ethical considerations pertaining to avoidance of harm to the respondents, informed consent, confidentiality, and authorisation to undertake the study were observed in this study.

3.19 Permission to conduct the research

The researcher obtained a letter of authorisation and introduction from the Ethics Committee of the University of Namibia (see Annexure A). Permission to conduct research was granted by the Ministry of Health and Social Services (MoHSS) (see Annexure B). The management of the Roman Catholic Hospital also gave the researcher permission to conduct the study in the premises (see Annexure C). The researcher explained the study to the unit managers of the ICUs, who granted permission to the researcher to enter the units.

3.20 Principles of respect for persons

Human beings are autonomous and have a right to self-determination, which means the right to decide whether or not to participate in the study (De Vos et al., 2016). An informed consent form (see Annexure E) included the identification of the researcher, aim and process of the research. Respondents were only included in the study when they signed an informed consent form. They were informed that they

could withdraw from the study at any point or choose not to answer some questions without any consequences.

3.21 Principle of beneficence

This principle is based on the notion of right to protection from harm and discomfort. It also emphasises that one should do well, and above all, do no harm (Brink, 2013). The questionnaire was carefully structured to avoid emotional stress to respondents. No names were used in the study.

3.22 Fair treatment/justice

In this study, the principle of justice was ensured through random sampling. Every potential respondent had an equal opportunity to be selected from the target population for the reasons directly related to the research purpose and not because they were easily available or could be manipulated.

All respondents were treated fairly regardless of their looks or positions. The researcher ensured safekeeping of collected data by using a computer password. All information collected from the respondents was stored in a locked cabinet that was only accessible to the researcher.

3.23 Summary

This chapter dealt with the research methodology used in this study, addressing the research design, population, sampling, data collection instruments and procedure. Pilot testing and its purpose, ensuring validity and reliability, as well as data analysis were also discussed. This chapter concluded with the discussion on the ethical considerations. Chapter 4 covers the study results and discussions based on the information or data obtained from the questionnaires.

CHAPTER 4

PRESENTATION OF THE RESULTS AND DISCUSSIONS

4.1 Introduction

The preceding chapter dealt with the research methodology that was followed in selecting the appropriate research design, study population, sampling and sample size as well as selection, research instrument, data collection procedure, data analysis and finally research ethics. This chapter describes the results of the study presented in tables and charts. The presentation of the results will be followed by the discussion with the integration of literature support. The presentation and subsequent discussion are organised in the following sequence:

- Demographic characteristics of the respondents (Section A of the research instrument)
- Results of the critical care family needs inventory (Section B of the research instrument)
- Comparison analysis of the results between the private and state hospitals.

4.2 Demographic data

Demographic data in this study included the age, gender, relationship to the patient, level of education, language spoken in the family, area of residence, specifics of family members, as well as previous ICU visitation experience. The first item under demographic data to be presented is age.

4.2.1 Age

The ages of the respondents are depicted in Figure 4.1.

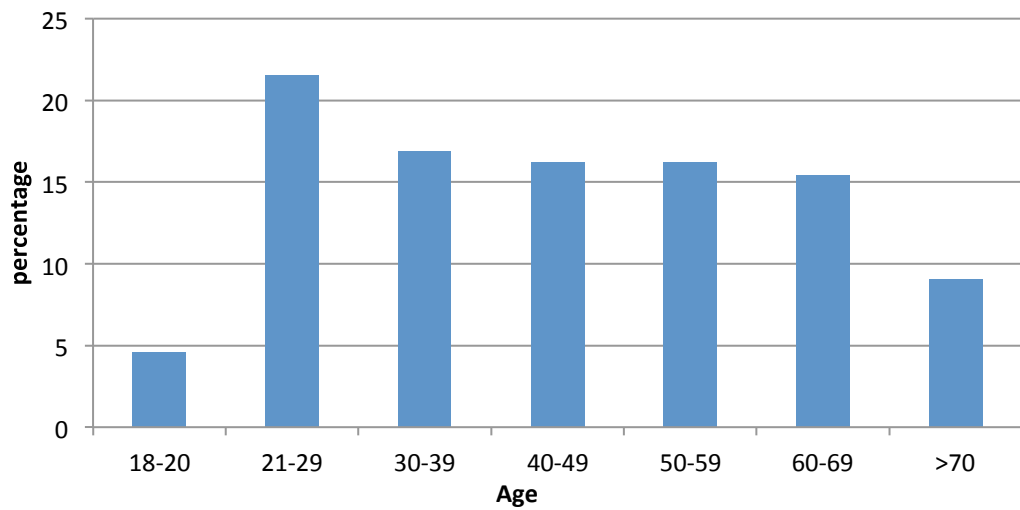


Figure 4.1: Age distribution of the respondents [n=130]

The mean age was 44.5 and standard deviation is 1.754. In this study, the age group 21 to 29 years old represented the majority of the respondents (21.5%), followed by the respondents in the age group 30 to 39 years at 16.9%. In both age groups, respondents 40 to 49 and 50 to 59 years old were 16.2%, while 60 to 69 years totalled 15.4%. The age group 70 years and older formed 9.2 %, and the 18-20 age group recorded the lowest percentage at 4.6%.

Respondents between the ages 21-29 years were the majority in the two hospitals that were sampled for the study.

4.2.2 Gender

The gender of the respondents is portrayed in Figure 4.2.

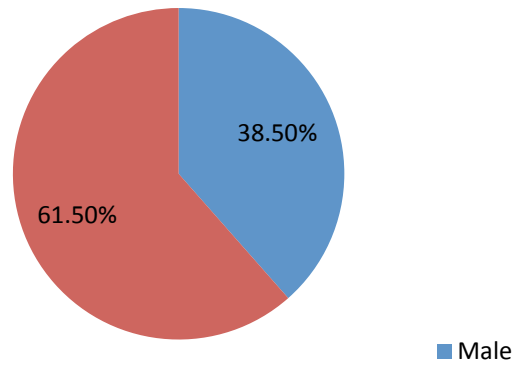


Figure 4.2: Gender distribution of the respondents [n=130]

The results show that 38.5% were males and 61.5% participated in the study was females. These findings are in line with the findings of two studies done in Malawi and the United States of America, respectively, which determined that females more than males, tended to visit family members in intensive care units (Gundo, 2011; Nolen, 2013).

4.2.3 Relationship to the patient

The relationship to the patient is presented in Figure 4.3.

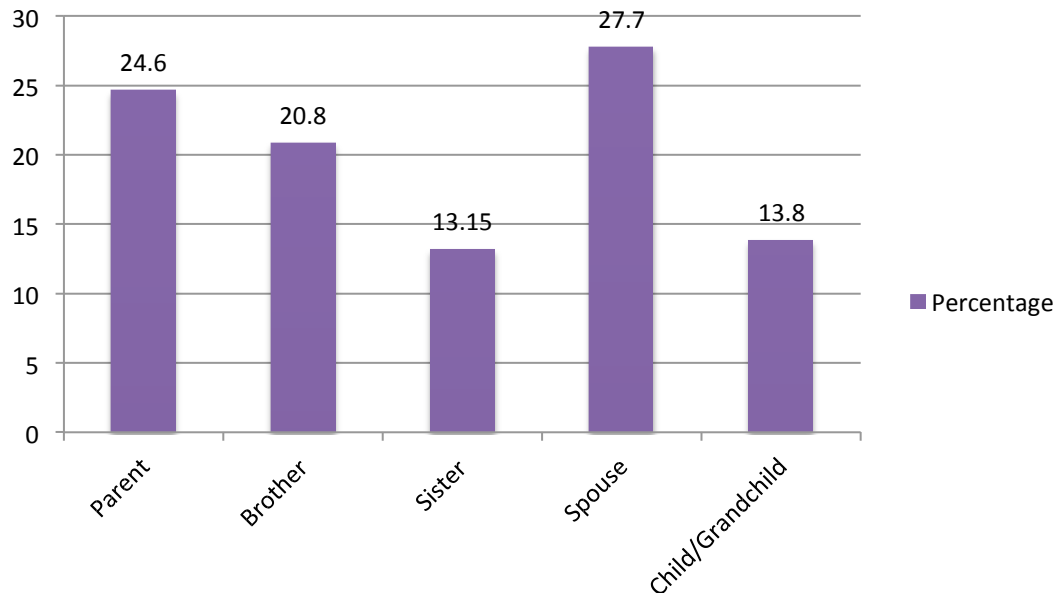


Figure 4.3: Relationship of the respondent to the patient [n=130]

From the findings, it emerged that the most prominent relationship was spouses (27.2%), followed by parents, then brothers. Sisters were 13.15% and children or grandchildren were the lowest at 13.8%.

4.2.4 Level of education

The findings of the level of education of the respondents are presented in Figure 4.4.

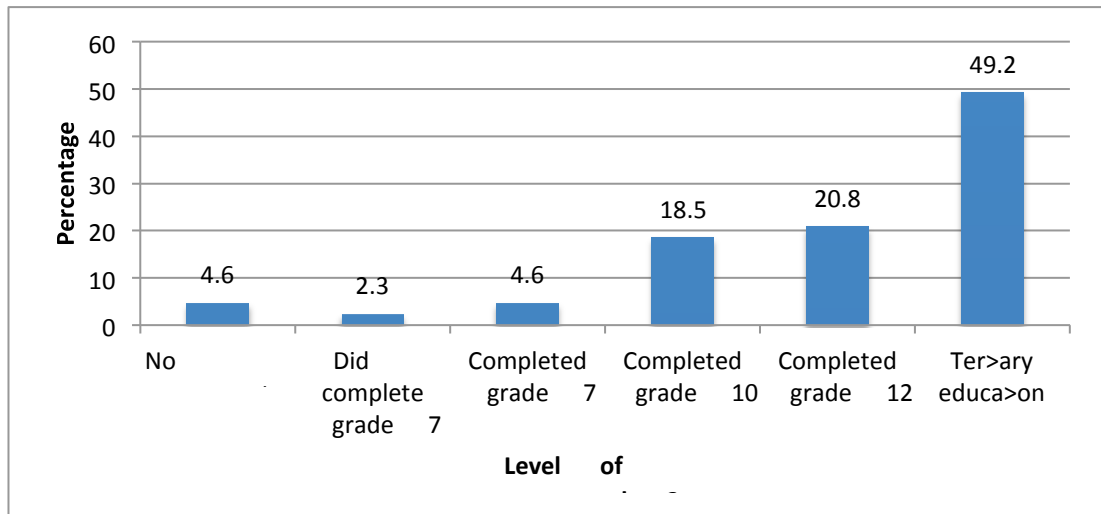


Figure 4.4: Level of education of the respondents [n=130]

Respondents who had no school or never attended school and did not complete Grade 7 were 2.6% and 2.3%, respectively. Those who completed Grade 7 as well as completed grade 10 were 4.6% and 18.5%, respectively. Respondents who completed Grade 12 were 20.8%, while those who completed tertiary education were 49.2%.

Most of the participants in this study completed tertiary education. Loghmani et al. (2014) state that educated people have more expectations, especially on the need for information. They would require explanations of all interventions as well as the prognosis of the patient.

4.2.5 Home language/Language spoken in the family

The home language of the respondents is portrayed in Figure 4.5.

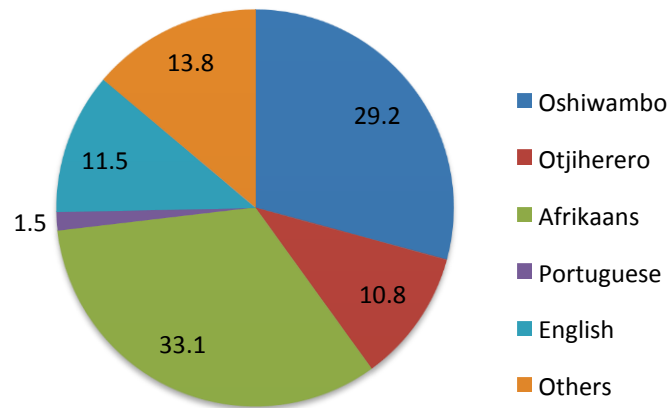


Figure 4.5: Home languages of family members [n=130]

Although the respondents in this study were able to speak English as part of the inclusion criteria for the study, in terms of home language the following were the findings: Oshiwambo 29.2%, Otjiherero 10.8%, and Afrikaans 33.1%, English 11.5%. Other languages spoken were 13.8%, while Portuguese formed the lowest 1.5%.

The New Era newspaper dated 22 May 2015, reported that Afrikaans is widely spoken in about 11% of households in Namibia, mostly in Windhoek, Hardap and //Karas regions (New Era, 2015). This substantiates the finding that most respondents spoke Afrikaans as their home language.

4.2.6 Gender of the patient being visited

In this study, the researcher aimed to find out from the respondents the gender of the patients being visited.

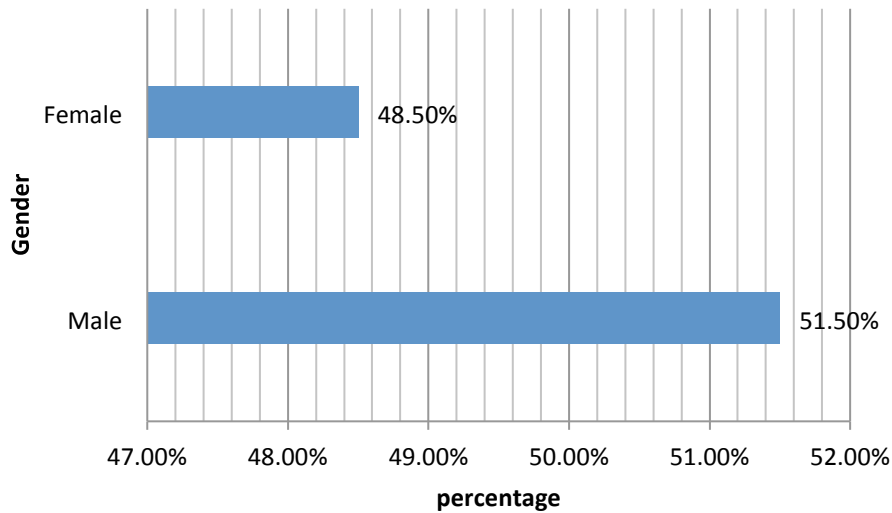


Figure 4.6: Gender of patient being visited. [n=130]

The Figure 4.6 shows that, most (51.5%) of the patients visited were males, while 48.5% were females.

Larsson et al. (2015) in their study reported that male patients tend to be admitted more in critical care units than females due to the a high risk of non-communicable diseases like myocardial infarction and severe injuries related to motor vehicle accidents, mining accidents and gunshots among men.

4.2.7 Area of residence

Figure 4.7 reflects on the residential areas of the respondents to determine distance travelled to visit family members.

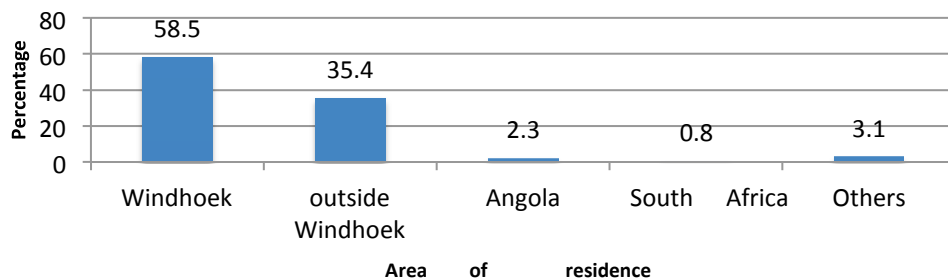


Figure 4.7: Residential areas for respondents [n=130]

Most respondents were from Windhoek and represented 58.5% of the total, while 35.4% were from outside Windhoek but still in Namibia and 2.3% were from Angola and 0.8% were from South Africa while 3.1% of the respondents were from outside Namibia, excluding Angola and South Africa. At the time of the study, Angola had no critical care facilities equivalent to those in Namibia, especially regarding cardiac care, which necessitates Angolan nationals to be referred to Windhoek (Health 24/7, 2018).

4.2.8 Previous ICU visitation experience

Respondents were asked to indicate if they had ever visited a family member admitted in any ICU before. These results are depicted in Figure 4.8.

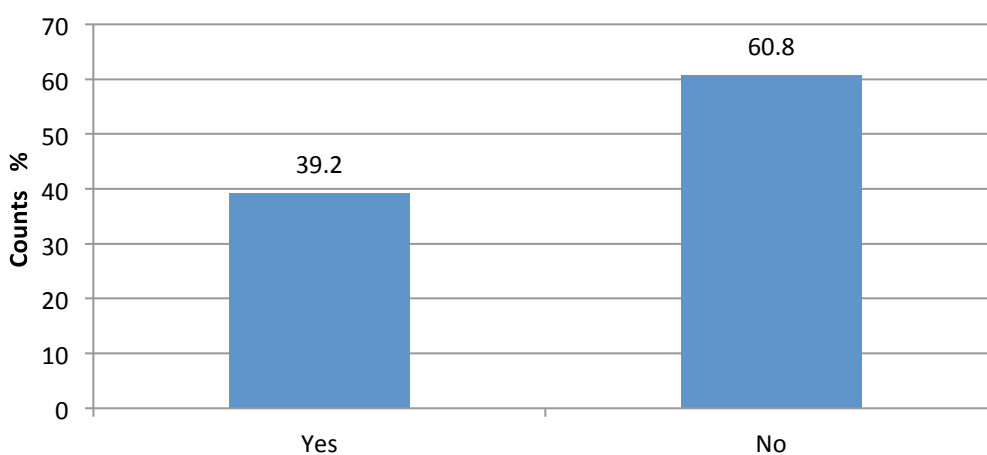


Figure 4.8: Respondents previous ICU visitation experience [n=130]

In this study, 60.8% of the respondents indicated they had never visited an ICU patient, only 39.2% had an experience in visiting ICU patients.

Welch (2017) reports significant differences in perceived needs between family members with or without experience of visiting the intensive care unit. Families with previous ICU visitation experience, seem to need more information and assurance, while those without ICU visitation experience, seem to need more support and hope.

It could, therefore, be assumed that the respondents in this study would also require more support and hope.

The next section deals with the results/findings regarding CCFNI.

4.2.9 Critical Care Family Needs Inventory

The next section reflects on the combined results and discussions from the private and state hospitals, based on CCFNI, as adopted from Molter (1979) and amended by Leske (1991).

4.2.10 Need for assurance

The results for the need for assurance are presented in Table 4.1.

Table 4.1: Need for assurance [n=130]

Need for assurance	Not Important	Slightly important	Important	Very Important
To have questions answered honestly	0%	2%	10%	88%
To know the expected outcome	0%	5%	18%	77%
To have explanations given that are understandable	1%	5%	15%	80%
To know details concerning the patient's progress	0%	8%	16%	76%
To talk about the possibility of the patient's death	11%	15%	23%	52%
To feel there is hope	0%	10%	16%	74%
To be assured that the best possible care is being given to the patient	1%	11%	19%	69%

About 88% indicated it is very important “to have questions answered honestly”, 10% indicated it is important, 2% rated it is slightly important and no one rated it as not important.

This result is consistent with the findings of Nolen (2013), who reported that family members of patients in ICU desired confidence and assurance in the nurses caring for the patient and having their questions answered honestly.

“To know the expected outcome” was rated as follows: approximately 77% indicated it as very important, 18% as important and 5% rated it as slightly important.

On the item “to have explanations given that are understandable”, it emerged that 80% regarded it as very important, 15% rated it as important, slightly important obtained a rating of 5%. However, 1% indicated that it is not important to have explanations that are understandable.

The respondents in these two hospitals thus had a need in knowing the outcomes as well as understandable explanations This is supported by the findings of Bandari et al. (2015), who revealed that families of ICU patients highly rank the need to have understandable explanations and to know the expected outcomes.

For the next four items the results are presented, after which a combined discussions follow.

Responses on “To know details concerning the patient’s progress” were rated as follows: slightly important (8%), important (16%) and very important (76%). None rated it as not important.

“To talk about the possibility of patient’s death” were rated as follows: 11% as not important, 15% as slightly important, 23% important, while 52% indicated that it is very important.

The respondents rated “to feel that there is hope” as follows: 74% very important; 16% important and 10% indicated that it is slightly important. None rated it as not important.

On the item “To be assured that the best possible care is being given to the patient”, 69% of the respondents rated it as very important, 19% as important and 11% rated it important while 1% rated it as not important.

In this study, the respondents indicated that they regarded the four mentioned needs as of importance. This is supported by studies that reported that family members want to know details concerning the patient’s progress, to have hope and be assured that the best care is given to their loved ones (McKiernan & McCarthy, 2010).

The next discussion is on the need for comfort.

4.2.11 Need for comfort

The need for comfort for family members is captured in Table 4.2.

Table 4.2: Need for comfort [n=130]

Need for comfort	Not Important	Slightly Important	Important	Very Important
To feel accepted by health care professionals	5%	14%	33%	48%
To have comfortable furniture in the waiting room	18%	30%	31%	21%
To have a bathroom near the waiting room	18%	28%	32%	22%
To have good food available in the hospital	24%	25%	24%	28%
To be assured it is acceptable to leave the hospital for a while	10%	19%	40%	31%

“To feel accepted by health care professionals” was rated as follows: 5% indicated that it was not important, 14% rated it as slightly important, 33% rated it as important, while 48% rated it as very important.

“To have comfortable furniture in the waiting room” was rated not important by 18% of the respondents, 30% indicated that it was slightly important, 31% rated it important, while 21% rated it as very important.

Findings on “To have a bathroom near the waiting room” were as follows: 18% rated it as not important, 28% as slightly important, 32% as important, and 22% rated it as very important.

“To have good food available in the hospital” was rated as follows: 24% indicated that it was not important, 25% that it was slightly important, 24% that it was important, while 28 % indicated that it is very important.

The findings that emerged regarding “To be assured it is acceptable to leave the hospital for a while” were that 10% rated it as not important, 18% rated it as slightly important, 40% rated it as important, while 31% rated it as very important.

These findings are in line with the findings of the study by Shorofi et al. (2016), who reported that the need for comfort is generally rated important. This included items like having a bathroom nearby, food as well as comfortable furniture for visitors who spend long hours or days in the ICU.

The need for information and the results will be discussed next.

4.2.12 Need for information

Table 4.3 shows the findings of the needs for information.

Table 4.3: Need for information [n=130]

Need for information	Not Important	Slightly Important	Important	Very Important
To know which health care professionals could give what type of information	2%	8%	25%	65%
To know what medical treatment the patient is receiving	2%	6%	30%	62%
To know why the patient has to undergo various procedures	2%	7%	25%	67%
To know exactly what is being done for the patient	2%	5%	32%	61%
To talk to the doctor every day	2%	8%	28%	62%
To be contacted when changes in the patient's condition occur	2%	5%	32%	62%
To know about the types of health care professionals taking care about the patient	1%	12%	40%	48%
To have specific person to contact at the hospital when unable to visit	4%	14%	35%	47%
To be informed about religious services/spiritual care	17%	15%	38%	31%
To know what to bring for the patient	12%	12%	35%	41%

The following findings emerged on “To know which health care professionals could give what type of information”: 2% rated it as not important, 8% as slightly important, 25% as important, while 65% rated it as very important.

“To know what medical treatment the patient is receiving” was rated as follows: 2% of the respondents rated it not important, 6% as slightly important, 30% as important, while 62% rated it very important.

Kloos and Daly (2008) report that the uncertainty and lack of information experienced by patients’ family members is an important factor in increasing their depression and anxiety. It is, therefore, evident that receiving information is important to put family members at ease. This information includes medical treatment and progress.

The third item was “To know why the patient has to undergo various procedures”.

The option “very important” obtained a rating of 67%. The second highest rating was 25% for the option “important”, while 7% rated it as important and 2% rated it not important. “To know exactly what is being done for the patient”, the fourth item, was rated very important by 61% of the respondents, important by 32%, slightly important by 5%, while 2% regarded it as not important.

“To talk to the doctor every day” was indicated not important by 2%, slightly important by 8%, as important by 28% and 62% rated it as very important.

“To be contacted when changes in the patient’s condition occur” was rated very important by 62%, important by 32% and rated as slightly important by 6%, while 2% rated it as not important.

“To know about the types of health care professionals taking care of the patient” was rated not important by 1%, slightly important by 12%, important by 40% and 48% rated it as very important.

“To have specific person to contact at the hospital when unable to visit” was rated not important by 4%, slightly important by 14%, important by 35% and very important by 47%.

“To be informed about religious services/spiritual care” was rated not important by 17%, slightly important by 15%, important by 38% and very important by 31%.

The last statement in this category was “To know what to bring for the patient” and was rated not important by 12%, slightly important by 12%, important by 35% and very important by 41%.

Loghmani et al. (2014) found that “the most pressing need of family members of patients in the intensive care unit is to receive clear and understandable information about the patient's condition, especially from the doctor on a daily basis or when change in the patient's condition occurs”. This concurs with the findings of this study where most items like talking to the doctor every day, knowing about the procedures and rationale for the procedures, were rated important.

One of the main duties of nurses is to provide clear and appropriate information and compassionate care to family members enabling them to make informed decisions about their relatives who are unable to speak for themselves (Searle, Human & Mogotlane, 2009).

The need for proximity or closeness will be discussed next:

4.2.13 Need for proximity or closeness

The Table 4.4 shows the findings of the needs for proximity as according to the family members.

Table 4.4: Need for proximity or closeness [n=130]

Need for Proximity/ closeness	Not Important	Slightly important	Important	Very Important
To see the patient frequently	3%	16%	37%	44%
To receive daily information about the patient	4%	12%	42%	42%
To be told about the transfer plans while they are being made	2%	10%	36%	52%
To have visiting hours changed for special circumstances	3%	19%	31%	47%
To visit any time	14%	26%	35%	25%
To have visiting hours start on time	13%	22%	35%	29%
To help with patient's physical care	22%	21%	32%	25%
To have waiting room near the patient	24%	21%	32%	23%
To talk to the same nurse everyday	20%	24%	32%	25%

The first statement was “To see the patient frequently” and was indicated not important by 3%, slightly important by 16%, important by 37% and very important by 44%. The second statement “To receive daily information about the patient” was rated not important by 4%, slightly important by 12%, important by 42% and very

important by 42%. “To be told about the transfer plans while they are being made” was regarded not important by 2%, slightly important by 10%, important by 36% and very important by 52%. “To have visiting hours changed for special circumstances” was rated as not important 3%, slightly important by 19%, as important by 31% and as very important by 47%.

The last five statements and results on this theme are presented next. “To visit any time” was rated as not important by 14%, as slightly important by 26%, as important by 35% and as very important by 25%. “To have visiting hours start on time” was rated not important by 13%, as slightly important by 23%, as important by 35% and as very important by 29%. “To help with patient’s physical care” was rated not important by 22%, slightly important by 21%, and as important by 33% while 23% also rated it as very important. “To have waiting room near the patient” was rated not important by 24%, by 21% as slightly important and as important by 32% and very important by 23%. The last statement was “To talk to the same nurse everyday” which was found not important by 20%, slightly important by 24%, important by 32% and very important by 25%.

Among others, “To be told about transfer plans while they are being made” was the only need that is rated above 80%, to be specific 88%. “To receive daily information about the patient” was rated 84% important. These findings are contradicting the results from other similar studies that family members felt a strong need to be close to the patient to see what is happening (Plakas, Cant & Taket, 2009; Gundo, 2010; Nelson, 2011). According to these two studies being physically close to the patient comforts the family and helps them to validate the seriousness of the situation and illness. However, the item to be told about transfer plans while they are being made,

received the highest rating as very important in this category. This concurs with the findings of a study by Chhetri and Thulung (2017) where the respondents indicated that it is very important to be told about transfer plans of the patient while they are being made. The results on the need for support follow.

4.2.14 Need for support

The Table 4.5 shows the findings of the needs for support.

Table 4.5: Need for support [n=130]

Need for support	Not Important	Slightly Important	Important	Very Important
To have explanations of the environment before going into the Intensive Care Unit for the first time.	6%	15%	37%	42%
To have directions as to what to do at the bed side	15%	15%	42%	29%
To talk about negative feelings such as guilt or anger.	25%	18%	32%	25%
To have another person with you when visiting the Intensive Care Unit	28%	13%	35%	24%
To have friends nearby for support	23%	13%	36%	28%
To feel that health care professionals care about the patient	8%	6%	42%	43%
To have someone concerned about your health	11%	17%	38%	35%
To have someone to help with financial problems	28%	12%	35%	25%
To be alone with the patient at any time	21%	17%	39%	23%
To feel it is acceptable to cry	16%	18%	42%	24%
To have a priest available when needed	17%	18%	35%	31%
To be told about other people who could help with family problems	21%	12%	37%	30%

The item “To have explanations of the environment before going into the Intensive Care Unit for the first time” was regarded as not important by 6%, slightly important by 15%, important by 37% and very important by 42%. “To have directions as to what to do at the bed side” was regarded as not important by 15%, slightly important by 15%, important by 42% and very important by 29%. “To talk about negative feelings such as guilt or anger” was rated as not important by 25%, slightly important by 18%, important by 32% and very important by 25%. “To have another person with you when visiting the Intensive Care Unit” was rated by 28 % as not important, 13% rated it as slightly important, 35% rated it as important and 24% as very important.

The item, “To have friends nearby for support” was rated by 23% as not important, 13% as slightly important, with 36% as important and very important by 28%. “To feel that health care professionals care about the patient” was rated not important by 8%, slightly important by 6% and 42% rated it as important while 43% rated it very important.

“To have someone concerned about your health” was rated by 11% as not important, by 17% as slightly important, by 38% as important and by 35% as very important. “To have someone to help with financial problems” was rated not important by 28 %, slightly important by 12%, important by 35% and very important by 25%.

The item, “To be alone with the patient at any time” was rated not important by 21%, as slightly important by 17%, as important by 38% and as very important by 23%. “To feel it is acceptable to cry” was rated not important by 16%, as slightly important by 18%, as important by 42% and as very important by 24%. “To have a priest available when needed” was rated not important by 17%, as slightly important by

18%, as important to 35% and as very important by 31%. “To be told about other people who could help with family problems” was rated not important by 21%, as slightly important by 12%, as important by 37% and as very important by 30%.

From the results of all 12 items that dealt with support, it emerged that most family members selected the options important or very important. The average percentage for these two options alone for all 12 items were always above 55%, with most combined scores above 60%.

Receiving information of the ICU environment, especially on the first visit, feeling that health care professionals care for the patient as well as having a priest available when needed are among some of the important needs under the theme category. These findings are supported by Chhetri and Thulung (2017), who, their study, determined that the feeling that nurses care for the patients as well as having a priest available for spiritual support and encouragement during hospitalisation, are important aspects of support for families.

The findings of a study by Kynoch (2016) revealed that receiving explanation of the ICU environment before entering, especially on the first visit, has been rated important. Furthermore, that study found that families are more satisfied and receiving information of the environment prior to visiting the patient reduced their anxiety.

4.2.15 Needs being met

The Table 4.6 shows the findings of the needs being met

Table 4.6: Needs being met n=130

Type of need “theme need”	Need not being met	Need being met
Assurance	5%	79.5%
Support	12%	71.5%
Comfort	35%	50%
Proximity/closeness	9%	73%
Information	10%	77.5%

The respondents used a 5-point ordinal scale to rate how various needs for each theme had been met. The score 1 meant that the need had not been met, while 5 meant the need had totally been met.

The results show the respondents indicated satisfaction with scores that are at least 50%. It can be suggested there was satisfaction above 50%.

In this study, families from both ICUs in the study have indicated that their needs under each theme have been met upon visitation in the ICU. The needs for assurance, support, proximity and information all received ratings above 70%. These findings are consistent with the findings by Yildirim and Özlü, (2018), which revealed that needs for assurance, information, closeness and support were highly rated as being met by families of ICU patients.

In summary, these findings indicate that the need for assurance is regarded as the most important need category. The next discussion will be on the comparison of the findings between the two hospitals (private and public).

4.3 Comparison of findings between private and state hospitals

The comparison aimed to determine whether there were differences and or similarities in how the needs of family members were rated between the two hospitals.

4.3.1 Comparison of the need for assurance

Table 4.7 illustrates the comparison of the findings on the rating of the need for assurance at both hospitals.

Table 4.7: Comparison of needs for assurance [n=130]

	Assurance				Variance
	Not important	Slightly important	Important	Very important	
	State Hospital	1.78%	4.67%	22.67%	
Private Hospital	2.02%	11.01%	13.71%	73.26%	1060.097

From the comparison, it emerged that 73.26% of the respondents at the private hospital indicated the need of assurance as very important compared to respondents at the state hospital (70.89%). About 23% of the respondents at the state hospital indicated the needs for assurance as important, compared to the 13.71% of respondents at private hospital. It is also worth noting that for each hospital, about 2% of the respondents indicated assurance as not important. It is worth noting that these findings are not statistically significant ($p < 0.05$).

Thus, for the theme on assurance, there is no statistically significant difference on the ratings between the private and state hospital.

4.3.2 Comparison of the need for comfort

Table 4.8 indicates the results on the rating of the need for comfort at the state and private hospitals.

Table 4.8: Comparison of needs for comfort [n=130]

	Not important	Slightly important	Important	Very important	Variance
State Hospital	15.69%	23.69%	28.00%	32.62%	51.9853
Private Hospital	14.15%	22.77%	36.00%	27.08%	82.674

Respondents have different feelings on the need for comfort. There was not much difference between the respondents who stated not important and slightly important, important and very important. Hence the findings are not statistically significant

($p < 0.05$). Thus, for the theme on comfort, there is no statistically significant difference on the ratings between the private and state hospital.

4.3.3 Comparison of the need for information

Table 4.9 portrays the comparison for the rating of the information need.

Table 4.9: Comparison of need for information [n=130]

	Information				Variance
	Not important	Slightly important	Important	Very important	
	State Hospital	5.38%	6.77%	33.54%	
Private Hospital	3.54%	11.38%	30.46%	54.62%	517.731

The need for information was rated slightly equally at both hospitals; 54.3% and 54.6% for state and private hospital respectively. For the state hospital 54.3% indicated it as very important while 54.6% of the respondents of the private indicated it as very important. The findings are not statistically significant ($p < 0.05$).

Thus, there is no statistical significant difference on the ratings between the private and state hospital on the need for information.

4.3.4 Comparison of the need for proximity

Table 4.10 depicts the findings on the comparison of the findings of the proximity need from both hospitals.

Table 4.10: Comparison of needs for Proximity [n=130]

	Proximity				Variance
	Not important	Slightly important	Important	Very important	
	State Hospital	12.99%	18.97%	36.75%	
Private Hospital	10.43%	18.97%	32.48%	38.12%	158.910

As it is for needs of comfort, need for closeness had mixed feeling. All ratings for need for closeness were below 40%. However, the highest ranked was 38.12% in the option very important, obtained from family members at the private hospital. Only 31.3% of family members of patients from state hospital indicated proximity as very important. The findings are not statistically significant ($p < 0.05$). Thus, for the theme on proximity, there is no statistically significant difference on the ratings between the private and state hospital.

4.3.5 Comparison of the need for support

Table 4.11 shows the results of the comparison for the need for support.

Table 4.11: Comparison of needs for support [n=130]

	Support				Variance
	Not important	Slightly important	Important	Very important	
	State Hospital	18.77%	10.92%	37.69%	
Private Hospital	16.15%	18.08%	36.79%	28.97%	93.658

The need for support received a relatively high score as important by family members from state hospitals with 32.69% and 38.79% by family members from private hospitals. About 19% of respondents from the state hospital indicated that support is not important and 16% respondents from the private hospital indicated it as not important. Findings are not statistically significant ($p < 0.05$).

Thus, for the theme on support, there is no statistically significant difference on the ratings between the private and state hospital.

4.3.6 Top five highly ranked need statements from both hospitals in the study

Table 4.12 shows the top five highly ranked need statements; this was calculated by getting a sum of the very important ratings at both hospitals.

Table 4.12: Top five highly rated important and very important items [n=130]

Statement	Frequency	Theme category
1. To have questions answered honestly	128 (98.5%)	Assurance
2. To know the expected outcome	123 (94.6%)	Assurance
3. To have explanations given that are understandable	123 (94.6%)	Assurance
4. To know exactly what is being done for the patient	121 (93.1%)	Information
5. To be contacted when changes in the patient's condition occur	121 (93.1%)	Information

In this study, result shows that the statement “To have questions answered honestly” seemed very important to 98.5% of the respondents. It was followed by “To know

the expected outcome” and “To have explanations given that are understandable” who were rated very important by 94%. Moreover, statements “To know exactly what is being done for the patient” and “To be contacted when changes in the patients’ condition occur” followed both with 93.1%.

From this study, it emerged that the top five statements that were rated very important by almost all respondents are from the themes assurance and information. Equally, Gundo, (2010) revealed the top 10 statements that were rated very important by families and nurses, were from the themes assurance, information and support.

4.4 Summary

This chapter covered the data analysis, presentations of the findings and discussions. All analyses were done in SPSS version 23 and presented in tables, graphs and summary. A combined analysis of the results as well as the discussions was presented, as well as a final comparison between the two hospitals. The next chapter, which is also the final chapter, covers conclusions, limitations as well as the recommendations from this study.

CHAPTER 5

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

5.1 Introduction

In this final chapter, the discussion centres on the conclusions, limitations and recommendations of the study. A summary of the study will be provided before the final conclusions, limitations and recommendations are presented.

5.2 Summary of the study

A quantitative, descriptive and comparative design was used to explore and compare the needs of patient family members in ICUs at two Windhoek hospitals. One hundred and thirty respondents from both hospitals completed the instrument and the data were analysed and described variances that emerged were used to analyse group differences between the two hospitals. The results were presented in Chapter 4, with an integrated approach employed for the appropriate discussions. These discussions were controlled with the literature.

The final chapter presents the conclusions, limitations and recommendations.

The conclusions are discussed according to the study objectives. For the sake of clarity, the study objectives are displayed below: The objectives of the study were to:

- Describe the needs of family members of patients admitted in the intensive care unit in a private hospital in Windhoek;
- Describe the needs of family members of patients admitted in the intensive care unit in a government (state) hospital in Windhoek;
- To compare needs identified by the family members of these two intensive care units.

5.3 Conclusions

5.3.1 Objective one

To describe the needs of family members of patients admitted in the intensive care unit in a private hospital in Windhoek.

The conclusions are presented according to each theme need as follows: assurance, comfort, information, proximity and support.

Need for assurance

The study revealed that family members regarded the need for assurance as very important. The emphasis was especially on honesty regarding all questions asked.

Need for comfort

The comfort theme addressed both human and physical aspects.

It was found that family members regarded being accepted by health professionals as contributing to their comfort level. However, it was only regarded as slightly important, while the physical aspect was not even regarded as important.

Need for information

The need for information was regarded as very important. The findings indicated that family members want to be informed regarding all aspects of care, be it procedures [interventions], explanations or any change in the condition of their family member.

Need for proximity

The need for proximity or closeness was regarded as important. Family members emphasised that being allowed in outside normal visiting times as well as visiting the patient frequently are important.

Need for support

Family members regarded the need for support as very important. More emphasis was put on being allowed to have support from a priest, being allowed to show emotions, like crying and being supported to express these emotions.

5.3.2 Objective two

To describe the needs of family members of patients admitted in the intensive care unit in a government (state) hospital in Windhoek.

Need for assurance

The need for assurance was regarded as very important. Family members put more emphasis on honesty, knowing the expected outcome and to be given hope. Family members also indicated the importance of being given explanations that are understandable.

Need for comfort

The need for comfort was regarded as important. More emphasis was put on the need to have a bathroom near the waiting area as well as comfortable furniture in the

waiting area. The family members also indicated having food available at the hospital as important.

Need for information

The need for information was regarded as very important by family members. Emphasis was put on being informed about all aspects of patient care and knowledge of healthcare professionals.

Need for proximity

The need for proximity was regarded as important. Family members emphasised that to have visiting hours changed for special circumstances and to see patient frequently as important aspects of proximity. Having a waiting room near the patient was also emphasised.

Need for support

The study revealed that family members regarded the need for support as important. Emphasis was put on having explanations of the environment before going into the ICU for the first time. Furthermore, the aspect of feeling that health care professionals care about the patient being allowed to show emotions, like crying were objective three: **To compare needs identified by the family members of these two intensive care units.** The study revealed that there were no statistical significant differences between the results of the family members of the private hospital and the family members of the state hospital. However, the comfort need was found to be very important to family members of the private hospital, while the family members from the state hospital

It can, therefore, be concluded that the needs of family members from the private hospital and the state hospital in this study are similar.

5.4 Limitations

The context of this study included only two hospitals, thus the findings can only be generalised to these two hospitals. The study only included family members that could read and speak English. There was also a limitation of recent studies on the topic experienced.

5.5 Recommendations of the study

The recommendations in this study concern the following:

- Management of Roman Catholic Hospital and the Ministry of Health and Social Services (MoHSS) as well as Windhoek Central Hospital ICU management
- Further research

5.5.1 Recommendations to the Roman Catholic Hospital, Ministry of Health and Social services as well as Windhoek Central Hospital ICU management

- All healthcare professionals working in the intensive care unit should be made aware of the needs of family members of the patients and be able to meet those needs. This may be done through in-service training as well as on the-spot training during clinical rounds.
- Assurance for family members should be practiced at all times. Emphasis to be given on honesty and explaining possible expected outcomes.
- Communication with the families should be done in a clear, concise, honest and understandable manner and be a priority. This could be done through

printing brochures or information leaflets and be placed in the waiting area for families to read.

- Physical comfort should always be considered as well as support to be given to families.
- Administration of information leaflets to families on first admission. These leaflets could contain information on unit policies, equipment, procedures and resources available. Two examples were developed by the researcher (see Annexure H and I).

5.5.2 Recommendation for further research

- This study was conducted at two Windhoek health care institutions only (namely the Roman Catholic Hospital and Windhoek Central Hospital ICUs). It is recommended that the study be repeated in a different setting to confirm the findings. It is further recommended that a qualitative study be conducted to investigate or compare perceptions of the families and nurses on the needs of critically ill patients. Lastly, it is further recommended that a repetition of this study using a qualitative methodology, since it is unclear if the family members of patients in Namibia have the same needs as those in the western countries.

5.6 Summary

This chapter presented the last part of this study. Conclusions, limitations as well as recommendations were presented. The conclusions of the objectives were described. Recommendations based on the findings of the study were also presented.

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LIST OF ANNEXURES

ANNEXURE A: RESEARCH PERMISSION LETTER FROM UNIVERSITY OF NAMIBIA

CENTRE FOR POSTGRADUATE STUDIES

University of Namibia, Private Bag 13301, Windhoek, Namibia
340 Mandume Ndemufayo Avenue, Pioneers Park
☎ +264 61 206 3275/4662. Fax +264 61 206 3290. URL: <http://www.unam.edu.na>



RESEARCH PERMISSION LETTER

Student Name: E Hamukwaya

Student number: 200729098

Programme: Masters in Nursing Sciences

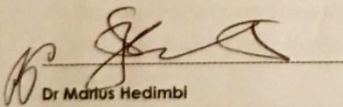
Approved research title: THE NEEDS OF FAMILY MEMBERS OF PATIENTS ADMITTED IN TWO INTENSIVE CARE UNITS IN WINDHOEK.

TO WHOM IT MAY CONCERN

I hereby confirm that the above mentioned student is registered at the University of Namibia for the programme indicated. The proposed study met all the requirements as stipulated in the University guidelines and has been approved by the relevant committees.

The proposal adheres to ethical principles as per attached Ethical Clearance Certificate. Permission is hereby granted to carry out the research as described in the approved proposal.


Best Regards


Dr Marius Hedimbi
Director: Centre for Postgraduate Studies
Tel: +264 61 2063275
E-mail: directorpgs@unam.na

22/01/2018
Date

Centre for Postgraduate Studies
Office of the Director
2018 -01- 22
University of Namibia
UNAM

**ANNEXURE B: CONSENT LETTER FROM MINISTRY OF HEALTH AND
SOCIAL SERVICES**


REPUBLIC OF NAMIBIA
Ministry of Health and Social Services

Private Bag 13198 Windhoek Namibia	Ministerial Building Harvey Street Windhoek	Tel: 061 - 2032537 Fax: 061 - 222558 Email: shimenghipangelwa71@gmail.com
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OFFICE OF THE PERMANENT SECRETARY

Ref: 18/3/3 EH
Enquiries: Mr. J. Nghipangelwa
Date 06 February 2018

Ms. Edith Hamukwaya
UNAM
Windhoek

Dear Ms. Hamukwaya

RE: The need of family members of patients admitted in two Intensive Care Units in Windhoek

1. Reference is made to your application to conduct the above-mentioned study.
2. The proposal has been evaluated and found to have merit.
3. **Kindly be informed that permission to conduct the study has been granted under the following conditions:**
 - 3.1 The data to be collected must only be used for academic purposes;
 - 3.2 No other data should be collected other than the data stated in the proposal;
 - 3.3 Stipulated ethical considerations in the protocol related to the protection of Human Subjects' should be observed and adhered to, any violation thereof will lead to termination of the study at any stage;
 - 3.4 A quarterly report to be submitted to the Ministry's Research Unit;
 - 3.5 Preliminary findings to be submitted upon completion of the study;

**ANNEXURE C: PERMISSION LETTER FROM ROMAN CATHOLIC
HOSPITAL**



ROMAN CATHOLIC HOSPITAL
P.O. Box 157, TEL 2702004, FAX 2702034
WINDHOEK, NAMIBIA

19 January 2018

Ms. Edith Hamukwaya
University of Namibia
Windhoek

Dear Ms. E. Hamukwaya

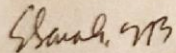
Re: Permission to interview family members of patients admitted in ICU

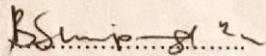
Herewith, the Roman Catholic Hospital grants permission and gave reference to your application to conduct the abovementioned study.

Your proposal has been evaluated and found to have merit.

We wish you all the best with this activity.

Kind Regards


.....
Sr. Sarah Gocela, OSB
Roman Catholic Hospital


.....
Sr. Bernadette Shipanga
Nursing Service Manager

ANNEXURE D: PERMISSION TO USE AND MODIFY THE CCFNI

Dear Researcher,

Please find enclosed a copy of the *Critical Care Family Needs Inventory*. You have permission to use/modify and/or translate the tool to meet your research needs and credit is referenced in your work. The psychometric properties of the instrument are published in Leske, J.S. (1991). Internal psychometric properties of the Critical Care Family Needs Inventory, *Heart & Lung*, 20, 236-244. Please do not hesitate to contact me if you have any questions. Best wishes for a successful research project.

Sincerely,

Jane S. Leske PhD, RN, ACNS-BC, FAAN

ANNEXURE E: CONSENT FORM TO PARTICIPATE IN THE STUDY



INFORMED CONSENT FORM

Title of study: The needs of family members of patients admitted in two intensive care units in Windhoek.

Researcher: Edith Hamukwaya

Master of Nursing Science student

I hereby invite you to participate in a research study of the needs and experiences of family members and patients admitted to the Roman Catholic Hospital intensive care unit (ICU). The purpose of this study is to describe and explore the needs of family members of patients admitted to the ICU. Although this study will not benefit you directly, information obtained will be used to improve care by addressing family member needs, set policies on a family based patient care as well as to relieve stress to the family members.

You have been chosen to participate in this study because you are a family member of a patient admitted in the above-mentioned unit and you are 18 years or above, your participation is voluntary and you have a right to withdraw from the study at any time if you wish, without any repercussion or penalty.

As far as I can tell, there are no risks or discomforts in participating in this study. If you have any questions about the study of participating in the study, please feel free to ask me (Edith) at mobile: 0816940299 or 061270 2125 (work).

The ministry of health and social services, the University of Namibia's postgraduate research committee as well as the Roman Catholic Hospital management has approved this study.

I have explained the purpose of the study to the participants; it is my opinion that the participant understands the risks, benefits as well as the purpose of the study.

.....

Researcher

Date

I understand that my participation is voluntary and that I may refuse to participate or withdraw my consent and stop taking part at any time without penalty.

I hereby voluntarily and freely give my consent to take part in this research project.

.....

Participant

Date

.....

Witness

ANNEXURE F: RESEARCH INSTRUMENT



STUDY TITLE: The needs of family members of patients admitted in two intensive care units in Windhoek

SECTION A: Demographic data

INSTRUCTION: *please tick in the most appropriate box.*

1. Age (years)

18-20

21-29

30-39

40-49

50-59

60-69

>70 years

2. Gender

Male

Female

3. Relationship to the patient

Parent

Brother

Sister

Spouse

Child or Grandchild

4. Level of education

No education

Did not complete grade 7

Completed grade 7

Completed grade 10

Completed grade 12

Completed tertiary education

5. Language spoken in the family

Oshiwambo

Otjiherero

Afrikaans

Portuguese

English

Others

6. Religious Orientation

Anglican

Catholic

Lutheran

Others

7. Area of Residence

Windhoek

Outside Windhoek

Angola

South Africa

Others

8. Specifics about my family member (gender)

Male

Female

9. Previous experiences of ICU visitation?

Yes

No

SECTION B: FAMILY NEEDS

INSTRUCTION: *The following statements relate to family needs in the Intensive Care Unit. Please indicate the level of importance against each of the statements*

NEEDS STATEMENTS				
1= Not important 2=Slightly important	1	2	3	4
3= Important 4= Very important				
Need for assurance				
1. To have questions answered honestly				
2 To know the expected outcome				
3. To have explanations given that are understandable				
4. To know details concerning the patient’s progress				
5. To talk about the possibility of the patient’s death				
6. To feel there is hope				
7. To be assured that the best possible care is being given to the patient				
Need for comfort				
8. To feel accepted by health care professionals				
9. To have comfortable furniture in the waiting room				
10. To have a bathroom near the waiting room				
11. To have good food available in the hospital				

12. To be assured it is acceptable to leave the hospital for a while				
Need for information				
13. To know which health care professionals could give what type of information				

14. To know what medical treatment the patient is receiving				
15. To know why the patient has to undergo various procedures				
16. To know exactly what is being done for the patient				
17. To talk to the doctor every day				
18. To be contacted when changes in the patient's condition occur				
19. To know about the types of health care professionals taking care about the patient				
20. To have specific person to contact at the hospital when unable to visit				
21. To be informed about religious services/spiritual care				
22. To know what to bring for the patient				
Need for proximity or closeness				
23. To see the patient frequently				
24. To receive daily information about the patient				

25. To be told about the transfer plans while they are being made				
26. To have visiting hours changed for special circumstances				
27. To visit any time				
28. To have visiting hours start on time				
29. To help with patient's physical care				
30. To have waiting room near the patient				
31. To talk to the same nurse everyday				
Need for support				
32. To have explanations of the environment before going into the Intensive Care Unit for the first time.				
33. To have directions as to what to do at the bed side				
34. To talk about negative feelings such as guilt or anger.				
35. To have another person with you when visiting the Intensive Care Unit				
36. To have friends nearby for support				
37. To feel that health care professionals care about the patient				
38. To have someone concerned about your health				
39. To have someone to help with financial problems				
40. To be alone with the patient at any time				
41. To feel it is acceptable to cry				

42. To have a priest available when needed				
43. To be told about other people who could help with family problems				

44. How would you rate your needs being met as indicated in questionnaire?

Five (5) indicates the highest satisfaction while one (1), the lowest satisfaction.

44.1 Your need for assurance being met

Not being met	1	2	3	4	5	Totally being met

44.2 Your need for support being met

Not being met	1	2	3	4	5	Totally being met

44.3 Your need for comfort being met

Not being met	1	2	3	4	5	Totally being met

44.4 Your need for closeness being met

Not being met	1	2	3	4	5	Totally being met

44.5 Your need for information being met

Not being met	1	2	3	4	5	Totally being met

I thank you.

ANNEXURE G: LETTER FROM THE STATISTICIAN

Date: 08 October 2018

To whom it may concern

I Liina Shiimi, holder of an honours Degree in Statistics and Economics from University of Namibia (UNAM) hereby certify that, I have helped Edith Hamukwaya with her statistical analysis between the period of June–September 2018. The work entailed descriptive statistics, cross tabulation and determine the significance values. All analysis was done in Statistical Package of Social Sciences (SPSS).

For further inquiries, I can be reached at +264812848125

or +264612087659 lnshiimi@gmail.com

Windhoek

**ANNEXURE H: INFORMATION BROCHURE OF APPARATUS USED IN
THE ICU**

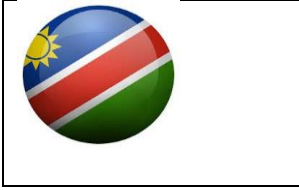
Intensive Care Unit: State Hospital-Windhoek.

Apparatus description for visitors



Compiled by Edith Hamukwaya

October 2018






Introduction

Dear family member or friend. Thank you for taking the time to visit the patient. We know that the first and even subsequent times might be overwhelming. The reason is the environment where the patient is admitted to.

We will try to explain the meaning or usage of some of these apparatus that you might see at the bedside. Also ask the nurse for an explanation.

We hope this brochure might ease the overload of sounds and visuals impressions.

	Photo description	Explanation
1	<p>Mouth tube or known as endotracheal tube</p> 	<p>The patient [family member] is receiving his or her breaths in this manner.</p>

2	<p>Neck tube or known as tracheostomy</p>  <p><small>© CanStockPhoto.com - csp5870660</small></p>	<p>The patient [family member] is receiving his or her breaths in this manner. Usually after being in the unit for a couple of days.</p>
3	<p>Breathing machine or known as a ventilator</p> 	<p>This machine pumps in the air in the patient. [Family member]. It acts like the lungs.</p>
4	<p>Suctioning of a patient</p>	<p>An example showing how a nurse is suctioning the airways to remove secretions.</p> <p>Keep in mind the patient cannot</p>

	 <p>Source: https://opentextbc.ca/clinicalskills/chapter/10-6tracheostomies/</p>	<p>cough up the secretions like you can.</p>
<p>5</p>	<p>Restraining your family member/friend</p>  <p>Source: https://www.google.com/search?</p>	<p>It might be necessary to prevent your family member or friend accidentally pulls out any lines or tubes. This could easily happen as he or she might be a bit confused which would be a normal state at times.</p>
<p>6</p>	<p>Demonstration on how to wash your hands</p>	



ANNEXURE I: Information on addressing the needs of family members

An educational approach to deal with the needs of family members of patients

A practical approach would be to follow the first step of the nursing process when planning an intervention for families for intensive care patients.

○ Family assessment

To plan any care for a family, even though the focus may be on single person who represents a family, involves a comprehensive family assessment. This includes the structure and function of the family. The religious affiliation plus previous coping behaviours needed to be assessed. Because of the crisis nature of critical illness it might not be possible to obtain all the required information during a single interview.

Even then, periodic follow-up assessment should be performed.

- **Interventions to provide assurance**

Establish an environment that is patient focused and sensitive to the needs of the family. Convey the personnel's caring attitude to the family. It is also necessary that the nurses demonstrate how the patient will be monitored. Convey to the family members the advocacy role of the nurse, and stress any improvement noticed in the patient, if appropriate.

- **Interventions to facilitate proximity**

It might be possible to create unit policies that facilitate individualised family visiting based on the specific needs. It is also necessary to assess the family's need to be with the patient. Encourage the family members to get adequate rest and nutrition. It would be therapeutic to allow the family to touch and speak to the patient. It might even be possible to allow them with certain caring activities.

- **Interventions to provide information**

First assess how much information the family is able to receive and understand. The information needed to be concrete, simple and non-technical. It might include to discuss realistic long-term goals. It would be preferable to provide the verbal information with written information

- **Interventions to provide support**

Assess the family's structure, function and usual coping mechanisms. Respect the observable coping mechanisms and intervene only when it is detrimental to the family or patient. As part of the support, allow the family members to ventilate their

feelings. This will also allow the nurse to assess the family - staff communication patterns. Focus on the positive effects the families have on the patient. If requires, utilise other support personnel, like social workers and religious persons.

o **Interventions to provide comfort**

Evaluate the environmental conveniences near the unit, and provide information on resources and facilities that may be needed near the hospital.

ANNEXURE I: INFORMATION BROCHURE FOR VISITORS

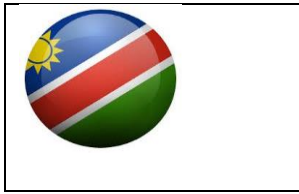
Intensive Care Unit: State Hospital-Windhoek.

Information brochure for visitors.



Compiled by Edith Hamukwaya

October 2018



Welcoming

Dear family member and friend, we appreciate your time in visiting your relative and friend in the intensive care unit. We acknowledge that this might be a time of upheaval and uncertainty. You might experience anxiety and being overwhelmed.

With this brochure we will try to provide some direction, and if possible, try to ease this difficult period for you.

The unit

This unit has eight beds for patients who are critical sick, like for instance the person you are visiting. It is also called a critical care unit or specialist unit. The unit allows for close observation of patients. That is why you will constantly see a nurse at the patients' bedside. This observation necessitates all the "machines" that you will see around the patients' bed.

Visiting the unit

The visiting hours are from 15:30 -16:00 and again from 18:00- 19:00. Please wait in front of the unit in the designated waiting area. At the appropriate time, the doors will be opened and you will be invited in.

Only two persons will be allowed to visit at a time. On entering the unit you will find a basin next to the entrance. Wash your hand thoroughly for two minutes and dry it. If unsure how- please ask one of the nurses. This is very important as your family member, friend or loved one is at this stage very vulnerable and could easily be infected with organisms brought in by accident by visitors. Thus it is also not advisable to visit if you have any ailments. If unsure, ask a nurse in the unit.

Your information

Should there be a number of family members and friends, one should be indicated as the contact person. He or she should leave their contact details with the nurse in charge. Only this contact person should phone or contact the unit when the need arises. Only this person will also be contacted should additional information be required, or should the condition of the patient changes. Do not forget to obtain the unit's telephone number as well.

The personnel

The personnel you will mainly see are nurses. They will have their name plates attached to their uniforms as well as their profession. There will usually be one specific nurse allocated for that day for your family member or friend. Feel free to ask her about the patient you are visiting. You will also find some doctors during your visit. Feel free to ask one of the nurses to arrange a meeting should you want to obtain more detail, apart from what you have received from the nurses.

What can you do?

Ask the nurse who is caring for your family member or friend, if you might touch the patient. It is usually advised to do so, as well as to speak to the patient. If allowed,

talk about the everyday things you would usually talk about. Also ask the nurse if you may bring own cleaning items to ensure a sort of individuality. Sometimes a recording with your voice to play to patients if they seem unaware of their surroundings is also good.

When leaving

On leaving, tell the person who you are visiting, that you are doing so. Inform him or her that you will be back. Do not forget to wash your hands again.

We wish you strength during this difficult period.