

**NURSES' EXPERIENCES AND ATTITUDES TOWARDS FAMILY
WITNESSED RESUSCITATION IN ACCIDENT AND EMERGENCY
UNITS IN TWO SOUTH AFRICAN HOSPITALS**

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A research report is submitted to the Faculty of Health Sciences, University of the
Witwatersrand, Johannesburg, in partial fulfilment of the requirements for the
degree of
Master of Science in Nursing

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DECLARATION

I, Tshepo Lillet Motsepe, declare that this research report is my own work. It is being submitted for the degree of Master of Science (Nursing) to the University of the Witwatersrand, Johannesburg. It has not been submitted before any degree or examination at this or any other university.

Signature.....

.....day of.....2015

Protocol number: **M130342**

DEDICATION

This study is dedicated to all the accident and emergency nurses, my colleagues and friends in the unit, keep up the great work as it is not everyone who can do what you guys do on daily basis, saving lives.

ACKNOWLEDGEMENTS

I would firstly acknowledge the most important person who have made this possible, by blessing me abundantly, my Lord my God.

I would like to thank the following people who were with me each step of this journey, who have helped by contributing to this report and who have encouraged me not to give up.

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ABSTRACT

Background: Family witnessed resuscitation is a practise that is internationally growing and nurses' attitudes and experiences influence this practice.

Aim: To determine the experiences and attitudes of nurses towards family witnessed resuscitation in an accident and emergency unit and to make recommendations towards the development of a family witnessed resuscitation protocol based on the results of the first objective.

Design: Descriptive quantitative research design. The population was comprised of accident and emergency nurses who all met the inclusion criteria, with a sample size of n=76.

Methods: South African Accident and Emergency nurses completed a self-administered questionnaire which was aimed at determining their experiences and attitudes towards family witnessed resuscitation. The questionnaire was divided into four sections. The first section was demographic data, the second section investigated nurses experiences on family witnessed resuscitation, the third section further examined the nurses attitudes of family witnessed resuscitation, which comprised 5 point Likert Scale questions ranging from strongly agree to strongly disagree. An open-ended question was also added (section 4) to allow nurses to expand upon their experiences and attitudes towards family witnessed resuscitation.

Results: Of the total sample (n=76), the majority (67.1%; n=49) of respondents reported that they had not experienced a situation in which family members were present during resuscitation. In addition, only six (n=6; 8.0%) respondents had offered the family an opportunity to be present at the bedside during resuscitation and 55.4% (n=42) reported that family members had not requested to be present during CPR. Most (86.5%; n=64) of

the respondents reported that there was no written policy or protocol regarding family presence during resuscitation in the two academic hospitals. An overwhelming (86.8%; n=66) of the respondents believed the family members should not be offered the opportunity to be present during CPR. Furthermore 77.6% (n=59) of respondents indicated that family presence during CPR was not common practice, 77.6% (n=59) did not find family presence beneficial for the patient. When asked whether family members might decide to stop CPR, the majority (88.2%) of respondents disagreed and 11.8% agreed. Upon unsuccessful CPR, 65.8% (n=50) of nurses believed being present would not help the family members grieving process and 46.1% (n=35) were concerned that their emotional readjustment would be prolonged.

Conclusion: It can be concluded from the study that accident and emergency nurses of two academic hospitals in the Gauteng Province have not experienced family witnessed resuscitation, furthermore, there were no written policies or protocols regarding family witnessed resuscitation.

Relevance to clinical practice: It is recommended that policies or protocols towards family witnessed resuscitation be developed. Furthermore the resuscitation team need to be in- serviced on this internationally recognised practise to promote good patient care delivery in the accident and emergency unit.

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CHAPTER ONE

OVERVIEW OF THE STUDY

1.0 INTRODUCTION

This chapter provides an outline of the entire study. It elaborates the purpose of the study, research objectives, research question, and significance of the study and defines operational terms that are utilised in the study. Furthermore, research methodology and ethical considerations adhered to are briefly outlined and further discussed in detail in Chapter 3.

Resuscitation can be a stressful event for both relatives and healthcare professionals. Family Witnessed Resuscitation (FWR), being rarely practiced in South Africa, is internationally recognised. Countries such as Turkey, Saudi Arabia and England have conducted research on this practice and the lack of professional protocols on family witnessed resuscitation has led to a variety of responses by Critical Care nurses towards family witnessed resuscitation. These responses indicate that nurses think family witnessed resuscitation may lead to family members being traumatised by the event (Al-Mutair, Plummer and Copnell, 2012). Family members may disturb the resuscitation team, litigations can arise due to the lack of understanding of resuscitative procedures by family members (Badir and Sepit, 2007). There is shortage of experienced nurses to accompany relatives during resuscitation as relatives might require a healthcare professional to elaborate on what the resuscitation team is doing (Kobérich, Rothaug and Albarran, 2010), the patients' confidentiality may be compromised by having family

present (Fulbrook, Albarran and Latour, 2005) and the family should be given an option of choosing to be present during resuscitation (Fulbrook et al, 2005).

The practice of requesting family members to wait for long periods in the escorts' bay and calling them back after the resuscitation processes are completed on their loved one is what is considered the norm by Accident and Emergency nurses in hospitals where the researcher has observed this practice.

In South Africa there is little known about the experiences, attitudes and views of Accident and Emergency nurses towards family witnessed resuscitation. The Accident and Emergency units are the first line in a hospital setting as it is where patients first arrive to receive appropriate healthcare. Life-saving procedures are performed on a daily basis in this setting. According to the researchers' observations in an academic hospital in Gauteng Province, South Africa, the patient would be brought in by his/her loved one who would be anxious and afraid of what was going to happen to their relative. This relative would be asked to wait in the escorts' bay by nurses and not asked if they would prefer to see resuscitative procedures being carried out or not. It is assumed that families are not supposed to be present when procedures are carried out. What are the reasons for such a practice? Why do Accident and Emergency nurses not allow family members to witness resuscitation? Is it because there are no family witnessed resuscitation guidelines or is it fear that their abilities or competence will be questioned by relatives during resuscitative procedures?

The researcher who is a registered nurse in the second largest academic hospital in Gauteng Province, South Africa, with more than 1, 600 beds, was exposed to various major trauma cases. These major trauma and medical cases are often presented during night shift at every month end (which the researcher observed to be

the pattern), would be resuscitated in various ways. Family members would accompany their loved ones, giving history of the patient in cases where the patient was unable to. With families rarely requesting to be present during resuscitation of their loved ones, family witnessed resuscitation continues to be a rare phenomenon in this particular setting. This is further shown by the lack of family witnessed resuscitation guidelines, protocols or policies. Family witnessed resuscitation is implemented internationally in countries such as Europe, Saudi Arabia and the United States of America, to name a few, where literature has exposed the attitudes and experiences of Critical nurses towards family witnessed resuscitation. Interesting responses by the Critical Care nurses have shown that families want to be present during resuscitation of their loved ones, regardless of the fears of the family being traumatised by the resuscitative process or disrupting the resuscitative process or the resuscitation team.

Legalities and ethics might be brought into this practice as the patients' confidentiality and privacy may be violated. The researcher has witnessed situations in which the patients' loved ones were unaware of the patients' full medical history, as they had not been told about their ailments.

1.1 BACKGROUND OF THE STUDY

The concept of Family Witnessed Resuscitation (FWR) was first introduced in the 1900s' at Foote Hospital, Michigan, in the United States of America, when relatives asked to be present during their loved ones' resuscitation. Since then, this practice has sparked various reactions in healthcare practice. In countries such as Saudi Arabia, it is common practice to perform resuscitations without giving relatives an option of attending (Al-Mutair, Plummer and Copnell, 2012). This research further indicates that due to the fear of lawsuits and the lack of family witnessed resuscitation (FWR) protocols,

75.6% of Saudi Arabian Critical Care nurses did not support the notion of Family Witnessed Resuscitation (Al-Mutair et al, 2012). Family witnessed resuscitation (FWR) is a practice that has shown to be rarely practised in Saudi Arabia. This is evidenced by a study conducted in two major hospitals in Saudi Arabia, where nurses were not familiar with such a practice and did not support it as there were no supporting protocols or guidelines. Saudi Arabian Critical Care nurses believe that family members would be traumatised by witnessing the resuscitations, that family presence may interfere or disturb the resuscitation team and if the family member does attend the resuscitation, there has to be an experienced nurse accompanying them. In the global reality of having a limited number/shortage of trauma nursing staff, this would create further problems (Al-Mutair et al, 2012).

Research has further indicated that countries such as Turkey and Germany are encountering the same problems as identified above including the concern of staffing, as shown by 71.5% of Critical Care nurses who felt that there is not enough staff to accompany relatives during resuscitation (Badir and Sepit, 2007). Allowing relatives to witness the resuscitation of their family member has been demonstrated to be a traumatic experience for some relatives (Al-Mutair et al, 2012), however some relatives view it as providing closure in the event that resuscitation of their relative is unsuccessful. In Turkey, the practice of Family Witnessed Resuscitation is not common or the Critical Care nursing staff members were unfamiliar with the practice. There were no family witnessed resuscitation guidelines or protocols to support this practice, which has led to confusion about and resistance to family witnessed resuscitation by Turkish Critical Care nurses however, some mentioned the following advantages:

- The family members will be re-assured that everything has been done for their loved one.
- Critical information will be shared with the family so that they can be re-assured, although 81.1% of the participants felt that the patient's confidentiality would be breached (Badir and Sepit, 2007).
- The family's anxiety levels are lessened and it may assist them with the grieving process (Badir and Sepit, 2007).

Research was conducted in an Intensive Care Unit in Europe, which revealed that only 5.7% of nurses reported having a unit protocol regarding family witnessed resuscitation (Fulbrook, Albarran and Latour, 2005). Furthermore, 5% of North American Critical nurses indicated having family witnessed resuscitation protocols in their units (Fulbrook, Albarran and Latour, 2005).

This notion was stated by 75.6% of Critical nurses who did not support family witnessed resuscitation (Al-Mutair et al, 2012). As mentioned earlier, resuscitation can be a stressful event for both health professionals and relatives. Health professionals have verbalised that allowing families to be present during resuscitation can disturb or disrupt the resuscitation team and conflicts may arise which may hinder the performance of the trauma team (Al-Mutair et al, 2012). German Intensive Care nursing staff were also concerned that allowing family members to witness resuscitations could affect the ability of the trauma team to perform their duties/work as they would be disrupted by the family members. Such that family members might argue with the resuscitation team because of lack of knowledge regarding the life-saving interventions that may be performed on their loved one (Kobérich et al, 2010). Critical Care nurses continued to raise a concern of the patients' right to confidentially

being breached with the family being present and also the fear of possible legal actions being undertaken by families who witness resuscitation. Even though some of the German Critical Care nurses have indicated that they do not support family witnessed resuscitation, 66.3% of the Intensive Care nursing staff expressed the view that even though families may not be allowed to be present during resuscitation, they should be given the opportunity of being involved in decision making on behalf of their loved ones (Kobérich et al, 2010).

Interestingly, patients who were resuscitated and survived expressed the view that they would have preferred their family members to be present during resuscitation. This was shown in a study conducted in the United Kingdom (UK) by Walker (2006). The survivors believed their relatives would benefit from being present even though they were concerned about confidentiality being breached. Generally, it is feared that if family members are present during resuscitation, they may have traumatic experiences from the type of procedures and comments made by the team and that these may cause offence to the family (Walker, 2006).

It appears that the attitudes of nurses are similar across the board and family witnessed resuscitation is not supported by many nurses in other countries. The reality is that relatives need accompaniment during resuscitation, so that they can understand what is being done for their family member. This has proven to be difficult with existing staff shortages (Badir and Sepit, 2007). Fear of legal actions being undertaken also rationalises the nurses' attitudes of not supporting family witnessed resuscitation. However, some of the participants concluded that families being present may be beneficial to a certain extent as it brings closure for their loss and an understanding that the best has been done for their loved one.

Other countries experience similar challenges towards family witnessed resuscitation. Guidance and support of the Critical Care nurses on family witnessed resuscitation may, to a certain point, be beneficial for all parties involved, that being the patient, Critical Care nurse and the relatives. Relatives may have closure and feel everything possible was done for their loved one thus shortening the grieving period, as they would have witnessed the efforts of the staff to save their relative's life. Fear of litigation comes across in all the studies conducted. In Turkey, it has been suggested that Critical Care nurses be offered further training on family witnessed resuscitation in order to contribute to policy and practice change that will enhance Critical Care, as mentioned by Badir and Sepit (2007). They further mention that there is a need for the introduction of family witnessed resuscitation protocols and that these should be included as part of cardiopulmonary resuscitation training programmes, as there are organisations that endorse family witnessed resuscitation and have guidelines for nurses policy/protocol development. Amongst these are the Royal College of Nursing, The Emergency Nurses Association, The American Heart Association and The American Association of Critical-Care Nurses.

1.2 PROBLEM STATEMENT

According to Polit and Beck (2012), a problem statement expresses the dilemma or troubling situation that needs investigation and provides a reason for the research that is to be conducted. There are 10 public academic hospitals in Gauteng Province, South Africa, of which two have a high influx of patients accessing the trauma unit with some patients requiring resuscitation. The two hospitals in which the study was conducted are in different areas of Gauteng and in both hospitals, family witnessed resuscitation is not practised, meaning families are not granted an opportunity to witness resuscitations. The

norm in both hospitals is to ask family members to sit and wait in the escorts' bay until resuscitation is completed. Similar to other countries, in these two South African hospitals there is no protocol for Family Witnessed Resuscitation, because of this, the researcher decided to conduct this study. The researcher believes that this practice might bring closure to family and relatives. Such a study has been conducted internationally, but what about the experiences and attitudes of the Accident and Emergency nurses in South Africa? This study brought to light what the experiences and attitudes of Accident and Emergency Unit nurses towards family witnessed resuscitation are. There are benefits that family members can gain from this experience. Such as family members seeing that all was done for their loved one if resuscitation is not successful thus encouraging individuals to have a short grieving process. This study was therefore conducted to determine the attitudes and experiences of Accident and Emergency nurses towards this seemingly strange practice of family witnessed resuscitation, with the aim of making recommendations towards the development of a family witnessed resuscitation protocol.

1.3 PURPOSE OF THE STUDY

To describe the experiences and attitudes of Accident and Emergency nurses in two academic hospitals in Gauteng, towards family witnessed resuscitation in order to make recommendations towards the development of a family witnessed resuscitation protocol.

1.4 RESEARCH QUESTION

What are the experiences and attitudes of nurses in the Accident and Emergency Units in two academic hospitals in Gauteng towards family witnessed resuscitation?

1.5 RESEARCH OBJECTIVES

- To determine the attitudes and experiences of nurses towards family witnessed resuscitation in an Accident and Emergency Unit.
- To make recommendations towards the development of a family witnessed resuscitation protocol based on the results of the first objective.

1.6 OPERATIONAL DEFINITIONS

- **Attitudes**

‘A way of thinking or feeling about something or someone’ (South African Pocket Oxford

Dictionary, 2002)

Attitudes are elaborated as a way of thinking or feeling about family witnessed resuscitation.

- **Experiences**

The South African Pocket Oxford Dictionary (2006) explains experiences as practical contact with an observation of facts or events.

Experiences are the events or knowledge about family witnessed resuscitation shared by participants of this study that influences the way they think and behave towards family witnessed resuscitation.

- **Resuscitation**

Restoration to life of one apparently dead, or whose respirations have ceased (Balliere's

Nursing Dictionary, 2005).

- **Family**

A relative of the patient or any person (significant other) with whom the patient shares a valued relationship (Royal Council of Nursing, 2002).

- **Family witnessed resuscitation**

Signifies family presence during resuscitation (Walker, 2006). Family members are present to witness resuscitation of their loved one.

- **Family witnessed resuscitation protocol**

A plan detailing how a medical procedure such as family witnessed resuscitation should be carried out.

- **Nurses or participants in this study**

All nurses registered with the South African Nursing Council as registered, staff or auxiliary nurses.

- **Professional nurse**

'A person who is qualified and competent to independently practice comprehensive nursing in the manner and to the level prescribed and who is capable of assuming responsibility and accountability for such practice' (Nursing Act, 2005).

Professional nurses are referred to as Registered nurses.

- **Staff nurse**

'A person educated to practice basic nursing in the manner and level prescribed' (Nursing Act, 2005).

- **Auxiliary nurse**

'A person educated to provide elementary nursing care in the manner and to the level prescribed' (Nursing Act, 2005).

- **Accident and Emergency Unit**

'A setting for dealing with problems which require immediate attention and where patients can be directed or referred by a general practitioner or emergency services' (Balliere's Nursing Dictionary, 2005).

1.7 SIGNIFICANCE OF THE STUDY

As mentioned before, family witnessed resuscitation is rarely practised in South Africa compared to international counterparts. This phenomenon is growing internationally and South African nurses need to familiarise themselves with this phenomenon. It is essential to investigate what the experiences and attitudes of Accident and Emergency

nurses in public academic hospitals in Gauteng Province, South Africa, are towards family witnessed resuscitation. This information will assist in making recommendations towards the development of family witnessed resuscitation protocol. This protocol may promote the practice of family witnessed resuscitation in the nursing practice of public sector hospitals

in order to meet family needs in Accident and Emergency Units. Protocols are important in any situation as they give directives of what is supposed to happen. The recommendations that will be made to the two Gauteng hospitals might bring ground breaking changes that will assist in improving the quality of services offered to family members in Accident and Emergency Units.

1.8 RESEARCH METHODOLOGY

A descriptive quantitative study with closed and open-ended questions a qualitative aspect was conducted. Burns and Grove (2005) explain that a descriptive study is a study design that is aimed at obtaining more information about certain characteristics which may be utilised to identify problems that are present in current practice. This is what this study sought to do and to discover how Accident and Emergency nurses feel about family witnessed resuscitation.

1.8.1 Population and Sample

The population comprised of all the nursing staff (n=76) of all the Accident and Emergency Units of the two participating hospitals. The sampling method utilised in this study was total/census sampling. Total population sampling is a technique that involves examining the entire population that have particular characteristics, traits, experiences, knowledge, skills and exposure to an event (this is a type of purposive

sampling); in this type of sampling the population and sample are equal. This sampling method was chosen as it has the advantage of including all members within the population, there is wide coverage and a reduced risk of missing potential insights from members who are not included (<http://dissertation.laerd.com/articles/total-population>: accessed on 29/01/13). This sample included all categories of nurses who had more than one year's experience in the unit; those with less than one year's experience fell into the exclusion criteria and could not take part in the study.

1.8.2 Data Collection

Permission to conduct research in Accident and Emergency Units was obtained from the Gauteng Health Department, the hospital management and unit managers of the participating hospitals. Prior to participating in the study, the participants were given an overview of the study and consent forms were signed prior to completion of the questionnaire. An information letter was included with the questionnaire and administered to participants by the researcher. Different shifts were included and the total sampling method was chosen. This data collecting method has the advantage of including all the members within the population, a wide coverage and reduced risk of missing potential insights from members who were not included (<http://dissertation.laerd.com/articles/total-population>: accessed on 29/01/13). This method is further discussed in Chapter three.

1.8.3 Data Collection Tool, Validity and Reliability

A self-administered questionnaire was utilised. The instrument was identified in a study titled "European Survey of Critical Care nurses' attitudes and experiences of having family members present during cardiopulmonary resuscitation" by Albarran,

Latour and Fulbrook (2005) and permission to utilise the tool was granted by Albarran (Annexure 6). The demographic data on the questionnaire was modified by adding nursing ranks and questions asking about the country in which the participants were in and their main practice role were removed, as these were not applicable to this study. The tool was divided into four sections. The first section was demographic data, the second section investigated nurses experiences on family witnessed resuscitation, the third section further examined the nurses attitudes of family witnessed resuscitation, which comprised of 5 point Likert Scale questions ranging from strongly agree to strongly disagree. An open- ended question was also added (section 4) to allow nurses to expand upon their experiences and attitudes towards family witnessed resuscitation.

This instrument has been utilised and its validity and reliability confirmed in numerous countries other than South Africa. A pilot study was carried out to test the practicality of using this tool in a South African setting.

1.9 ETHICAL CONSIDERATIONS

De Vos, Strydom, Fouche and Delport (2005) define ethics as ‘a set of moral principles suggested by an individual or group, which are subsequently widely accepted and which offer rules and behavioural expectations about the most correct conduct towards experimental subjects and respondents, employers, sponsors, other researchers, assistants and students. Permission and ethical clearance to conduct the study was granted by the following authorities:

- The Medical Human Research Ethics Committee of the University of the Witwatersrand (Medical) (Protocol Number M130342) (**Annexure 4**),

- The Faculty of Health Sciences' Postgraduate Committee (**Annexure 7**),
- Permission for utilising the data collection tool was obtained from the authors (**Annexure 6**).
- The Gauteng Department of Health (**Annexure 2**)
- The CEOs' of the institutions where the study was conducted (**Annexure 3**) and (**Annexure 9**).

Anonymity and confidentiality was ensured on each completed questionnaire as there was no identifying information required. Informed consent was obtained prior to completion of the questionnaire from each participant, who were not coerced into participating and who could withdraw from the study without facing any penalties. The data collection tool was handed out by the researcher to each shift and sealed boxes were placed in the units for participants to deposit completed questionnaires. In units where there was insufficient space for boxes, sealed envelopes were available and kept in a secure locker by the Team Leader. The boxes and envelopes were then collected by the researcher per shift change.

1.10 SUMMARY

This chapter has looked at the layout of the study by introducing the concept family witnessed resuscitation. Furthermore the background of the study, the objectives, research questions and the purpose were explained and the significance and ethical considerations were discussed. The research design, data collection, validity and reliability were also outlined.

This report will be further expanded by including the following in subsequent chapters:

- Literature review – Chapter two.

- Research design and research method – Chapter three.
- Data analysis, description and interpretation of research findings – Chapter four.
- Summary of the research findings, recommendations and conclusion – Chapter five.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter aims to provide an overview of the concept family witnessed resuscitation from various research studies conducted on the topic and to generate a picture of what is known and not known. Polit and Beck (2012) describe literature review as 'a critical summary of research on the topic of interest, often prepared to put a research problem in context.' Literature review was undertaken to understand previous research to identify gaps and contribute new evidence to family witnessed resuscitation and the following subheadings regarding this subject will be reviewed: Family witnessed resuscitation in South Africa, family witnessed resuscitation internationally, ethics and patients and family views on family witnessed resuscitation.

2.2 SOUTH AFRICA AND FAMILY WITNESSED RESUSCITATION

As mentioned earlier, there is minimal literature on family witnessed resuscitation in South

Africa. In 2003, a study on FWR was conducted by Goodenough and Brysiewicz in a level

1 Accident and Emergency Unit of a hospital in the Province of KwaZulu-Natal. This study showed the topic was a new concept amongst the emergency personnel who participated in the study, as the researcher had to explain what witnessed resuscitation meant before commencing with the study (Goodenough and Brysiewicz, 2003). Once

the concept of FWR was understood, the participants had various opinions towards it, these being:

- Families will suffer from post-traumatic trauma by having flash backs after witnessing the resuscitation, with 70% of Accident and Emergency Unit doctors expressing the same concern.
- Families will not understand the resuscitative procedures being carried out on their loved ones which may lead them to being unsatisfied with the efforts provided, ultimately leading to litigation.
- Having limited physical space to accommodate relatives who witness the resuscitation are some of the reasons why FWR is not favoured (Goodenough and Brysiewicz, 2003).

The researcher has been working in an Accident and Emergency Unit of a central hospital in Gauteng province, where it is a norm to ask relatives to stay outside the resuscitation area then be allowed back in once the patient has been stabilised. This shows common practice, as evidenced by Critical Care nurses of a hospital in Gauteng Province, asking the relatives to leave, then calling them back once resuscitation had been done in a study by Le Goff (2012). Out of 11 participants in Le Goff's study, only five accepted the notion of family witnessed resuscitation. However, in Gordon's (2011) study, 57% of the doctors in the Accident and Emergency Unit accepted family witnessed resuscitation.

In addition, only four out of 11 participants expressed that allowing families to be present during resuscitation would eventually bring closure and shorten the grieving process if resuscitation failed (Le Goff, 2012). Fifty three percent of the Accident and Emergency Unit doctors of both public and private sectors favoured family witnessed resuscitation

(Gordon, 2011). Nine out of 11 participants in Le Goff's study were concerned that family witnessed resuscitation may be a traumatic event for the family (Le Goff, 2012), sentiments which were shared by 72% of the Gauteng private and provincial sectors in Gordon's (2011) study. Goodenough and Brysiewicz's (2003) study identified concern that families may misinterpret the resuscitative procedures due to graphic medical television shows that are broadcast, but having a nurse present with the family to explain the procedures being carried out minimises the relatives fear and increases their understanding of what is being done (Le Goff, 2012). This is a common view, as Gauteng doctors also mention that a senior member of staff should accompany relatives during resuscitative procedures, as some relatives may view the resuscitation as a harmful process through misunderstanding the procedures carried out on their loved one. However, with the global shortage of nursing staff, would this be possible?

Six out of 11 participants of the Gauteng Critical Care nurses expressed how allowing families to be present would expose their inadequacies and faults, thus increasing the staffs' stress levels (Le Goff, 2012). Whilst in Gordon's study, it is shown that by having courses such as American Heart Associations Advanced Cardiac Life Support increases the staffs' confidence which would lead to families being invited to witness resuscitation (Gordon, 2011). This illustrates that the more knowledgeable and skilled the staff, the greater the chances of families being invited to witness resuscitation.

Regarding the patients' privacy and confidentiality, 48% of Accident and Emergency doctors stated how FWR would invade patients' privacy, hence not allowing families to witness resuscitations (Gordon, 2011). This is supported by 38% of Critical Care

nurses expressing that the patients' confidentiality and privacy should be respected, therefore asking permission is important (De Beer, 2005).

A family witnessed resuscitation protocol is described as a plan detailing how a medical procedure such as this should be carried out. In all the above mentioned studies there was no form of written guideline or protocol on family witnessed resuscitation. Interestingly

none of the Gauteng hospitals where studies were conducted had any formal protocol on family witnessed resuscitation.

It is shown in Gordon's study (2011) that the more experienced the emergency medical doctors , the greater the chances of relatives being invited to witness resuscitation of their loved one, compared to those with less experience not being keen to do so.

In addition,

- Seventy one percent of doctors found it difficult to terminate resuscitation, which led to prolonged resuscitation when the family members were present.
- Sixty one percent of doctors believed families would interfere with the team during resuscitation.
- Fifty two percent were afraid of being intimidated by relatives (Gordon, 2011).

Who should be invited to witness resuscitation was a concern for the Gauteng Accident and Emergency Unit doctors and the conclusion was that if an opportunity arose for a family member to witness the resuscitation, only parents and spouses

should be allowed to do so. The Emergency doctors further mentioned the importance of obtaining the correct identity of the patient before allowing families into the resuscitation room (Gordon, 2011). Another concern raised by the Emergency doctors, was the need for sufficient space to prevent the medical team and family members colliding with each other and medical equipment, thus avoiding injuries.

Seeing that this topic is relatively new to South African health care professionals in the Accident and Emergency Units, many points of view have arisen on family witnessed resuscitation from previously conducted studies and there is still more to be researched on this topic in South Africa.

2.3 INTERNATIONAL VIEWS ON FAMILY WITNESSED RESUSCITATION

In 1928, history was made at Foote Hospital in the United States of America, where family witnessed resuscitation was initiated after two relatives requested to be present. This experience has since made what was thought to be impossible in healthcare practice possible - families witnessing resuscitation of their loved ones. Various international research studies have since been undertaken following the incident at Foote Hospital.

In 2005, Fulbrook, Albarran and Latour conducted a study on family witnessed resuscitation in which Critical Care nurses from Europe, United Kingdom and Sweden participated and it yielded very interesting results. The results showed that most critical care nurses from mainland Europe were less experienced with the practice

of family witnessed resuscitation and the resulting consequences of witnessing resuscitation of a loved one.

Ethico-legal concerns were an issue in De Beers' study, as 62% of Critical Care nurses in Saudi Arabia were concerned that family witnessed resuscitation would increase legal liability (De Beer, 2005). This is similarly seen in previous South African studies and also internationally, where family witnessed resuscitation is not favoured as there were no protocols or guidelines available. In Saudi Arabia, 25% Critical Care nurses would prefer to have guidelines on family witnessed resuscitation (De Beer, 2005). This is supported by Critical Care nurses in Fulbrooks' et al (2005) study and illustrates that such guidelines would guide staff on how to go about implementing family witnessed resuscitation. This would mostly be useful when dealing with distressed families. Interestingly, this sentiment was opposed by 40% of Saudi Arabian Critical Care nurses who preferred a written policy prohibiting family witnessed resuscitation (De Beer, 2005), which was also supported by 75% of Saudi Arabian Critical Care nurses opposing the notion of family witnessed resuscitation (Al-Mutair et al, 2012).

There are some associations that endorse family witnessed resuscitation and have provided guidelines on this practice, these being:

- The American Heart Association
- The American Association of Critical-Care Nurses
- The Emergency Nurses Association
- The Society of Critical Care Medicine (Leske, McAndrew and Brasel, 2013).

The American College of Emergency Physicians also supports family witnessed resuscitation and recommends the development of a guideline on family witnessed resuscitation during child care (Atwood, 2008).

Cox (2008) states that relatives should be granted an opportunity to witness resuscitation, however, only 5% of Critical Care Units in the United States have a family witnessed resuscitation protocol. The need for a protocol has shown to be an important aspect of family witnessed resuscitation implementation. The following are guidelines that have been suggested for nurses to utilise when drawing up a family witnessed resuscitation policy:

- The benefits of family witnessed resuscitation for both the family and patient should be stated.
- The role of the healthcare provider that accompanies the family during resuscitation should be stated.
- Contraindications to family witnessed resuscitation should also be stated, for example if the family member is being combative, aggressive or has uncontrolled emotional outbursts.
- There should be proficiency standards for all the staff involved in family witnessed resuscitation (Cox, 2008).

As mentioned earlier, there are concerns about ethico-legal consequences arising from families witnessing resuscitation, as studies continue to show that nurses are afraid of lawsuits being filed by relatives if they were to witness resuscitation. Atwoods' study conducted in 2008, showed that lawsuits do occur, but only if families are not allowed to witness procedures or resuscitation and if there is no communication between the relatives and health care providers. Atwood further stated that communicating and

allowing families to witness resuscitation and procedures does minimise lawsuits. A positive aspect of families witnessing resuscitation is that it helps develop a bond between the resuscitation team and the relatives, hence a decline in lawsuits (Atwood, 2008).

With families asking to be present during resuscitation, which is how family witnessed resuscitation came into practice, the question is, whose responsibility is it to permit the family into the resuscitation room? In Albarran, Latour and Fulbrook's study (2005), 46% of the Critical Care nurses did not agree to families being granted the opportunity of witnessing resuscitation.

There are so many fears and concerns about family witnessed resuscitation. The practicality of allowing family members into a resuscitation room which lacks adequate space, has been mentioned as one of the reasons why nurses are against this practice. Saudi Arabian Critical Care nurses mentioned that allowing families into the resuscitation room could lead to chaos and confusion as there is limited work space. Gordon's South African study (2011) mentions that limited space may lead to injuries by having the family and medical team colliding with equipment and each other. Moreover, participants from Albarrans' study mentioned there was insufficient physical space to accommodate families during resuscitation as the areas are too small (Fulbrook et al, 2005).

The fear of prolonging resuscitative measures, when it is no longer viable, due to the family being present also comes across as an issue as verbalised by 78% of Saudi Arabian Critical Care nurses (De Beer, 2005).

In the United Kingdom, the Royal College of Nursing (RCN) published a report which encouraged families to witness resuscitation of their loved ones. This report examines various aspects of family witnessed resuscitation, which favours the relatives and guides healthcare professionals on how to go about the process. Various studies have reported that Critical nurses would allow families to witness resuscitation if there was an experienced staff member to accompany them; this is also supported by the RCN as it prefers an experienced staff member to accompany families during resuscitation (RCN, 2002). To make resuscitation less traumatic, as nurses have verbalised in previous studies, the RCN made a guideline on how family witnessed resuscitation should be conducted. Various points were included such as, establishing ground rules prior to entering the resuscitation room with the relatives, informing the relatives about the patients' condition prior to entering the resuscitation room, discussing with the family what are they going to see during the resuscitation, including the type of equipment being utilised (RCN,2002).

The RCN encourages family witnessed resuscitation, though its guidelines further extend to explain when relatives should not be allowed to witness resuscitation. This supports numerous Critical Care nurses that oppose family witness resuscitation (RCN, 2002).

The RCN outlined some reasons why relatives might not be allowed to witness resuscitation of their loved one as the following:

- The family members may have uncontrolled grief which could disrupt the resuscitation team.
- The family may become physically involved during the resuscitation.
- Legal risks might increase.
- Remarks made by the resuscitation team might be offensive to the relative and observed actions by the family may in turn be offending.

- The experience might haunt the relatives of the patient as the event may be traumatic.
- There may not be enough adequately trained personnel to accompany the relatives during the resuscitation (RCN, 2002).

This is similar to results of research conducted by Al-Mutair Plummer and Copnell (2012), Goodenough and Brysiewicz (2003), De Beer (2005), Gordon (2011), Albarran, Latour and Fulbrook (2005), the fear of families being traumatised by witnessing the resuscitation was also expressed as a concern, families disrupting the resuscitation team, fear of lawsuits, lack of space in the resuscitation room to accommodate relatives. The fear of having to prolong the resuscitation even though it is no longer indicated and the need of family members to be accompanied by an experienced personnel (which some find would be difficult to carry out as there is not enough staff to accompany relatives, a common problem internationally).

The RCN has not only outlined rationale for when family members should not be allowed to witness resuscitation, but also for allowing FWR, so that the family members would be able to see that all was done for their loved one instead of being told and they can touch their loved one whilst still warm, after resuscitation had failed (Royal College of Nursing [RCN], 2002).

The above mentioned are some of the positive attributes adding to previously mentioned research that by allowing families to witness resuscitation, the grieving process may be shortened, and that the family can see and touch their loved one if the resuscitation had failed. Some cultures also require the family members to bid farewell to the spirit of the departed loved one. One of the members of the Royal College of Nursing (RCN)

had some concern, as they mention that allowing a family member to witness resuscitation would not yield any positive result as there is a shortage of staff to accompany family members during resuscitation and the resuscitation may be prolonged unnecessarily if a family member is present. Another RCN member opposed this by mentioning that allowing a family member to be present during resuscitation helps shorten the grieving process (RCN, 2002).

The need for a policy or guideline for family witnessed resuscitation is essential, as Critical Care nurses internationally have mentioned, as it is one of the major reasons why nurses do not allow family members to witness resuscitation of their loved one. The RCN has shown what detail should be included in the policy towards family witnessed resuscitation, if one is made.

There are similar attitudes towards family witnessed resuscitation internationally by Critical Care nurses, some are for and some are against. Shortage of staff, fear of lawsuits, lack of policies and guidelines and families being traumatised by witnessing resuscitation has proved to be stressful amongst Critical Care nurses. Though there are some organisations that have made guidelines, some may ask what about the legal and ethical issues surrounding family witnessed resuscitation?

2.4 PATIENTS' AND RELATIVES VIEWS ON FAMILY WITNESSED RESUSCITATION

Experiences and attitudes of healthcare professionals have been discussed above. Not only does family witnessed resuscitation affect healthcare providers, it also involves family members and their relatives.

Leske, McAndrew and Brasel (2013), conducted a study on the experiences of families when present during resuscitation in the Emergency Unit after their relatives had sustained trauma. The results of this study showed that family members who experienced resuscitation, had the perception that the resuscitation team were there to 'fix' the patient from physical injuries, whilst their role was to provide support and protect the patient. This sentiment is shared by 71% of patients in a study by Mortelmans, Van Broeckhoven, Van Boxstael, De Cauwer, Verfaillie, Van Hellemond, Van Colen and Cas (2010), as they expressed that they preferred their loved ones to be closer to them during resuscitation, with the ability to provide support being the main reason. Furthermore, in a study by McMahon-Parkes, Moule, Bengner and Albarran (2009), family members continue to support the notion by mentioning that being present during resuscitation encourages their loved one to have the will and courage to survive. Interestingly, it was only a minority of patients who expressed the concern that having their loved ones witness resuscitation could be shocking to them (Mortelmans et al, 2010). This supports healthcare professionals who fear family members will be traumatised by the resuscitation process, as it came across in various studies.

Opposing these sentiments are family members who have not reported any 'psychological damage' after witnessing resuscitation of their loved one, as Atwood (2008) reports. Patients in the study by McMahon-Parkes et al (2009) further stated that the presence of family members 'would help create an atmosphere of trust by promoting feelings of security and maintaining a tie and bond with families.'

According to McMahon-Parkes et al (2009), patients mentioned their expectation of family members to be their advocates. The ability to inform the resuscitation team about the patients' medical history and assisting with information that is needed, is one of the

rationales that make families feel they should stay with their loved one during resuscitation. Witnessing resuscitation of their loved ones helps relatives to know and understand the patients' condition therefore reducing anxiety over what is happening during resuscitation. For unsuccessful resuscitative outcomes, family would be able to see that everything was done for their loved one and no 'psychological damage' would be reported as a result of family witnessing resuscitation, as stated in (Atwood 2008).

Interestingly, patients had mixed views on whether they wanted their loved ones to be present during their resuscitation. Some patients explained it would bring closure to their loved ones and would grant them a chance 'to say goodbye.' Other patients preferred to be alone, as they mentioned they would not want their loved ones last memories to be of them being in that position (McMahon-Parkes et al, 2009).

Healthcare providers have raised concerns that family members may disrupt the resuscitation team when present during resuscitation. This notion is not supported by family members, who express that their presence will not cause disruption as they want the team to provide the best possible care to their loved one. Relatives continued to say that health professionals should not be disturbed when they are performing life-saving procedures and that they should be allowed to 'get on with their job' (McMahon-Parkes et al, 2009).

Health professionals feared medical television shows influenced the relatives' perceptions about being present during resuscitation, however 71% of relatives in Mortelmans et al's (2010) study reported that television shows had no influence on their views.

A maximum number of 33% (n=181) of parents whose children had been admitted to hospital and undergone a resuscitative procedure who preferred not to be present, gave reasons that they 'did not want to get in the way' as per Isoardi, Slabbert and Treston (2005) study. This was followed by 24% (n=132) mentioning they do not want their child to see them worried. However, 98% of parents mentioned their presence during resuscitation was to comfort their child and 47% wanted to be present during resuscitation to observe the procedure (Isoardi et al, 2005). Parents also expressed how they found it important to be present as they could advocate for their child in critical events and can be part of decision making. Parent could ask the resuscitation team to stop treatment, when they could see the efforts were failing, to prevent their little one from suffering (Maxton, 2008). This sentiment is not shared by all parents, as a minority of parents in Isoardi et al (2008) study felt their presence was of no importance during resuscitation. Critical Care nurses have mentioned that during resuscitation, family members should be accompanied by an experienced or senior nurse who could explain the procedure being carried out on the patients. Parents who have witnessed resuscitation mentioned that by having a social worker or a priest with them was insufficient support and that nurses could answer 'technical' questions posed to them during resuscitation (Maxton, 2008). Furthermore parents mentioned that being present minimised stress as not being present would cause distress (Maxton, 2008).

Amongst issues surrounding family witnessed resuscitation, patients' confidentiality was stated as an issue by both patients and Critical Care nurses internationally. Critical Care nurses mentioned that the patients' confidentiality would be compromised by having relatives present, although resuscitated patients have shown not to have a problem with this. (Albarran et al ,2009) bring to light that patients are not concerned about confidentiality being breached, though they mention they would prefer

healthcare professionals to disclose confidential information with sensitivity to help family members understand their condition; a sentiment also witnessed by McMahon-Parkes et al (2009). By allowing family members to witness resuscitation, the number of lawsuits has decreased, as witnessed in Foote Hospital, which can be attributed to the positive bond created between the healthcare providers and family leading to lawsuits being lessened (Atwood, 2008). The lack of communication and keeping family members behind closed doors of resuscitation rooms have led to lawsuits against health professionals (Atwood, 2008). This is contrary to the notion by some healthcare professionals believe that lawsuits may take place, as stated above.

Patients believed that upon admission, family members should be asked about their preference for being present or not during resuscitation (Albarran et al, 2009). Atwood (2008) stated that 95% of parents whose children were resuscitated in one of the nurse-led studies, reported that being present is something they would do again, showing the family support towards witnessing resuscitation. Patients have also supported this practice, as seen in post-resuscitation patients in (Albarran et al 2009) study.

There is a risk of relatives not being able to cope with witnessing resuscitation, therefore patients can choose to nominate a relative who they believe could cope (McMahon- Parkes et al, 2009).

2.5 ETHICS AND THEORIES OF NURSING

Florence Nightingale, mother of nursing, introduced holistic caring for patients. She believed in utilising the environment to enhance patients' recovery (Young, Van Niekerk

and Mogotlane, 2003). One of the ways this can be achieved is by allowing families, who ask for it, to be present during resuscitation, as this would provide positive aspects for them and the patient. Patricia Benner, a theorist in nursing, focused on an aspect that is viewed as important in healthcare, ethics (Masters, 2014).

As more theories were introduced, Katherine Kolcaba, a theorist, explored the effects of cultural traditions, family interactions and societal relations (Masters, 2014). As South Africa is a culturally diverse country, Kolcaba's theory of family witnessed resuscitation integrates well as it addresses culture, patient and family, which is what family witnessed resuscitation is partially about.

The American Association of Critical Care Nursing introduced the synergy model of patient care in 1992. The model was developed with the vision of a healthcare system being driven by patient and family needs, in which Critical Care nurses produce their competence (Alspach, 2006). This model combines the needs of the patient and family with the competency of the nurse. In this instance, families witnessing resuscitation with a nurse accompanying brings the practicality of the theory. Taking it further with culture, a nurse caring for a patient with values and beliefs, collaborates these values and beliefs with patient care, for example in some South African cultures and religious practices, some patients wear bracelets, necklaces or strings around their waists which is believed to protect them. These strings, referred to as 'Xitshungulu' in Tsonga or 'safety belts,' would require relatives to remove them or be removed by nurses and kept safely according to standard procedure during resuscitation (Bruce, 2000).

Allowing relatives to witness resuscitation has various reactions when looking at what is in the best interest of the patient; would the patients' right to privacy or confidentiality be breached?

In South African law there are basic human rights which enshrine the right of all people and affirm the democratic values of human dignity, equality and freedom (Bruce, 2000). Amongst these rights, there are some which are confined to healthcare, these being the patients right to information, the right to treatment and the right to privacy and confidentiality (Bruce, 2000).

Furthermore, looking at the patients' rights during resuscitation, the right to equality requires the trauma team to have good judgement and good decision making in the treatment of seriously injured patient (Bruce, 2000). Patients further have the right to freedom and security, which 'includes the right to bodily and psychological integrity in relation to the patients' security and control over his/her body' (Bruce, 2000). It further involves the patients providing consent. During resuscitation, obtaining consent from an unconscious patient may be difficult, especially in a case where relatives are not available to give consent to life saving procedures. In such instances, some hospitals would ask for consent from the superintendent for such procedures.

The patients' rights charter in South Africa aims to promote and protect the patients' rights in the healthcare sector. Amongst these, is the right to confidentiality and privacy and right to informed consent which plays an important role during resuscitation (HPCSA, 2008). Allowing relatives to witness resuscitation may be viewed as a breach of the patients confidentiality and yet again, informed consent needs to be obtained from their loved ones when the patient is in no state to do so e.g. when the patient has decreased level of consciousness.

The American Heart Association, as mentioned above, promotes family witnessed resuscitation on the basis that the resuscitation team should be sensitive to the family's presence and a team member should be allocated to relatives to explain the procedures

undertaken, to answer questions posed by relatives where they do not understand and to provide emotional support (Circulation, 2005). The Royal College of Nursing (RCN) also advocates for family witnessed resuscitation as it has provided guidance for nursing staff for such procedure. These guidelines look intensely at family witnessed resuscitation, such as when relatives should and should not be allowed into the resuscitation room, supportive measures to be provided to the relatives and how to prepare for family witnessed resuscitation (RCN, 2002). Furthermore the patients' confidentiality, together with consent, is also mentioned in this guideline provided by the RCN. The Emergency Nursing Association endorsed family witnessed resuscitation in 1993, which adopted a resolution to support family witnessed resuscitation and in 1995, an educational programme for implementation of family witnessed resuscitation in different healthcare facilities was revised (Atwood, 2008) and in 2001, by allowing family witnessed resuscitation and opening resuscitation to families, the number of lawsuits decreased (Atwood, 2008).

Ethical considerations are taken into account by healthcare providers as ethics play an important role in healthcare. Young et al (2003) define ethics as character or habit, that it is viewed as the 'science of morals.' This is supported by the South African Dictionary (2008) which defines ethics as the 'the moral principles that govern a persons' behaviour or how an activity is conducted.' In nursing practice, ethics is viewed as doing good and preventing harm (Young et al, 2003).

Looking at Codes of Ethics, Young et al (2003), firstly describe a code as 'a system of principles and moral rules' and a professional code includes values and norms of members of a profession, in this instance nurses. An advantage of having a professional code is that it re-assures the public and provides guidelines for the regulation of a profession and in nursing practice it provides regulation for practice (Young et al, 2003). The South African Nursing Code of Ethics aims to remind nurse practitioners of their responsibilities towards the patient, family and the community, with responsibilities of promoting and restoring health, preventing illness and alleviate suffering (South African Nursing Council, 2003). These responsibilities require respect for human rights, which includes cultural rights and right to life, amongst others. The code further focuses on providing ethical decision making for practice and influence on ethical values, behaviour and interaction between the nurse and the public.

The South African Nursing Council Code of Ethics is also based on beliefs that nurses' value, looking at family witnessed resuscitation, the provision of accurate and truthful information with informed consent aiding individuals to make the right decision when it comes to their healthcare. The importance of confidentiality and privacy of personal information is mentioned in the code and plays an integral part in family witnessed resuscitation amongst other important values (South African Nursing Council, 2003). Together with the South African Nursing Councils Code of Ethics, the South African nurse practices under the following codes of ethics: the Florence Nightingale Nursing Pledge, the International Code of Nursing Ethics, the South African Nurses Code of Service, The Nurses Creed which was prepared by Ernst van Heerden for the nurses of South Africa, the International Council for Nurses-Code for Nurses and the Meaning of the Lamp in the Pledge of Service (Young et al, 2003).

There are also international Codes of Ethics that build foundations for ethical nursing practice. The American Nurses Association has a Code of Ethics for nurses and is a statement of the nurses' obligations and duties, as it provides ethical standard and indicates commitment to the society by the nurse practitioner (Alspach, 2006). Included in the American Nurses Association's Code of Ethics is an important factor that family witnessed resuscitation involves, which is that the 'nurse promotes, advocates and strives to protect the health, safety and rights of the patient' (Alspach, 2006).

2.6 SUMMARY

This chapter has shown various responses by nurses on their views on family witnessed resuscitation. Protocols and guidelines play an important role in family witnessed resuscitation as many nurses in various studies have mentioned that without protocol or guidelines, relatives are not going to be allowed to witness the resuscitation so as to avoid lawsuits. Having the patients' relatives witnessing resuscitation has elicited various responses from the resuscitation team. Fear of lawsuits and relatives being traumatised have been mentioned by various studies as a disadvantage of allowing relatives to witness resuscitation, amongst other views. Interestingly there are some nurses that expressed how families witnessing resuscitation of their loved one is a positive attribute as different studies have mentioned that relatives have closure after witnessing the resuscitation, that the grieving process is shortened and most importantly the relatives can see that all was done for the loved one if resuscitation efforts fail.

A worldwide obstacle to family witnessed resuscitation is that there is shortage of nursing personnel and having an experienced or senior nurse to accompany relatives

has shown to be a general concern. Not only that, but also the lack of space in the resuscitation room has been mentioned as an obstacle to allowing relatives in the resuscitation room as there is fear that relatives may collide with the resuscitation team or the equipment. Culture and ethics also play a major role in family witnessed resuscitation. With various organisations providing protocols, policies, guidelines and position statements in support of family witnessed resuscitation have been put into practice and when families ask to witness their loved one being resuscitated, they are given that opportunity but with referral to the protocols that are set.

In South Africa, more research is needed on this topic as there is minimal literature available, which shows little is known about family witnessed resuscitation in our hospitals.

In the next chapter, the research design and research method are elaborated upon in more detail.

CHAPTER THREE

RESEARCH DESIGN AND RESEARCH METHODS

3.1 INTRODUCTION

This chapter aims to explain the research methodology, research design, population and sample, data collection, description of the data collection tool utilised and the ethical considerations adhered to in the study.

3.2 RESEARCH DESIGN

There are different definitions of research design. De Vos, Strydom, Fouche and Delport (2005) quote Mouton (2001) by explaining research design as ‘a plan or blueprint of how one intends to conduct research,’ with Polit and Beck (2012) elaborating that research design indicates how often data will be collected and where the study will take place. In this study, a descriptive quantitative research design with a qualitative aspect was utilised to meet the study objectives. According to De Vos et al (2005), descriptive research “presents a picture of the specific details of a situation, social setting or relationship and focuses on “how” and “why” questions. Burns and Grove (2007) further elaborate that descriptive design ‘may be used to develop theories, identify problems with current practice, justify current practice, make judgements, or determine what other practitioners in similar situations are doing.’

The purpose of the study was to describe the experiences and attitudes of Accident and Emergency nurses, in Accident and Emergency units of two academic hospitals in Gauteng, towards family witnessed resuscitation in order to make recommendations towards the development of a family witnessed resuscitation protocol. A non-experimental design was utilised as human characteristics cannot be experimentally manipulated (Polit and Beck, 2012). Furthermore, nurses' experiences and attitudes were investigated utilising a descriptive design as it observes and describes a situation as it naturally occurs (Polit and Beck, 2012).

3.3 RESEARCH SETTING

Burns and Grove (2007) explain a research setting as the location where a study will be undertaken, with Polit and Beck (2012) adding it is a physical location and condition in which data collection for the study will take place. The study was conducted in two public sector academic hospitals in Gauteng Province, South Africa. Both hospitals have a high influx of trauma patients accessing the Accident and Emergency unit, with no family witnessed resuscitation policy/guidelines in either setting. Asking relatives to wait in the escorts room during resuscitation and surrounding them after resuscitative efforts are completed, is the norm in both hospitals, hence they have been identified as the research setting for the study.

The study was conducted in a natural setting as the environment was not changed nor manipulated by the researcher (Burns and Grove, 2007). The majority of patients

accessing these units are poor and unemployed and do not possess medical aid insurance, resulting in a high influx of patients. Shortage of resources, nursing staff and lack of trained specialist nurses remain a concern in both settings.

3.4 POPULATION

A population is defined as the entire set of individuals having common characteristics, such as registered nurses (Polit and Beck, 2012). Burns and Grove (2007) explain that a population is all elements (such as people, objects, events or substances) that meet certain inclusion criteria in a study. The target population in this study was all categories of nursing staff in Accident and Emergency Units, being paediatric casualty, medical casualty and trauma/adult trauma casualty. De Vos et al (2005) further describes a population as 'individuals in the universe who possess specific characteristics or a set of entities that represent all the measurements of interest to the practitioner or researcher.'

3.5 SAMPLE AND SAMPLING METHOD

Sampling, according to Polit and Beck (2012), is the 'process of selecting cases representing an entire population so that inferences about the population can be made.' In this study total sampling, which is defined as a sampling technique involving examining the entire population that have particular characteristics, traits, experiences, knowledge, skills and exposure to an event (this is a type of purposive sampling), was chosen as the sampling method. In this type of sampling the population and sample are equal and the method was chosen as it has the advantage of including all the members within the population, there is a wide coverage and there is a reduced risk of missing

potential insights from members who were not included (<http://dissertation.laerd.com/articles/total-population>: accessed on 29/01/13).

The total sample for this study was N=76 including both participating hospitals. n=40 at hospital one and n=36 at hospital two. The inclusion criteria included:

- The nurse must be registered with The South African Nursing Council as a Registered Nurse, Staff Nurse or Auxiliary Nurse.
- The nurse must be working in the Accident and Emergency Unit.
- The nurse must have more than one year of experience in the Accident and Emergency Unit.

The exclusion criterion excluded nurses with less than one year's experience in the

Accident and Emergency Unit.

3.6 DATA COLLECTION

3.6.1 Data Collection Tool

A self-administered questionnaire was utilised in this study, as the participants completed the tool themselves. A self-administered questionnaire, according to De Vos et al (2005), is a questionnaire which is handed to respondents who in turn, complete and place it into a sealed marked box. This was utilised as a data collection tool and was why quantitative design was chosen as it provides objective views of the participants. The design was combined with a qualitative aspect. This is explained as an investigation that is typically in an in-depth and holistic one through collection of rich narrative material (Polit and Beck, 2012). This was done through open-ended questions included in the study to obtain subjective views from participants.

This questionnaire was identified in a study titled “European survey of Critical Care nurses’ attitudes and experiences of having family members present during cardiopulmonary resuscitation” by Albarran et al (2005). Permission to utilise the questionnaire was obtained from its developers (Annexure 6).

The demographic data on the questionnaire was modified by adding nursing ranks, whilst questions about the country in which the participants were in and their main practice role were removed as these were not applicable to this study. The tool was divided into four sections. The first section was the demographic data consisting of age, gender, speciality in which the participants practice, their rank in nursing, years of experience in their speciality and the number of years as a nurse. The second section investigated nurses experiences on family witnessed resuscitation; the third section further looked at the nurses attitudes on family witnessed resuscitation, which comprised a 5 point Likert Scale, a widely used scaling method where respondents are asked to indicate the degree to which they agree or disagree with the opinion expressed by the statement (Polit and Beck,2012). A questionnaire was utilised as it helps gather a broad spectrum of information from participants, such as facts about family witnessed resuscitation, or beliefs, attitudes, opinions, knowledge, or intentions of the subject (Burns and Grove, 2007). The advantage of the questionnaire was that it ensured participant confidentiality, was cost effective and without an interviewer, which guaranteed no interviewer bias as compared to interviewing participants (Polit and Beck, 2012). An open-ended question was added to allow participants to elaborate their experiences and attitudes towards family witnessed resuscitation in their own words by writing down their responses.

3.6.2 Procedure

Permission to conduct the research was granted by the Chief Executive Officers of both hospitals together with the Department of Gauteng Health (Annexure 3 and Annexure 9). Data was collected from 16 September to 31 October 2013 in both hospitals. An information letter elaborating on the study was included with the consent form, which was completed prior to completion of the questionnaire. Participant confidentiality and anonymity was ensured and participants were not coerced into participating and were given an option to withdraw from the study without facing any penalties. Questionnaires were handed out by the researcher per shift and sealed boxes were placed in the Unit for participants to place completed forms; in Units where there was insufficient space, envelopes were provided. The boxes and sealed envelopes were collected by the researcher after each shift change.

3.7 PILOT STUDY

A pilot study, as explained by Polit and Beck (2012), 'is a small scale version or trial run designated to test the methods to be used in a larger, more rigorous study.' Burns and Grove (2007) also mention that the main reasons for conducting a pilot study prior to the main study is to identify problems with the design, develop or refine the data collection tool and refine the research methodology. The pilot study was conducted at one of the state hospitals chosen for the study, with a sample of five nurses (n=5), to test the understanding of the questionnaire in a South African setting prior to commencing the major study. The results of the pilot study were included in the major study.

3.8 DATA ANALYSIS

Descriptive and inferential statistics was used for analysing the data. Nominal scaled variables were displayed as numbers and percentages, whilst interval scaled variables were reported as mean values and standard deviations. The following statistical tests were used in this study:

- Percentage, mean and standard deviation. The mean scores are not for the purpose of testing, rather to demonstrate the magnitude of the difference and the direction of the opinion.
- The Mann-Whitey test, which assesses the difference in ordinal data. This is used to assess the difference in attitudinal variables. As the results of this survey are not intended to change practice, the significance is set at <0.05 ($p<0.05$).
- Spearman's correlation coefficient used to calculate the correlation coefficient (ρ) and significance (to determine the direction and strength of attitudinal relationships of nurses' views).

Statistical assistance was sought from a statistician from the Medical Research Council (MRC). Thematic analysis was applied to the qualitative written responses (fourth section of the questionnaire) and verified by the supervisor.

3.9 ETHICAL CONSIDERATIONS

Ethics refers to a set of moral principles such as respect, anonymity, confidentiality and beneficence are used to guide the planning, implementing and evaluating of a research project (Meyer, Naude and Van Niekerk, 2004). Prior to conducting the study, permission was obtained from the following authorities:

- The Medical Human Research Ethics Committee of the University of the Witwatersrand; Subjects: Medical (Protocol Number M130342) (**Annexure 4**),
- The Faculty of Health Sciences' Postgraduate Committee (**Annexure 7**).

- Permission for utilising the data collection tool was obtained from the authors (**Annexure 6**).
- The Gauteng Department of Health (**Annexure 2**)
- The CEOs' of the institutions where the study was conducted (**Annexure 3**) and (**Annexure 9**).

An information letter expanding upon what the study entailed was included, accompanied by an informed consent which had to be completed by the participants to indicate they had adequate information about the research, that they understood the information and that they could consent or decline, as participation was voluntary (Polit and Beck, 2012). Participants took part in the study willingly without being coerced and the consent form was completed. No identifying aspects were requested ensuring participant anonymity.

Information obtained was confidential as it was only available to the researcher, her supervisors and the statistician.

3.10 VALIDITY AND RELIABILITY OF THE DATA COLLECTION TOOL

3.10.1 Validity

Validity according to Polit and Beck (2012) is 'the degree to which an instrument measures what it is intended to measure.' In describing validity further, according to DeVon, Block, Moyle-Wright, Ernst, Hayden, Lazzara, Savoy and Kostats-Polston (2007), it 'is the ability of an instrument to measure the attribute of the construct under the study,' with De Vos et al (2005) finally mentioning two aspects of validity

- 'That the instrument actually measures the concept in question,'

- That the concept is measured accurately’.

In this study, the tool utilised aimed at measuring attitudes and experiences of nurses towards family witnessed resuscitation, which it did successfully, not only in this study but also internationally as this data collection tool has been utilised in other countries such as Europe and Turkey.

3.10.2 Reliability

Reliability is explained as ‘the degree of consistency or dependability with which an instrument measures an attribute’ (Polit and Beck, 2012). De Vos et al (2005) further describes it as the consistency and stability of a measurement. To ensure reliability and consistency of the main study, a pilot study was carried out to ensure the tool could be utilised in a South African setting. Nurses’ experiences and attitudes towards family witnessed resuscitation has been measured internationally and has produced identical results throughout, as the same data collection tool has been utilised, indicating the data collection tool is reliable.

3.11 SUMMARY

This chapter explained the research design and methodology utilised. Data collection and the data collection tool were elaborated upon extensively, including the pilot study and ethical considerations undertaken during the study. The following chapter presents data analysis and research findings.

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSION OF FINDINGS

4.1 INTRODUCTION

Data files were set within the statistical package 'STATA' version 11; data was entered once and then verified during the second direct data entry. Descriptive and comparative statistics were used to achieve the study objectives. The descriptive tests (frequency, mean and standard deviation) were used to synthesise nurse respondent's demographic data and questionnaire schedule. Comparative statistics were employed to describe and synthesise total questionnaire scores to compare the biographical data of nurse respondents with obtained levels of measurement to test for statistical significance. Statistical tests included the Fisher's Exact test, Mann-Whitney U test, two sample t-test and Spearman's Correlation Coefficient (ρ). Testing was done at the 0.05 level of significance ($p < 0.05$) which ensured a power of at least 95% accuracy in findings. Findings will be discussed on construct, scale and item levels.

4.2 APPROACH TO DATA ANALYSIS

Descriptive statistics were used to present interpretation of the biographical data of nurses: gender, age in years, rank of nurse, years of experience in current speciality and years of experience as a nurse. Frequency distributions and cross tables were used to provide an overall coherent presentation and description of the data. Percentages in these findings were taken to the nearest whole number.

When comparing total item scores the Fisher's Exact test was applied to test for significance of differences in the frequencies of responses for attitudes towards family witnessed resuscitation between registered nurses and sub-professional nurses. Collapsing of the rank of nurse categories was done to facilitate presentation of the data, whereby registered nurses and trauma trained nurses were combined to form the category of registered nurses, whilst staff nurses and auxiliary nurses were combined to form the sub-professional nurse category. Testing was done on the item level to facilitate further exploration of the data. Frequency distributions and cross tables were used to provide an overall summary of the data. Collapsing of the categories of the Likert scale was done to facilitate presentation of the data, however it was noted that a larger percentage of respondents answered agree or disagree responses in the itemised analysis. The level of statistical testing was set at the level of $p < 0.05$. A biomedical statistician from the Medical Research Council (MRC) analysed the data using the statistical package 'STATA' version 11.

Measurement of central tendency and variation (mean and standard deviation) were used to summarise the data. It is acknowledged that there is some contention around citing mean values when Likert scales are used, however, the mean values are not given for the purpose of statistical testing rather "to demonstrate the magnitude, difference and direction in opinion" (Fulbrook et al, 2005). When testing for the difference in attitudinal variables by selected categorical variables, namely gender and rank, the Mann-Whitney test was applied because the attitudinal variables measured were ordinal data. When testing for the differences in attitudinal variables of respondents in the two hospitals, the paired t-test was applied to provide the test statistic.

When examining the data to determine the presence and strength of relationships of nurses' views, the Spearman's Rank Order Correlation (ρ) was used to calculate the correlation co-efficient (r) and significance. The level of significance was set at <0.05 . Two tailed significance was used since relationships could go in either direction. The data were analysed using the statistical package 'SPSS' version 21.

4.3 RESULTS AND FINDINGS

4.3.1 Section One: Biographical Details

This section relates to the respondents' biographical data which comprised five (5) items. Items included are gender, age in years, rank of nurse, years of experience in current speciality and years of experience as a nurse, which were obtained from the respondents through a self-administered questionnaire. **Table 4.1** summarises the results of this process for the total sample ($n=76$). Items were combined to form coherent groups to facilitate discussion of the data.

Table 4.1 Demographic data for nurse respondents for the total sample (n=76)

Item	Demographic data	Frequency	Percentage
Q1	Gender		
	Male	10	13.2
	Female	66	86.7
Q2	Age in years		
	21-30	18	23.7
	31-40	22	28.94
	41-50	16	21.05
	51-60	20	26.32
Q3	Rank of Nurse		
	Trauma trained specialist	9	12.0
	Registered Nurse	36	48.0
	Staff Nurse	19	25.3
	Nursing Auxiliary	12	15.8
Q4	Years of experience in current speciality		
	0-5	40	52.6
	6-10	11	14.5
	11-15	13	17.1
	16-20	4	5.3
	>21	8	10.5
Q5	Years of experience as a nurse		
	0-5	23	30.3
	6-10	14	18.4
	11-15	11	14.5
	16-20	9	11.8
	>21	19	25.0

Table 4.1 presents a summary of the biographical details of the respondents. In this study, females accounted for 86.8% (n=66) and males 13.1% (n=10) of the total sample (n=76). The majority (52.6%; n=40) of the respondents were between the ages of 21 and 40 years and 36 (n=36; 46.1%) were in the 41 to 60 age category. It can be

extrapolated from these findings that female nurses predominate in the sample. This is also reflected in a Fulbrook et al (2005), as 73.4% (n=91) females dominated the study. However, between age categories indicated opposite higher and lower frequencies in the 21 to 40 and 41 to 60 age categories implying, in terms of age distributions, this is a young nursing population. **Figure 4.1** illustrates the findings.

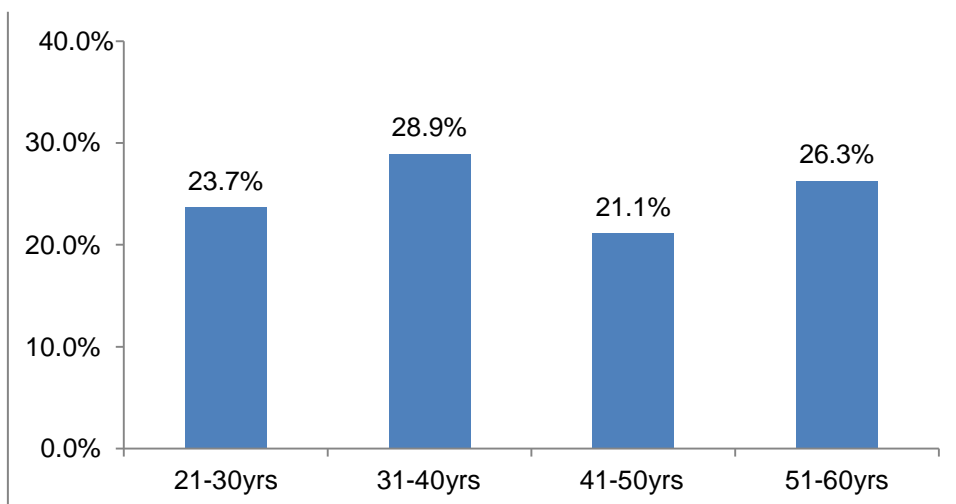


Figure 4.1 Age distribution of respondents (n=76)

A close majority (48.0%; n=36) of the total sample (n=76) were in the category of registered nurse, followed by 25.3% (n=19) and 14.7% (n=12) as either staff nurse or auxiliary nurse, respectively. In this study, only 12.0% (n=9) of the respondents were trauma trained specialist nurses. Findings are displayed in **Figure 4.2**.

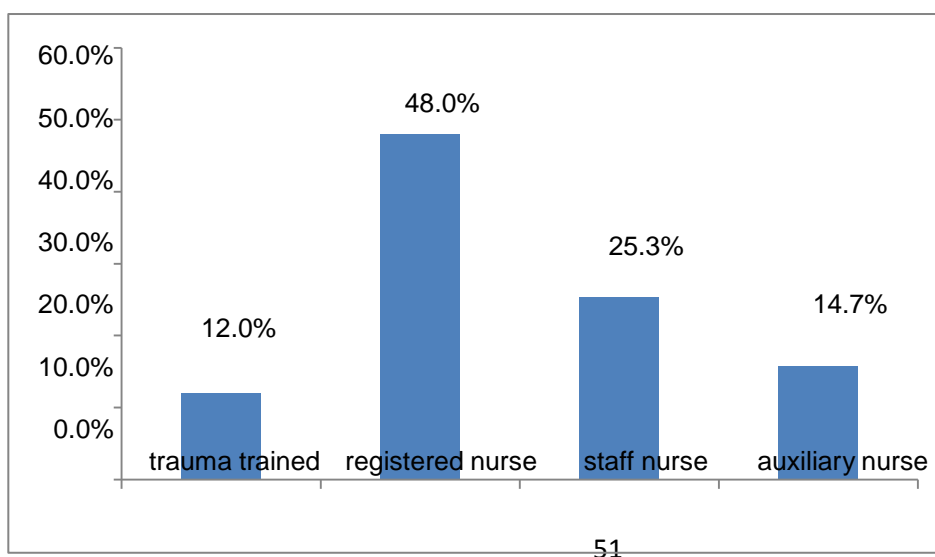


Figure 4.2 Rank of nursing

Findings indicated the majority (52.6%; n=40) of the respondents had less than five years' experience in the current speciality, whereas only 17.1% (n=13) and 10.5% (n=8) had from 11 to 15 and more than 21 years of experience, respectively. Findings are displayed in **Figure 4.3**.

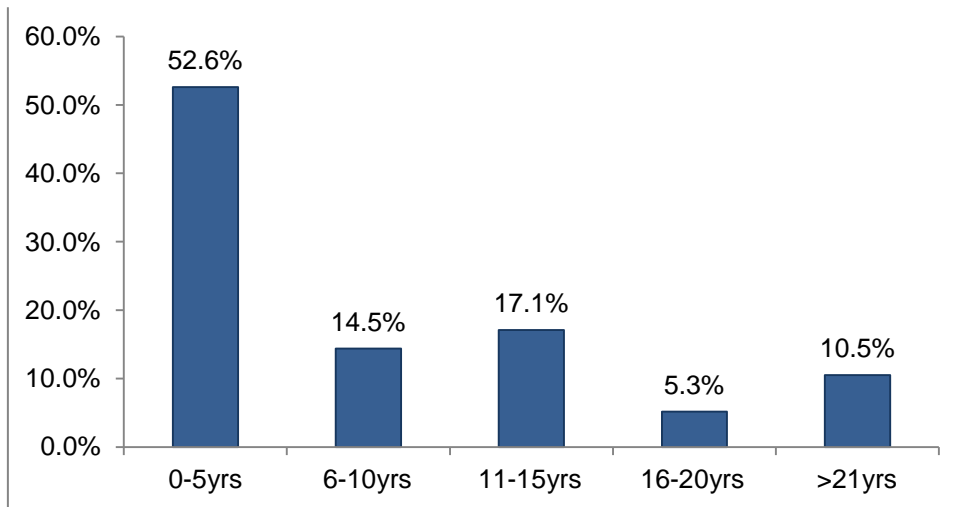


Figure 4.3 Years of experience in current speciality

Most of the respondents had less than five (<5) years of experience as a nurse, followed closely by 25.0% (n=19) with more than 21 (>21) years. Findings are displayed in **Figure 4.4**.

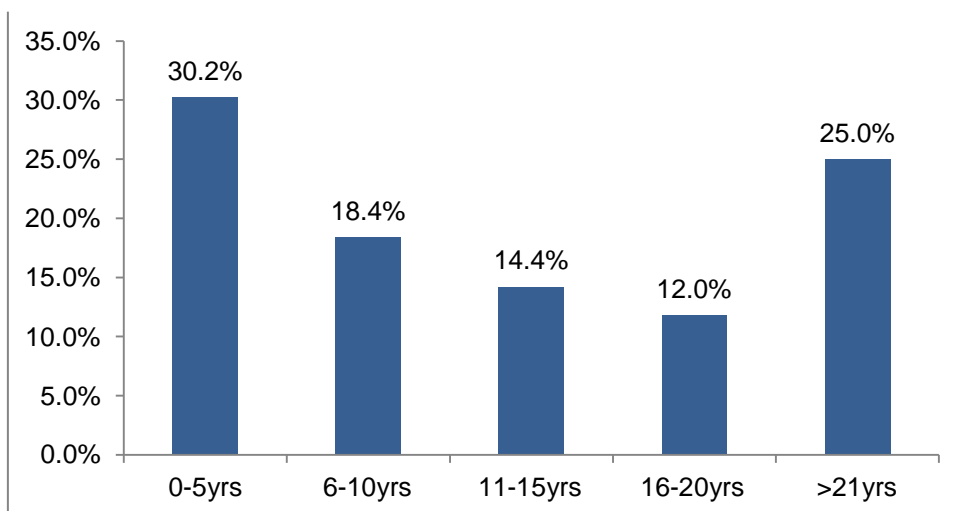


Figure 4.4 Years of experience as a nurse

4.3.2 Section Two: Nurse's Experiences

Nurse's experience of family presence during resuscitation formed the next part of the questionnaire (**Annexure 8**), which comprised six (6) questions. Items were combined to form coherent groups to facilitate discussion of the data. **Table 4.2** displays the findings.

Table 4.2 Nurses experiences of family presence during CPR for total sample (n=76)

Item	Experience statements	Respondent's responses			
		Yes		No	
		n	%	n	%
2.1	Have you experienced a situation in which the family members were present during CPR?	24	32.9	49	67.1
2.2	Has a family member ever asked you if they could be present during CPR?	34	44.7	42	55.3
2.3	Have you ever invited a family member to be present?	6	8.0	69	92.0
2.4	Does your unit/ward have a protocol or policy document on family presence during CPR?	10	13.5	64	86.5
2.5	Have you had one or more positive experiences of family members being present during CPR?	12	16.0	63	84.0
2.6	Have you had one or more negative experiences of family members being present during CPR?	25	33.3	50	66.7

Findings revealed a total of twenty-four (n=24; 32.9%) respondents had experience of family witnessed resuscitation (**item 2.1**); similarly 46.8% (n=58) respondents in Europe indicated they had experienced a situation where family members were present during resuscitation of their loved one (Fulbrook et al, 2005), with twenty-five (n=25; 33.0%) respondents

indicating these had been negative (**item 2.6**). Thirty-four (n=34; 44.7%) respondents had been approached by family members to be present with their loved ones during resuscitation (**item 2.2**), but only six (n=6; 8.0%) respondents had invited family members to be present (**item 2.3**). Only ten respondents reported that their unit had a policy or protocol on family presence during resuscitation (**item 2.4**); the lack of family presence policies or protocol is reflected internationally where only seven (5.7%) respondents reported to have a unit policy or protocol on family witnessed resuscitation (Fulbrook et al, 2005). **Table 4.2** displays the findings.

4.3.3 Section Three: Attitude to Family Presence

This section comprised thirty (30) items to which responses were obtained from the nurse respondents through a self-administered questionnaire, to determine their attitude towards family witnessed resuscitation.

Section three was sub-divided into three parts surveying the influence of family presence during decision making (**items 3.1 to 3.10**), effects on health care professionals and patient members (**items 3.11 to 3.20**) and possible CPR outcomes (**items 3.21 to 3.30**).

Items were combined to form coherent groups to facilitate discussion of the data. **Tables 4.3 to 4.5** display the findings.

4.3.4.1 Decision making

Table 4.3 Decision making regarding the presence of family members during CPR (n=76)

Item	Decision making statements	Respondent's responses			
		Agree		Disagree	
		n	%	n	%
3.1	Family members should be offered the opportunity to be with the patient during CPR. It should always be their decision.	10	13.2	66	86.8
3.2	Doctors want relatives to be present during CPR.	15	19.7	61	80.3
3.3	Nurses do not want relatives to be present during CPR.	39	51.3	37	48.7
3.4	Nurses should have the responsibility for deciding if family members should be present during CPR.	34	44.7	42	55.3
3.5	Doctors are responsible for deciding if family members are allowed to be present during CPR.	29	38.2	47	61.8
3.6	It should be the joint responsibility of all members of the resuscitation team to decide whether (or not) family members are allowed to be present during CPR.	49	64.5	27	35.5
3.7	There may be a problem of confidentiality in discussing details about the patient if family members are present during CPR.	68	89.5	8	10.5
3.8	Because family members do not understand the need for specific intervention they are more likely to argue with the resuscitation team.	67	88.2	9	11.9
3.9	Family should be present during CPR so they can be involved in decisions.	9	11.8	67	88.2
3.10	If present during CPR, family members are more likely to accept decisions to withdraw treatment.	20	26.3	56	73.7

Findings presented in **Table 4.3**, indicated sixty-six (n=66; 86.8%) of the respondents disagreed that family members should be given the option to remain with their loved one during resuscitation (**item 3.1**). Thirty-seven (n=37; 48.7%) respondents did not want relatives to be present during CPR (**item 3.3**), a sentiment shared by 33.3% (n=41) of nurses.

An overwhelming majority (89.5%; n=68) of respondents were concerned there could be breaches of confidentiality during family witnessed resuscitation (**item 3.7**) and sixty nine (n=69; 88.2%) were anxious that relatives would argue with the resuscitation team because they may not understand the need for interventions (**item 3.8**). Similarly, sixty-seven (n=67; 88.2%) respondents disagreed with family members being present so that they could be involved in decisions for their loved one (**item 3.9**). However, twenty (n=20; 26.3%) respondents agreed family members would more likely accept decisions to withdraw treatment if they were present (**item 3.10**). **Table 4.3** displays the findings.

4.3.4.2 Process

Table 4.4 Effect of family member presence on health care providers and patient family member.

Item	Process statements	Respondent's responses			
		Agree		Disagree	
		n	%	n	%
3.11	Family members are likely to interfere with the resuscitation process.	54	71.1	22	28.9
3.12	Family members should not be present during CPR because it is too distressing for them.	63	88.2	13	11.8
3.13	Nursing and medical staff find it difficult to concentrate when relatives are watching.	63	82.9	13	17.1
3.14	The performance of the team will be positively affected due to the presence of family members.	49	64.5	27	35.5
3.15	During CPR the resuscitation team may say things that are upsetting to family members.	54	71.1	22	28.9
3.16	There are enough nursing staff to provide emotional support and remain with the family member during resuscitation.	27	35.5	49	64.5
3.17	Most bed areas are too small to have a family member present during resuscitation.	62	81.6	14	18.4
3.18	It should not be normal practice for family members to witness the resuscitation of a family member.	59	77.6	17	22.4
3.19	If family members are present during CPR, there should be a member of the resuscitation team whose only role is to look after the family.	36	47.4	40	52.6
3.20	Family presence during CPR is beneficial to the patient.	17	22.4	59	77.6

Findings presented in **Table 4.4**, revealed fifty-four (n=54; 71.1%) respondents agreed that family members could interfere with the resuscitation process (**item 3.11**). In addition, the majority (82.9%; n=63) of respondents agreed family members would cause difficulties for the resuscitation team to concentrate on CPR attempts (**item 3.13**).

The majority (77.6%; n=59) of respondents did not consider family witnessed resuscitation to be standard practice (**item 3.18**) and sixty-three (n=63; 88.2%) respondents agreed that watching resuscitation attempts may be too distressing for family members (**item 3.12**).

Shortage of nursing staff is brought to light as a close majority (47.4%; n=36) of respondents agreed there should be a dedicated member of the resuscitation team whose role is to look after the family (**item 3.19**). However, more than half (64.5%; n=49) of the respondents did not believe there was sufficient staff to support family members during resuscitation (**item 3.16**) which is witnessed globally, as 52.8% (n=65) of European nurses mentioned that there were inadequate nursing staff numbers to accompany family members during resuscitation (Fulbrook et al, 2005).

Only 18.4% (n=14) of respondents disagreed that bed areas were too small to have family members present during CPR, while most (81.6%; n=62) respondents agreed (**item 3.17**). Overall, fifty nine (n=59; 77.6%) respondents disagreed that family presence during CPR was beneficial to patients (**item 3.20**).

4.3.4.3 Outcome

Table 4.5 Influence of family members on CPR outcome

Item	Outcome statements	Participant's responses			
		Agree		Disagree	
		n	%	n	%
3.21	Family presence during CPR prevents family members developing distorted images or wrong ideas.	41	53.9	35	46.1
3.22	Family will suffer negative long-term emotional effects if present during CPR.	62	81.6	14	18.4
3.23	Rates of legal action against staff will increase, family may misunderstand actions of resuscitation team.	66	86.8	10	13.2
3.24	Family presence during CPR helps family members know everything is being done for the patient.	26	34.2	50	65.8
3.25	The resuscitation team are more likely to prolong resuscitation attempt if family is present.	49	64.5	27	35.5
3.26	Family presence during CPR creates a stronger bond between family and nursing team.	13	17.1	63	82.9
3.27	Family presence during CPR <i>is not</i> beneficial to the patient.	43	56.7	33	43.4
3.28	Family presence during CPR helps the family with the grieving process, if the patient does not survive.	26	34.2	50	65.8
3.29	Family presence during CPR prolongs emotional readjustment at the loss of the family member.	43	53.9	35	46.1
3.30	Family presence during unsuccessful CPR is important because it enables family to share the last moments with the patient.	25	32.9	51	67.1

As indicated in **Table 4.4**, an overwhelming majority (81.6%; n=62) of respondents agreed that family members would suffer long term emotional effects associated with family witnessed resuscitation (**item 3.22**), although patients' in McMahon-Parkes et al's (2009) study stated the presence of family members 'would help create an atmosphere of trust by promoting feelings of security and maintaining a tie and bond with families'.

Just over one-third (34.2%; n=26) of respondents believed family witnessed resuscitation helped in the grieving process when CPR was unsuccessful (**item 3.28**) and forty-three (n=43; 53.9%) respondents agreed that being present would prolong emotional adjustment following the loss of a family member (**item 3.29**). A further fifty-one (n=51; 67.1%) respondents disagreed with the notion that family witnessed resuscitation was important for family members because if unsuccessful it allowed the family to share the last moments with the patient (**item 3.30**). In addition, twenty-six (n=26; 34.2%) of respondents believed family witnessed resuscitation could help relatives to realise everything possible was done for the patient (**item 3.24**), with a majority of 76.4% (n=94) of European nurses indicating the same notion (Fulbrook et al, 2005).

However, fear that family witnessed resuscitation might increase the rate of legal actions or that resuscitation attempts may be unnecessary prolonged was shared by sixty-six (n=66; 86.8%) respondents (**item 3.23**), whereas only a minority 26.0% (n=32) of European nurses mentioned that misunderstanding may indeed increase lawsuits pertaining to family presence during resuscitation (Fulbrook et al, 2005).

Most (53.9%; n=49) respondents believed family witnessed resuscitation helped to prevent family members developing wrong ideas about the resuscitation process (**item 3.21**), however for unsuccessful resuscitative outcomes, family members would be able to see

that everything was done for their loved ones and no 'psychological damage' would be reported as a result of family witnessing resuscitation, as stated in Atwood's (2008) study.

A further sixty-three (n=63; 82.9%) respondents believed family witnessed resuscitation would have no effect on the bond between nurses and relatives (**item 3.26**), however 17.1% disagreed with this view (**item 3.26**).

Table 4.6 Summary of results of Fisher's Exact test for experiences between registered nurse and sub-professional nurse

Item	Experience statements	Respondent's responses								Fisher's exact test
		Registered Nurses				Sub-professional Nurses				
		Yes		No		Yes		No		
		n	%	n	%	n	%	n	%	
2.1	Have you experienced a situation in which the family members were present during CPR?	17	30.6%	27	61.3%	7	24.1%	22	75.8%	0.216
2.2	Has a family member ever asked you, if they could be present during CPR?	21	45.5%	25	54.3%	13	43.3%	17	56.6%	1.000
2.3	Have you ever invited a family member to be present?	4	8.7%	42	91.3%	2	6.9%	27	93.1%	1.000
2.4	Does the unit/ward have a protocol or policy document on family presence during CPR?	3	6.5%	43	93.4%	8	13.5%	21	75.0%	0.036*
2.5	Have you had one or more positive experiences of family members being present during CPR?	9	19.5%	37	80.4%	3	10.3%	26	89.6%	0.349
2.6	Have you had one or more negative experiences of family members being present during CPR?	18	39.1%	28	60.8%	7	24.1%	22	75.8%	0.215

Key: *= statistical significance

Table 4.7 Summary of results of Fisher's Exact test for decision making between registered nurse and sub-professional nurse

Item	Decision making	Respondent's responses								Fisher's exact test
		Registered Nurses				Sub-professional Nurses				
		Agree		Disagree		Agree		Disagree		
		n	%	n	%	n	%	n	%	
3.1	Family members should always be offered the opportunity to be with the patient during CPR. It should always be their decision.	7	16.2%	36	83.7%	3	10.7%	25	89.2%	0.730
3.2	Doctors want relatives to be present.	6	15.0%	34	85.0%	1	3.5%	27	96.4%	0.226
3.3	Nurses do not want relatives to be present.	25	60.9%	16	39.0%	14	51.8%	13	48.1%	0.617
3.4	Nurses should have the responsibility for deciding if family members should be present during CPR.	23	54.7%	19	45.2%	11	44.0%	14	56.0%	0.454
3.5	Doctors are responsible for deciding if family members are allowed to be present during CPR.	18	45.0%	22	55.0%	11	44.0%	14	56.0%	1.000
3.6	It should be the responsibility of all members of the team to decide whether (or not) family should be present.	32	74.4%	11	25.5%	17	65.3%	9	34.6%	0.429
3.7	There are problems with confidentiality in discussing details about the patient if the family are present during CPR.	41	91.0%	4	8.8%	27	96.4%	1	3.5%	0.643
3.8	Because family do not understand the need for specific intervention they are more likely to argue with the team.	40	93.0%	3	6.9%	27	96.4%	1	3.5%	1.000
3.9	Family members should be present during CPR so they can be involved in decisions.	7	16.2%	36	83.7%	2	6.9%	27	93.1%	0.297
3.10	If present during CPR family members are more likely to accept decisions to withdraw treatment.	13	35.1%	24	69.5%	7	30.3%	16	66.6%	0.783

Table 4.8 Summary of results of Fisher's Exact test by process between registered nurse and sub-professional nurse

Item	Process statements	Respondent's responses								Fisher's exact test
		Registered Nurses				Sub-professional Nurses				
		Agree		Disagree		Agree		Disagree		
		n	%	n	%	n	%	n	%	
3.11	Family members are likely to interfere with the process.	37	86.0%	6	13.9%	17	68.0%	8	32.0%	0.119
3.12	Family members should not be present during CPR because it is too distressing.	37	86.0%	6	13.9%	26	89.6%	3	10.3%	0.731
3.13	Nursing and medical staff find it difficult to concentrate when relatives are watching.	37	88.6%	5	11.3%	24	85.7%	4	14.2%	0.728
3.14	The performance of the team will be positively affected due to the presence of family members.	24	54.5%	20	45.5%	25	89.2%	3	10.7%	0.002*
3.15	During CPR the resuscitation team may say things that are upsetting to family members.	35	77.7%	10	22.2%	19	67.8%	9	32.1%	0.415
3.16	There is enough staff to provide emotional support and remain with the family member during resuscitation.	14	32.5%	29	67.4%	13	50.0%	13	50.0%	0.204
3.17	Most bed areas are too small to have a family member present during resuscitation.	37	82.2%	8	17.7%	25	86.2%	4	13.7%	0.754
3.18	It should be normal practice for family members to witness the resuscitation of a family member.	37	86.0%	6	13.9%	22	81.4%	5	18.5%	0.739
3.19	If the family members are present during CPR, there should be a member of the resuscitation team whose only role is to look after the family.	25	56.8%	19	43.1%	11	45.6%	13	54.1%	0.451
3.20	Family presence during CPR is beneficial to the patient.	12	33.3%	24	66.6%	5	22.7%	17	77.2%	0.554

Table 4.9 Summary of results of Fisher’s Exact test by process between registered nurse and sub-professional nurse

Item	Outcomes	Respondent responses								Fisher’s exact test
		Registered Nurses				Sub-professional Nurses				
		Agree		Disagree		Agree		Disagree		
		n	%	n	%	n	%	n	%	
3.21	Family presence during CPR prevents family members developing distorted images or wrong ideas.	23	56.1%	18	43.9%	18	69.2%	8	30.7%	0.315
3.22	Family members will suffer negative long-term effects if they are present during CPR.	36	87.8%	5	12.2%	26	89.6%	3	10.3%	1.000
3.23	Rates of legal action against staff will increase because when present family members may misunderstand.	40	86.9%	6	13.0%	26	92.8%	2	7.1%	0.702
3.24	Family presence during CPR helps family know that everything is being done.	19	47.5%	21	52.5%	7	29.1%	17	70.8%	0.192
3.25	The resuscitation team are more likely to prolong the resuscitation attempt if a family member is present.	32	80.0%	8	32.0%	17	68.0%	8	24.6%	0.376
3.26	Family presence during CPR creates a stronger bond between family and nursing team.	9	25.0%	27	75.0%	4	16.6%	20	83.3%	0.534
3.27	Family presence is not beneficial to the patient.	27	75.0%	9	25.0%	16	76.1%	5	23.8%	1.000
3.28	Family presence during CPR helps the family member with the grieving process, if the patient does not survive.	20	48.7%	21	51.2%	6	26.0%	17	73.9%	0.112
3.29	Family presence during CPR prolongs emotional readjustment at the loss.	26	68.4%	12	31.5%	15	71.4%	6	28.5%	1.000
3.30	Family presence during CPR is important because it enables family members to share the last moments with the patient.	18	46.1%	21	53.8%	7	35.0%	13	65.0%	0.579

4.3.4 Experiences and Attitudes to Family Presence during CPR

When comparing for the differences in the item scores between registered nurses (n=45; 59.2%) and sub-professional nurses (n=31; 40.8%), the Fisher's Exact test was applied to proportionate relationships between variables and to assign the test statistic. Testing was done at item level in order to determine where statistically significant differences might lie in the item scores. **Tables 4.6 to 4.9 present the findings.**

Data were analysed to determine whether the differences in the experiences and attitudes of nurses toward family witnessed resuscitation were statistically significantly different by rank of nurse groups. Fisher's Exact test was employed to proportionate the data by categories (registered nurses and sub-professional nurses) in order to determine the test statistic in the categories of experiences and attitudes (inclusive of decision making, process and outcomes) towards family presence during resuscitation.

Findings indicated, of the experiences of nurses towards family witnessed resuscitation, **one item was statistically significant** ($p < 0.05$). No significant difference was observed in the remaining five (5) items related to the experiences of nurses toward family witnessed resuscitation. **Table 4.6 displays the findings.**

Findings indicated that of the attitudes of nurses towards family witnessed resuscitation, **one item was statistically significant** ($p < 0.05$). No significant difference was observed in the remaining twenty-nine (29) items related to the attitudes of nurses toward family witnessed resuscitation. **Tables 4.7 to 4.9 display the findings.**

4.3.5 Attitudes to Family Presence

Measurement of central tendency and variation (mean and standard deviation) were used to summarise the data. Findings for selected respondent's biographic categorical variables, namely rank in nursing and gender, are discussed in the next section. Summary of the mean scores for broad comparison of attitudes inclusive of three variables (decision-making, process and outcome) are provided in **Table 4.10**.

Table 4.10 Summary of descriptive statistics for comparison of attitudinal variables for the total sample (n=76)

Category	Descriptive statistics				
	n	Mean	SD	Minimum	Maximum
Decision Making	76	31.07	5.92	17.00	48.00
Process	76	24.55	5.92	10.00	43.00
Outcome	76	27.07	5.19	10.00	40.00

Table 4.10 presents the summary of the descriptive statistics for comparison of mean scores for attitudes (decision-making, process and outcomes). Of the total sample (n=76), the mean score obtained for decision making was 31.07 (SD 5.92), followed by 27.07 (SD 5.19) and 24.55 (SD 5.92) for outcomes and process, respectively. This finding enabled broad analysis of the differences within the sample.

4.3.5.1 Gender

Based on an observed mean score of 1.13 (SD 0.340) for gender the data were then tested to determine whether there were differences in the mean values within the sample. A Mann-Whitney test was employed to provide the test statistics. **Table 4.11 summarises the results of this process.**

Table 4.11 Summary of mean scores of attitudes by gender for differences

Category	Gender								p-value
	Female				Male				
	n	Mean rank	Sum of ranks	Median	N	Mean rank	Sum of ranks	Median	
Decision making	66	39.87	2631.50	30.50	10	29.45	294.50	28.50	0.163
Process	66	40.44	2669.50	21.00	10	40.44	257.00	25.00	0.048*
Outcome	66	39.75	2623.50	28.00	10	30.25	302.50	25.50	0.203

Key: *=statistical significance

Table 4.11 presents the summary of median scores of attitudes by gender for differences within the sample. Of the total sample (n=76), the median score obtained for decision making was 28.50 (n=10) for males, compared to 30.50 (n=66) for females. The median score obtained for process was 25.00 (n=10) for male, compared to 25.00 (n=66) for females. Similarly, the median score obtained for outcome was 25.50 (n=10) for males, compared to the median score of 28.00 (n=66) for females.

The Mann-Whitney U test revealed **statistically significant** ($p < 0.05$) differences in one attitudinal variable, namely process ($U = -202$; $Z = -1.274$; $p = 0.048$) amongst male and female respondents. There was no significant difference ($p > 0.05$) in decision making and outcome variables. Results of this process are summarised in **Table 4.11**.

4.3.5.2 Rank of nurse recode

Based on an observed difference in the mean scores of 0.12 (SD 0.327) for rank recode, the items were tested to determine whether they were significant or not. A Mann-Whitney U test

was employed to provide the test statistic. Results of this process are summarised in **Table 4.12**.

Table 4.12 Summary of mean scores of attitudes by rank recode for comparison of decision-making, process and outcome.

Category	Rank Recode								p-value
	Others				Trauma trained specialist				
	n	Mean rank	Sum of ranks	Median	n	Mean rank	Sum of ranks	Median	
Decision making	66	38.05	2511.50	30.50	9	37.61	338.50	30.00	0.954
Process	66	37.64	2484.50	24.50	9	40.61	365.50	24.00	0.701
Outcome	66	38.36	2543.00	28.00	9	35.33	318.00	27.00	0.694

Table 4.12 presents the summary of mean scores of attitudes for rank for comparison of decision making, process and outcomes. Of the total sample (n=76), the median score for decision making was 30.00 (n=66) for trauma trained nurses, contrasting with the median score of 30.50 (n=66) for others. The median score for trauma trained nurses by process was 24.00 (n=9), contrasting with the median score of 24.50 (n=66) for others. Similarly the median score obtained for outcome was 27.00 (n=9) for trauma trained nurses, contrasting with 28.00 (n=66) for others.

The Mann-Whitney U test revealed **no significant differences** in the decision making (U=293.5; Z=-0.057; p=0.094), process (U=273.5; Z=273.5; p=0.701) and outcome (U=273; Z=-0.393; p=0.694) **amongst trauma trained specialist and other nurses**. Results of this process are summarised in **Table 4.12**.

4.3.5.3 Hospital setting

Findings for selected respondent's demographic categorical variables, namely hospital A and hospital B are discussed in the next section. **Tables 4.13 to 4.14 provide a summary of the mean scores for comparison of attitudes inclusive of three constructs (decision- making, process and outcome).**

Table 4.13 Summary of descriptive statistics for comparing mean scores between hospital A and hospital B

Category	Hospital	n	Mean	SD
Decision making	A	44	30.86	6.26
	B	32	31.37	5.50
Process	A	44	23.59	5.68
	B	32	25.87	6.07
Outcome	A	44	26.00	5.38
	B	32	28.56	4.59

Table 4.13 presents the summary of total mean scores for comparison of attitudes (decision making, process and outcome) between hospital A and hospital B. Of the total sample (n=76), the mean score obtained for hospital A for decision making was 30.86 (SD 6.26), compared to the mean score of 31.37 (SD 5.50) in hospital B. The mean score obtained for hospital A for process was 23.59 (SD 5.68), compared to 25.87 (SD 6.07) in hospital B. Similarly, the mean score for outcome obtained for hospital A was 26.00 (SD 5.38), compared to 28.56 (SD 4.59) in hospital B. Based on the observed difference in the mean scores by hospital A and hospital B, the data were analysed to determine whether they were significant or not. A t-test was employed to provide the test statistics. **Table 4.13 presents the results of the process.**

Table 4.14 Summary of t-test for equality of means by attitudes between hospital A and hospital B

Category	Hospital						t-test for equality of means			
	Hospital A			Hospital B			t-test	p-value	Mean difference	CI
	n	Mean	SD	N	Mean	SD				
Decision making	44	30.86	6.26	32	31.37	5.05	-0.36	0.713	-0.511	-3.270 to 2.247
Process	44	23.59	5.68	32	25.87	6.07	-1.68	0.097	-2.284	-4.993 to 0.424
Outcomes	44	26.00	5.38	32	28.56	4.59	-2.17	0.033*	-2.562	-4.908 to -0.216

Key: *=statistical significance

Table 4.14 presents the summary of t-test for equality of means by attitudes (decision making, process and outcome) between hospital A and hospital B. An independent sample t-test was conducted to compare decision making, process and outcome between hospital A and hospital B. There was **statistically significant difference (p=0.033) in the mean score of outcome between hospital A (26.00; SD 5.38) and hospital B (28.56; SD 4.59)**. This finding is based on t-test (-2.17), mean difference (-2.562) and confidence interval (CI=-4.993 to -0.216). There was no significant difference in the remaining categories (decision making and process). **Table 4.14 summarises the results of the process.**

4.3.6 Attitudinal Relationships

The data were then examined to determine the presence, direction and strength of attitudinal relationships of respondents' views. Because the data was non-parametric, Spearman's Rank Order Correlation (ρ) was used to calculate the correlation coefficient and significance.

Table 4.15 Summary of correlated statements

Item	Paired Statements	Correlation coefficient (r) **	Significance (p-value)
3.22	Family members will suffer negative long term effects if they are present during CPR.	0.313	0.006
3.12	Family members should not be present during CPR because it is too distressing for them.		
3.1	Family should be offered the opportunity to be with the patient during CPR. It should be their decision.	-0.285	0.013
3.18	It should be normal practice for family members to witness the resuscitation of a family member.		
3.20	Family presence during CPR is always beneficial to the patient.	-0.352	0.002
3.27	Family presence during CPR is beneficial to the patient.		
3.28	Family presence during CPR helps family members with the grieving process if patient does not survive.	0.647	0.000
3.30	Family presence during unsuccessful CPR is important because it enables family member to share the last moments with the		

Key: ** = correlation is significant at the 0.01 level (2-tailed)

Table 4.15 presented the summary of correlated statements. The relationship between **item 3.22** which stated *“family members will suffer long term emotional effects if they are present during CPR”* and **item 3.12**, which stated *“family members should not be present during CPR because it was too distressing for them”*, was investigated using the Pearson product moment correlation coefficient. There was a **moderate positive relationship** between the two items, $r=0.313$, $n=76$, $p<0.05$. **Table 4.15 displays the findings.**

The relationship between **item 3.1** which stated *“family members should be offered the opportunity to be with the patient during CPR; it should always be their decision”* and **item 3.18**, which stated *“it should be normal practice for family members to witness the resuscitation of a family member”* was investigated through the Pearson moment correlation coefficient. There was a **weak negative relationship** between the two items, $r=0.285$, $n=76$, $p<0.05$. **Table 4.15 displays the findings.**

The relationship between **item 3.20**, which stated *“family presence during CPR is beneficial to the patient”* and **item 3.27**, which stated *“CPR is not beneficial to the patient”* was investigated using the Pearson product moment correlation coefficient. There was a **moderate negative relationship** between the two items, $r=-0.352$, $n=76$, $p<0.05$. **Table 4.15 displays the findings.**

The relationship between **item 3.28**, which stated *“family presence during CPR helps the family member with the grieving process if the patient does not survive”* and **item 3.30** *“family presence during unsuccessful CPR is important because it enables family members to share last moment with the patients”* was investigated using the Person product correlation coefficient. There was a **moderate positive relationship** between the two items, $r=0.647$, $n=76$, $p<0.05$. **Table 4.15 displays the findings.**

4.3.7 Responses from an Open-ended Question

This is the qualitative section of the study. Nurses were asked if they would like to comment further on family witnessed resuscitation and 31.6% (n=24) nurses responded by saying they would and subsequently did, whilst the remaining 68.4% (n=52) opted not to comment. Findings of this process are presented in **Figure 4.5**.

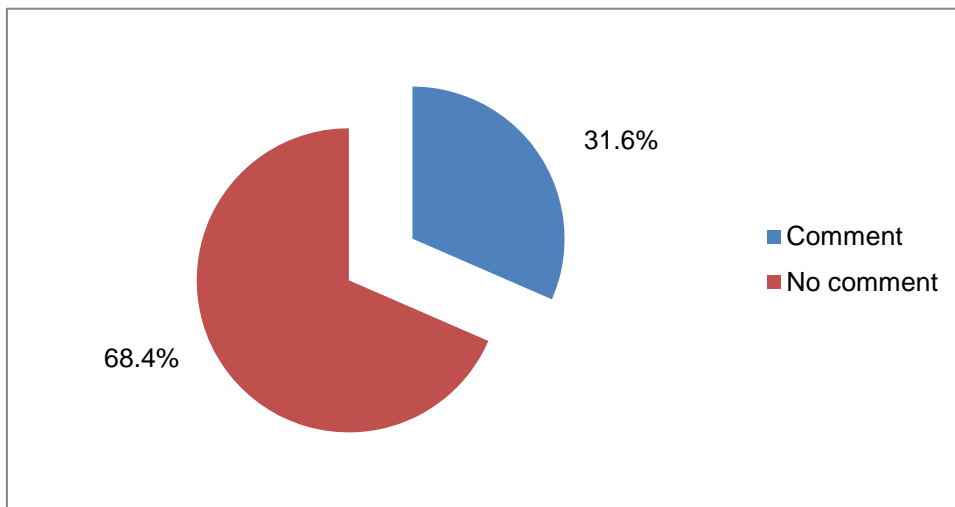


Figure 4.5 Frequencies of responses to open ended question

Thematic analysis was utilised to interpret open ended questions and the results are shown on **Table 4.16**.

Table 4.16 Nurses' open-ended responses

Major theme	Example
Negativity towards family witnessed resuscitation.	<p><i>"I think family members should not be part of the resuscitation team because they will delay the process, blame staff if the resuscitation failed and create wrong ideas towards staff members."</i> (Nurse 2)</p> <p><i>"Having patients' relatives present during CPR is not a good idea because you are unable to do what you are supposed to do properly because family members are watching ..."</i>(Nurse 6)</p> <p><i>."Family members should not be allowed to be present during resuscitation under any circumstance."</i> (Nurse 4)</p> <p><i>"It's not wise for the family member to be there during CPR, reason being they don't understand and they expect miracle to happen"</i> (Nurse 3)</p>
Uncertainty regarding family witnessed resuscitation.	<p><i>"I feel this is a very sensitive issue which puts me somewhere in the middle of whether family members should or should not be present during CPR."</i>(Nurse 21)</p> <p><i>"It is difficult to really totally disagree with family members available during CPR because some family members can remain calm and understanding."</i> (Nurse 24)</p>
Positivity towards family witnessed resuscitation.	<p><i>"I have learned that both Doctors and nurses without experience are the ones having negative attitude towards family being present during CPR so as to gain confidence during CPR hence will correct the attitude."</i> (Nurse 23)</p>

Twenty four nurses responded to the open-ended question. The summary of these open-ended responses is shown in Table 4.16. Approximately 91% of these nurses were against the notion of family witnessed resuscitation, which was the major theme that emerged from the open-ended responses, followed by approximately 8% of the nurses who were unsure about how they viewed the concept and lastly, about 1% who were in support of family witnessed resuscitation.

As already stated, the majority of the nurses were against family witnessed resuscitation.

The various reasons mentioned for this will be discussed below.

One nurse strongly showed no support for this practice by stating:

“Family members should not be allowed to be present during resuscitation under any circumstance...”

(Nurse 4)

This was supported by other participants who related the following:

“Family members are not allowed during resuscitation because if it should not be successful, they will be pointing fingers at the resuscitation team due to lack of understanding of the procedures that are being done ...”

(Nurse 11)

“They may misunderstand our efforts to help the patient and lay unnecessary complaints.”

(Nurse 8)

“...again being around us they will not understand what we are doing and of course expect miracles from us or more.”

(Nurse 9)

This sentiment was shared by other nurses who continued to elaborate that relative's should not be present during resuscitation as they might be traumatised by the resuscitative procedure and disturb the team during resuscitation. The lack of understanding and misinterpretation of the resuscitation efforts came through as a reason

for disagreement to family witnessed resuscitation. This can be supported by the study of Badir and Sepit (2007,) which indicated that 88.5% of their participants agreed that relatives would most likely argue with the resuscitation team as they do not understand the need for a specific intervention.

Within the notion of disagreeing with the concept of family witnessed resuscitation, nurses expressed how it would require more from them as there would be a need for a staff member to explain the resuscitative procedure to the family. This was shown by the following responses:

“The health team will be put in a position of needing to attend to family members and give emotional support which may be impossible because of shortage of staff.”

(Nurse 21)

Shortage of staff arises as a global concern, as shown by numerous studies. For instance, participants in Kobérich et al (2010) mentioned the lack of human resources has made it impossible for staff to support family members during resuscitation. Also in the study of Badir and Sepit (2007), 71.5% of participants expressed there wasn't enough personnel to escort relatives during resuscitation. However, due to the concern of lack of staff to accompany relatives, various organisations such as the American Association of Critical-Care Nurses have given guidelines on what to include in policies, procedures and educational programmes for nurses for family witnessed resuscitation (Cox, 2007). The Royal College of Nursing (RCN) also provided guidelines on what to incorporate and includes factors such as 'when relatives should be allowed into the resuscitation room' and when they should not amongst other factors (RCN, 2002).

Fear of litigation against the resuscitation team also surfaced as another reason why family witnessed resuscitation is not favoured. A patient related reason for not favouring family witnessed resuscitation was that patients' confidentiality and privacy would be breached. Kobérich et al (2010) found 69.9% of participants were concerned about the patients' confidentiality being breached and Al-Mutair et al, (2012) found, in their study that 55.3% of participants agreed that having relatives present would increase the risk of litigation. Interestingly, 37.1% participants in the same study were undecided about whether or not this practice might lead to breach of confidentiality without prior consent by the patient. These issues are shown by the views of participants as they relate the following:

'Some will just use the privilege to sue the hospital, more recording and filming will take place, before we know it, it's already in the media because it is not everybody who understand the actions taken.' (Nurse 13)

'Consider legalities and ethical principles, it offends confidentiality, privacy.' (Nurse 17)

This participant voiced a further suggestion:

'Family may be taking photos and videos during resuscitation, and might lead to family members sending it to social networks and it will also increase court cases, therefore consider manipulating professional, legal and ethical frameworks.' (Nurse 17).

4.4 DISCUSSION OF FINDINGS

The purpose of this study was to describe the experiences and attitudes of Accident and Emergency nurses in two academic hospitals in Gauteng, towards family witnessed

resuscitation in order to make recommendations towards the development of a family witnessed resuscitation protocol.

In this study, the first part of the questionnaire elicited nurses' experiences of family witnessed resuscitation. Of the respondents, 67.1% (n=49) reported they had not experienced a situation in which family members were present during resuscitation. In addition, only six (n=6; 8.0%) respondents had offered the family an opportunity to be present at the bedside during resuscitation and 55.4% (n=42) reported that family members had not requested to be present during CPR.

Most (86.5%; n=64) of the respondents reported there was no written policy or protocol regarding family presence during resuscitation in the two academic hospitals.

Of the nurses in the study, 44.7% (n=34) had experienced a situation in which family members were present during CPR. Amongst the experienced group of nurses, 16.0% (n=12) had one or more positive experiences of family presence during resuscitation.

The second part of the questionnaire elicited nurses' attitudes, inclusive of three variables namely, decision making, process and outcome, regarding family witnessed resuscitation.

In this study, findings related to **decision making**, revealed the majority (86.8%; n=66) of the respondents believed family members should not be offered the opportunity to be present during CPR, 48.7% were opposed to the presence of family members and 80.3% (n=61) mentioned the reluctance of doctors. In this study, 44.7% (n=34) of the nurses believed they should have the responsibility in deciding whether families should be present during resuscitation, 38.2% (n=29) indicated it was the doctors responsibility and 64.5% (n=49) agreed it was the responsibility of all members of the resuscitation team. As witnessed in Fulbrook et al (2005) forty-nine (n=49; 64.5%) respondents agreed

decisions on allowing family members into the resuscitation room should be joint decisions (**item 3.6**). In this study, the majority (89.5% n=68) of respondents were concerned that the presence of family members during resuscitation would compromise patient confidentiality, as opposed to 62.9% in the study of Fulbrook et al. (2005).

The majority (88.2%; n=67) of the respondents agreed that resuscitation attempts may be considered offensive by family members, most probably causing tension between them and the resuscitation team. When asked whether family members might decide to stop CPR, the majority (88.2%) of respondents disagreed and 11.8% agreed. As noted above, of the nurses in this study, 67.1% did not have experience of family presence during CPR.

In this study, **findings related to process**, indicated 77.6% (n=59) of respondents indicated that family presence during CPR was not common practice, 77.6% (n=59) did not find family presence beneficial for the patient, 71.1% (n=54) were concerned that decisions taken by the resuscitation team may be upsetting to the family members and 82.9% (n=63) indicated that family presence may hinder the performance of the resuscitation team. Amongst European nurses, a minority of 30.6% (n=38) shared the same fear as South African nurses when it came to family members arguing with the resuscitation team due to the lack of understanding of procedures carried out during resuscitation (Fulbrook et al, 2005).

Of the respondents in this study, 47.4% (n=36) were concerned that one of the members of the resuscitation team would have to assist the family members during resuscitation, 64.5% (n=49) feared there was insufficient nursing staff to assist the family members and 81.6% (n=62) agreed that bed areas were too small to have family members present during resuscitation.

Findings relating to outcomes in this study, indicated the majority (56.7%; n=43) of respondents did not believe family presence during CPR was beneficial to the patient,

81.6% (n=62) were concerned about the traumatic effects of resuscitation procedures on family members and 82.9% (n=63) disagreed that family presence would create stronger ties between nurses and family members.

Upon unsuccessful CPR, 65.8% (n=50) of nurses believed being present would not help the family members grieving process and 46.1% (n=35) were concerned their emotional readjustment would be prolonged. These results are consistent with 88.5% (n=246) of respondents in Badir and Sepit (2007) study who mentioned that family members would suffer prolonged emotional effects when present during resuscitation of a loved one.

Findings relating to differences in experiences and attitudes between registered nurses (n=45; 59.2%) and sub-professional nurses (n=31; 40.8%), indicated that of the experiences of nurses (items 2.1 to 2.6), **one item (item 2.4) was statistically significant (p<0.005) for differences between registered nurses and sub-professional nurses (6.5% vs 13.5%), respectively.** Similarly, findings related to attitudes (items 3.1 to 3.30) of nurses toward family witnessed resuscitation, **one item (item 3.14) was statistically significant (p<0.05) for differences between registered nurses and sub-professional nurses (54.5% vs 89.2%), respectively.** were no significant differences in the remaining items.

In this study the total mean score for overall attitude was calculated as 31.07 (SD 5.92), 24.55 (SD 5.92) and 27.07 (5.19) for decision making, process and outcome respectively. This finding enabled broader analysis of the differences in the sample.

Findings relating to differences in attitudinal variables by selected socio-graphic categorical data, indicated **statistically significant differences (p=0.048) in process** by gender. In other words, there was a difference in the process (items 3.11 to 3.20) median scores **amongst male (25.00; n=10) and female respondents (21.00; n=66).** In addition, no significant difference was found in decision

making, process and outcome variables amongst trauma trained specialists and other nurses.

Findings relating to differences between hospital A and hospital B, revealed there was a **statistically significant difference ($p=0.033$) in the mean score of outcome (items 3.21 to 3.30) between hospital A (26.00; SD 5.38) and Hospital B (28.56; SD 4.59).** This finding is based on t-test (-2.17) mean difference (-2.562) and confidence interval (CI -4.993 to -0.216).

In the study, findings relating to differences in the correlated paired statements, revealed there was a moderate positive relationship ($r=0.313$; $n=76$; $p<0.05$) between items 3.22 and 3.12. There was a weak negative relationship ($r=0.285$; $n=76$; $p<0.05$) between items 3.1 and 3.18. There was a moderate negative relationship ($r=0.352$; $n=76$; $p<0.05$) between items 3.20 and 3.27. There was a moderate positive relationship ($r=0.647$; $n=76$; $p<0.05$) between items 3.28 and item 3.30.

In this study, responses to an invitation to share experiences or provide comments on issues relating to the study generated additional insights, which are represented in three broad themes namely “negativity towards family witnessed resuscitation”, “uncertainty towards family witnessed resuscitation” and “positivity towards family witnessed resuscitation.”

4.5 SUMMARY

This chapter presented the quantitative results obtained in the study and discussed the descriptive and inferential statistics used to describe and analyse the data. The results have been presented in the form of descriptive tables and graphs so as to enhance interpretation of results. The narrative responses were grouped into meaningful categories.

The following chapter will present a summary of the study, the main findings, limitations, recommendations and conclusion.

CHAPTER FIVE

SUMMARY AND CONCLUSION

5.1 INTRODUCTION

This chapter aims to summarise the findings of the study. Furthermore, main findings and study limitations will be discussed. This will be followed by recommendations for clinical practice, nursing education, the institution and future research based on the findings of the study.

5.2 SUMMARY OF THE STUDY

5.2.1 Purpose of the Study

The purpose of the study was to describe the experiences and attitudes of accident and emergency nurses, in Accident and Emergency Units of two academic hospitals in Gauteng, towards family witnessed resuscitation in order to make recommendations towards the development of a family witnessed resuscitation protocol.

5.2.2 Objectives

Objectives of the study were:

- To determine the nurses' attitudes and experiences towards family witnessed resuscitation in an Accident and Emergency Unit.

- To make recommendations towards the development of a family witnessed resuscitation protocol based on the results of the first objective.

5.2.3 Methodology

The Faculty of Health Sciences Postgraduate Committee granted permission to conduct the study and The Medical Human Research Ethics Committee of the University of The Witwatersrand Subjects (Medical) (Protocol Number M130342) granted ethical clearance prior to commencement of the study. Furthermore, the Gauteng Department of Health (Provincial Protocol Review Committee: Protocol Number P010813) and Chief Executive Officers of both hospitals granted permission to conduct the study in the Gauteng Hospitals and Accident and Emergency Units of the selected hospitals. Permission to utilise the data collection tool was granted by the authors (Fulbrook et al, 2005) (see Annexure 6).

A descriptive quantitative research study with a qualitative aspect was conducted to meet the study objectives. Prior to the study a pilot study, which consisted of five participants, was conducted to test the practicality of utilising the tool in the South African setting and results were included in the main study. Research was conducted in two public sector academic hospitals of Gauteng in Accident and Emergency Units. A self-administered questionnaire was handed out by the researcher, together with an information letter and a consent form to the participants to obtain informed consent. The researcher further elaborated what the study entailed to participants and where to return the completed questionnaires. The researcher collected the completed questionnaires per change of shift and handed out questionnaires to the new shift, both day and night shifts. Data was collected from September 2013 to October 2013. The questionnaire comprised four sections which included demographic data, the second section looked at the nurses

experiences, the third section consisted of a five point Likert scale ranging from strongly disagree to strongly agree and consisted of 30 questions and to obtain comments from participants, an open ended question was included at the end of the questionnaire. Data analysis was done with the help of a biomedical statistician.

5.3 SUMMARY OF MAIN RESEARCH FINDINGS

The purpose of the study was to describe the experiences and attitudes of accident and emergency nurses, in Accident and Emergency Units of two academic hospitals in Gauteng, towards family witnessed resuscitation in order to make recommendations towards the development of a family witnessed resuscitation protocol. In this study, a self-administered questionnaire was utilised to meet the purpose of the study.

The first objective of the study was to determine nurses' attitudes and experiences towards family witnessed resuscitation in an Accident and Emergency Unit. The tool utilised in this study measured both the experiences and attitudes of nurses in the Accident and Emergency Unit. The first section focused on the demographic data and from this data it was extrapolated that, in terms of age distribution, this study was mainly comprised of a young nursing population, as the majority (52.6%; n=40) of the respondents were between the ages of 21 to 40 years. Furthermore, from the total sample (n=76), 48.0% (n=36) of respondents were in the category of registered nurses with a minority (12%: n=9) of respondents being trauma trained specialist nurses.

The second section of the tool focused on nurses' experiences towards family presence during resuscitation. It was revealed that a minority of 32.9% (n=24) of respondents have experienced family witnessed resuscitation, which indicates a small number compared to

other countries such as Europe where 46.8% (n=56) of nurses had experienced family presence during resuscitation (Fulbrook et al, 2005). It was extrapolated that 33% (n=25) of respondents inferred these experiences were negative.

A total of 34 (n=34: 44.7%) respondents had been approached by family members to be present with their loved ones during resuscitation and only six (n=6; 8.0%) had invited family members to be present during resuscitation. Only ten respondents reported that their unit had a policy or protocol on family presence during resuscitation. This lack of policy or protocol in the unit continues as only 5.7% of participants in the study by Fulbrook et al (2005) indicated having a policy or protocol on family presence during resuscitation.

This can be said to be a global concern, as nurses from various countries, such as Turkey, mention they did not have policies nor protocols on FWR (Badir and Sepit, 2007). In a study by Al-Mutair et al (2012), 30.3% of participants disagreed there should be a written policy on family witness resuscitation. In the open ended questions, nurses made no mention of the availability or suggestions towards having a policy, document or protocol on family witness resuscitation and only one nurse mentioned that 'ethical and legal frameworks' should be considered. This shows nurses do not want this practice.

Section three was sub-divided into three parts surveying the influence of family presence during decision making, effects on health care professionals and patient members and possible CPR outcomes.

The results indicate an overwhelming majority (n=66; 86.8%) of the respondents disagreed that family members should be given the option to remain with their loved one during resuscitation. This is a huge number of respondents compared to 46.8% (n=58) nurses in Europe who also disagreed that family members should "always" be offered an

option to remain with their loved one during resuscitation (Fulbrook et al, 2005). A slight majority of 48.7% (n=37) of respondents did not want relatives present during resuscitation; furthermore, as to who should take responsibility of inviting relatives to witness resuscitation of their loved one, a total of n=49 (64.5%) of respondents agreed it should be a joint decision of the resuscitation team. A similar majority of 75.6% (n=93) of European nurses indicated it should be the joint responsibility of the resuscitation team to invite relatives to witness resuscitation (Fulbrook et al 2005).

Patient confidentiality came through as a concern for the majority of the nurses, as an overwhelming 89.5% (n=68) of respondents stated there may be breaches of confidentiality when discussing the patients' details with relatives present during resuscitation; this notion is also witnessed by 48% of Gauteng doctors who raised the same concern of patient confidentiality being compromised if families were allowed to witness resuscitation of their loved one (Gordon, 2011). Furthermore, in Badir and Sepit (2007), 88.1% of participants agreed there might be a problem in discussing the patients' details with relatives present during resuscitation. Whilst participants were concerned about patients' confidentiality being breached, patients and relatives had a different perspective. As mentioned earlier, patients' confidentiality has been brought to light by both patients and Critical Care nurses internationally.

Critical Care nurses have mentioned in numerous studies that patients' confidentiality will be compromised by having relatives present, although resuscitated patients have shown not to have a problem with this. Albarran et al (2009) state that patients are not concerned about confidentiality being breached, though they mention they would prefer healthcare professionals to disclose confidential information with sensitivity to help family members understand their condition; this is also seen in patients in McMahon-Parkes et al (2009) who also support the notion.

A decrease in law suits has been witnessed in Foote Hospital as mentioned by healthcare providers. Allowing families to witness resuscitation develops a bond between them and the healthcare providers thus bridging the gap and lessening lawsuits (Atwood, 2008), whereas lack of communication and keeping family members behind closed doors of resuscitation areas has led to law suits against health professionals (Atwood, 2008). This indicates that by having families present during resuscitation, the number of lawsuits might decrease as families would be present to witness the procedures carried out on their loved ones.

By allowing family members to witness resuscitation of their loved one, sixty nine (n=69; 88.2%) respondents were anxious relatives would argue with the resuscitation team because they might not understand the need for interventions. Similarly, sixty-seven (n=67; 88.2%) respondents disagreed that family members should be present so they could be involved in decisions for their loved one. The majority (82.9%; n=63) of respondents agreed that family members would cause difficulties for the resuscitation team to concentrate on CPR attempts.

With respondents indicating their anxiety of disruption for the resuscitation team, family members introduced interesting points which may end the nurses' fear by expressing how their presence will not cause disruption, as they want the resuscitation team to provide the best care to their loved one. A patient who was resuscitated mentioned that health care professionals should not be disturbed when they are performing life-saving procedures and that they should be allowed to 'get on with their job' (Mcmahon-Parkes et al, 2009).

The majority (77.6%; n=59) of respondents did not consider family witnessed resuscitation to be standard practice. Looking back, the concept of family witnessed resuscitation was

born in the early 1900s, when a family member asked to be present during resuscitation of their loved one at Foote Hospital. In healthcare professionals in South Africa, as mentioned earlier, the concept has shown to be unfamiliar, as seen in a study conducted by Goodenough and Brysiewicz (2003), where nurses and doctors of an Accident and Emergency Unit were not familiar with family witnessed resuscitation. It appears families were allowed to stay with their relatives but not when resuscitative measures were carried out as they were asked to leave and only called back once resuscitation was over, then the family would receive an explanation of the measures carried out and the outcome of the resuscitation. This illustrates how difficult this was for some relatives as some were reluctant leave their loved one (Goodenough and Brysiewicz, 2003).

A slight majority (47.4%; n=36) of respondents agreed there should be a dedicated member of the resuscitation team to look after the family; this sentiment was confirmed by 80.6% (n=160) of nurse respondents in Europe (Fulbrook et al, 2005). However, more than half (64.5%; n=49) of the respondents did not believe there was sufficient staff to support family members during resuscitation, a point elaborated upon by 52.8% (n=65) of nurses in Fulbrook et al, 2005 study.

Only 18.4% (n=14) of respondents disagreed that bed areas were too small to have family members present during CPR, while most (81.6%; n=62) respondents agreed. This is further supported by Gordon's (2011) South African study, which mentions limited space may lead to injuries by having the family and medical team colliding with equipment and each other. Moreover, participants from Fulbrook et al (2005) study mentioned there was insufficient physical space to accommodate families during resuscitation as the areas are too small (Fulbrook et al, 2005).

An overwhelming majority (81.6%; n=62) of respondents agreed family members would suffer long term emotional effects associated with family witnessed resuscitation. Just over one-third (34.2%; n=26) of respondents believed family witnessed resuscitation

helped in the grieving process when CPR was not successful. Furthermore, twenty-six (n=26; 34.2%) of respondents believed family witnessed resuscitation could help relatives to know everything possible was done for the patient.

However, a fear that family witnessed resuscitation might increase the rate of legal actions or that resuscitation attempts may be unnecessarily prolonged was shared by sixty-six (n=66; 86.8%) respondents.

5.4 LIMITATIONS OF THE STUDY

The following limitations are recognised by the researcher:

- The data collection tool is a guided tool hence not all experiences and attitudes could be determined.
- The sample comprised of registered nurses, sub-professional nurses and only nine (9) trauma nurses.
- The sample size of n=76 was small.
- Results cannot be generalised as the study was undertaken in only two academic hospitals.

5.5 CONCLUSIONS

This study brings to light the experiences and attitudes of South African nurses of Accident and Emergency Units of two state hospitals in Gauteng Province. Nurses mentioned reasons for not supporting family witnessed resuscitation: fear of relatives being traumatised by the procedure, fear of prolonging the resuscitative procedure, fear of finger pointing by relatives if resuscitation is not successful, lack of staff to accompany relatives during resuscitative procedures, relatives being emotionally unstable, disturbing

resuscitative measures and lastly concern that families might take videos and pictures of the resuscitative procedure and showing them to others via social media, putting healthcare professionals at a high risk of being sued leading to the fear of litigation. Not only would social media lead to litigation, the lack of understanding of the resuscitative procedure by relatives also contributes to this fear.

These are the fears nurses mentioned in the open-ended questions, which are similar to those in international literature, however in the open-ended responses, none of the participants mentioned the need for a family witnessed resuscitation protocol. Only one nurse mentioned the need for in-service training for both nurses and medical doctors in order to encourage positive attitudes towards family witnessed resuscitation, which indicated the lack of support for this concept by participants. With the majority of nurses (67.1%: n=49) not having experienced families witnessing resuscitation in their practice, this indicates the lack of knowledge about the practice and the benefits for nurses', patients and relatives from the experience.

5.6 RECOMMENDATIONS OF THE STUDY

5.6.1 Recommendations for Nursing Practice

In the open-ended responses, one participant recommended in-service training for medical doctors and nurses of Accident and Emergency Units to encourage positive attitudes towards family witnessed resuscitation. The researcher agrees with the participant in recommending training for accident and emergency staff to encourage family witnessed resuscitation. Training in life saving courses, which are provided by the American Heart Association such as Basic Life Support, Advanced Cardiac Life Support and Paediatric Life Support, can increase staff competency levels

and confidence to allow relatives to witness resuscitation of their loved ones, as seen in Gordons' (2011) study, where after the completion of these courses, medical doctors were more confident and open to families witnessing resuscitation of their loved ones. Hospitals should sponsor such courses as nurses will not pay out of their own pockets, having mentioned these courses are too expensive and therefore do not go for such training, even though the importance of the courses is known to them, in the researcher's observations.

Not only should they attend the American Heart Association Courses, nurses should be encouraged to further their studies in their specialised areas. As seen in this study, there was only 12% (n=9) trauma trained nurses in the sample, which shows the lack of trauma trained nurse specialists in our state hospitals. Hospitals only train one or two nurses for specialities and when that opportunity arises nurses over the age of 55 are taken for training. The reason given that they have been working in the hospital for a long period should be discouraged as it promotes demotivation amongst nurses as they have to wait years before being eligible for specialised training, as they are told there is a queue before them. Not only is this demotivating, but the number of trauma trained nurses produced is not adequate to meet the overwhelming number of trauma patients seen in state hospitals. State hospital management should allow nurses who have completed their community service and worked one year in that specialised area to go for training in that speciality and also increase the number of nurses that are to be taken for further studying.

Once staff members have undergone training, the researcher further recommends introduction of policies, guidelines or protocols on family witnessed resuscitation to guide the staff of Accident and Emergency Units as to how to practice family witnessed resuscitation when a family member requests to be present during resuscitation. This can be done with the help of organisations who currently have policies and guidelines on

family witnessed resuscitation. The Royal College of Nursing has such a guideline which aids the nurse on how to prepare for family witnessed resuscitation, when can resuscitation be stopped, when should the relatives be invited to witness resuscitation and when not to invite them, to name a few items that can be included in the development of a family witnessed resuscitation protocol. Other organisations, such as The European Society of Paediatric and Neonatal Intensive Care and The European Society of Cardiology Council on Cardiovascular Nursing and Allied Professions Position, released position statements on family witnessed resuscitation (Moons, Tone and Norékva, 2008) similar to that of the Royal College of Nursing.

With such guidelines/protocols accident and emergency nurses and medical doctors of Accident and Emergency Units would be able to allow family members to witness resuscitation as they would have a guideline to reduce lawsuits, which as seen in Foote Hospital following the introduction of allowing relatives to witness resuscitation, the number of lawsuits decreased (Atwood, 2008). This is a benefit for the relative who is there to support their loved one and for the hospital, as lawsuits decrease.

5.6.2 Recommendations for Nursing Education

Family witnessed resuscitation is a practice that is now visible in the nursing fraternity. Family members and patients have become knowledgeable of their surroundings and as a nursing specialist, one should take that into account. Including family witnessed resuscitation in nursing education would not only eradicate nurses' lack of knowledge on this practice but would further encourage the patient to be managed holistically. Granting family the opportunity of witnessing resuscitation of their loved one and spending those moments, which in some instances could be the last, has shown not only to benefit the patient, but their loved ones as well. Consequently, family witnessed resuscitation should

be introduced through-out the nursing student's years as students are exposed to different settings during their training.

Once a family witnessed resuscitation policy/guideline has been formulated, student nurses and nurses should be taken for in-service training about this topic as this would encourage nurses to invite family members to be present during resuscitation. With regard to nursing education. The researcher firmly recommends the inclusion of family witnessed resuscitation practice in the nursing curriculum, with in-service training for both nursing students and nursing staff.

5.6.3 Recommendations for Policy (Institution or Management)

The majority (86.5%: n=64) of respondents indicated they do not have a family witnessed protocol/policy in their units, a result which illustrates the need for such a policy/protocol in Accident and Emergency Units and wards. The hospital should be involved in the initiation, introduction and implementation of family witnessed resuscitation in the hospital wards/units.

Consequently, a family witnessed resuscitation protocol is highly recommended. There are various organisations that have guidelines on how to make a family witnessed resuscitation protocol, such as the Royal College of Nursing (RCN). Such guidelines can be utilised to guide hospital managers on how to formulate a family witnessed resuscitation policy/guideline in order to allow families to make the decision of whether they would want to be present during resuscitation of their loved one and to prevent the occurrence of law-suits.

5.6.3 Recommendations for Further Research

A larger sample size should be targeted as the researcher could not generalise findings of the study. The questionnaire did determine the attitudes and experiences of nurses in an Accident and Emergency Unit and thematic analysis was done for the posed open-ended questions, although a qualitative study could be undertaken to further explore participant's views about FWR. For example, a response by Nurse 17 on page 76 who mentioned:

“Family may be taking photos and videos during resuscitation, and might lead to family members sending it to social networks and it will also increase court cases, therefore consider manipulating professional, legal and ethical frameworks”

(Nurse 17)

The participant could be asked to elaborate more on their comment, if it were a qualitative study.

5.7 RESEARCHERS' REFLECTIONS

Conducting a study on a topic rarely practiced in South Africa has been an eye-opening experience. This study has taught me to not only look at the patient as one, but to look at them as a person with family who would love to be present when their loved one is ill. Not having any form of guidance or protocol or knowledge on family witnessed resuscitation has opened doors for a new and important practice in the nursing fraternity. Nurses' attitudes and experiences have been determined and results indicate that accident and emergency nurses are not in support of this practice, but through education, I am optimistic these attitudes and experiences will change.

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ANNEXURES

ANNEXURE 1

Consent form

I hereby confirm that I have been informed about the study entitled “Nurses’ experiences and attitudes towards family witnessed resuscitation in accident and emergency units in two South African Hospitals” by MSc student Motsepe T.L. I have received, read and understood the written information letter regarding the study. I am aware that the results of the study, including personal details such as my gender and age will be anonymously processed into a study report. I further agree that the data collected during this study can be processed in a computerised system by STATA version 12. I do realise that I may stop participating in the study at any time without incurring penalties.

Print name:

.....

Signature:

.....

Date:

.....

Time:

.....

ANNEXURE 2



GAUTENG PROVINCE

HEALTH
REPUBLIC OF SOUTH AFRICA

OUTCOME OF PROVINCIAL PROTOCOL REVIEW COMMITTEE (PPRC)

Researcher's Name (Principal investigator)	Motsepe LT
Organization / Institution	University of the Witwatersrand
Research Title	Nurses experiences and attitudes towards family witnessed resuscitation in accident and emergency units in two South African Hospitals
Protocol number	P010813
Outcome	Approved
Date resubmitted	N/A
Date of second review	N/A
Final outcome	N/A
Date of final outcome	N/A

It is a pleasure to inform that the Gauteng Health Department has approved your study on "Nurses experiences and attitudes towards family witnessed resuscitation in accident and emergency units in two South African Hospitals".

The Provincial Protocol Review Committee kindly requests that you to submit a report after completion of your study and present your findings to the Gauteng Health Department.

Approves / not approves

Dr Bridget Ikalafeng
Provincial Protocol Review Committee (PPRC), Chairperson

Date: 20/09/2013



GAUTENG PROVINCE

HEALTH
REPUBLIC OF SOUTH AFRICA

DR GEORGE MUKHARI HOSPITAL

Enquiries: Dr. P. Shembe
Director: Clinical Services
Tel no: 012 529 3880
Fax no: 012 5500099

To : Ms. T.L. Motsepe
Department of Nursing Education
University of Witwatersrand

Date : 08 May 2013

PERMISSION TO CONDUCT RESEARCH

The Dr. George Mukhari Hospital hereby grants you permission to conduct research on "Nurses' experiences and attitudes towards family witnessed resuscitation in accident and emergency units in two South African Hospitals"

This permission is granted subject to the following conditions:

- That you obtain Ethical Clearance from the Human Research Ethics Committee of the relevant University
- That the Hospital incurs no cost in the course of your research
- That access to the staff and patients at the Dr George Mukhari Hospital will not interrupt the daily provision of services.
- That prior to conducting the research you will liaise with the supervisors of the relevant sections to introduce yourself (with this letter) and to make arrangements with them in a manner that is convenient to the sections.

Yours sincerely

DR. P SHEMBE
DIRECTOR: CLINICAL SERVICES

ANNEXURE 4



R1448 TL Motsepe

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)
CLEARANCE CERTIFICATE NO. M130342

NAME: TL Motsepe
(Principal Investigator)

DEPARTMENT: Department of Nursing Education
University of Witwatersrand

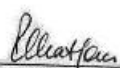
PROJECT TITLE: Nurses' Experiences and Attitudes towards
Family Witnessed Resuscitation in Accident
and Emergency Units in Two South African
Hospitals

DATE CONSIDERED: 05/04/2013

DECISION: Approved unconditionally

CONDITIONS:

SUPERVISOR: Mrs DR Maboko

APPROVED BY: 
Professor PE Cleaton-Jones, Chairperson, HREC (Medical)

DATE OF APPROVAL: 24/05/2013

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

DECLARATION OF INVESTIGATORS

To be completed in duplicate and ONE COPY returned to the Secretary in Room 10004, 10th floor, Senate House, University.

I/we fully understand the conditions under which I am/we are authorized to carry out the above-mentioned research and I/we undertake to ensure compliance with these conditions. Should any departure be contemplated, from the research protocol as approved, I/we undertake to resubmit the application to the Committee. I agree to submit a yearly progress report.


Principal Investigator Signature

Date

30 July 2015

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES

ANNEXURE 5

P.O.Box 62092

Karenpark

0118

07 October 2013

Dear Colleague

Re: Invitation for participating in a study.

Good Day/ Evening, My name is Motsepe Tshepo, I am currently a student of Masters in nursing at the University of the Witwatersrand. I am conducting a study entitled "Nurses experiences and attitudes towards family witnessed resuscitation in accident and emergency units of two South African Hospitals". I would like to invite you to participate in this study by completing the attached questionnaire as this would help determine your views on family witnessed resuscitation. This should not take more than thirty minutes and your participation will be highly appreciated.

The purpose of the study is to describe the experiences and attitudes of nurses in accident and emergency units towards family witnessed resuscitation in two academic hospitals in Gauteng in order to make recommendations towards the development of a family witnessed resuscitation protocol. Participating in the study is voluntary and no one will be coerced to participate in the study and you are allowed to withdraw from the study at any time without facing penalties. All the information provided by you in the questionnaire, including identifying information such as age and rank will only be seen by the researcher, supervisor and statistician who will assist in data analysis. Each questionnaire will be distributed by the researcher with an informed consent form and an information letter that should be returned with it. The completed questionnaires should be placed in a sealed box (which will be placed in all the participating units) until they are collected by the researcher a day after completion of the questionnaire.

If you have any questions of an ethical nature please contact Prof Cleaton-Jones, Chairman of the Human Research Ethics Committee (Medical) at (011) 717 1234.

Your participation will be highly appreciated.

Yours sincerely: Motsepe T.L.

Cell phone number: 0727656874, e-mail

address: tshepo411@gmail.com

ANNEXURE 6

Dear Tshepo and Mrs Maboko

Please find enclosed a copy of the questionnaire, many thanks for sending the pdf and agreeing to the terms and conditions. If you need further assistance please do not hesitate to get in touch

John

Dr John W Albarran

Associate Professor Cardiovascular Critical Care Nursing

Associate Head of Department for Research and Knowledge

Exchange (Nursing & Midwifery)

Programme Manager for Doctorate in Health and Social Care

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Member of the European Academy of Caring Science

ANNEXURE 7



Faculty of Health Sciences
Private Bag 3 Wits, 2050
Fax:
Tel: 027117172040

Reference: Ms Mpumi Mngapu
E-mail: mpumi.mngapu@wits.ac.za

08 May 2013
Person No: 687894
PAG

Ms TL Motsepe
PO BOX 62092
Karenpark
0118
South Africa

Dear Ms Motsepe

Master of Science in Nursing: Approval of Title

We have pleasure in advising that your proposal entitled *Nurses' experiences and attitudes towards family witnessed resuscitation in an accident and emergency unit i two South African hospitals* has been approved. Please note that any amendments to this title have to be endorsed by the Faculty's higher degrees committee and formally approved.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Sandra Benn'.

Mrs Sandra Benn
Faculty Registrar
Faculty of Health Sciences

ANNEXURE 8

Section 1: BIOGRAPHICAL DETAILS

1. Please state your gender: Male Female

2. Please indicate your age group.

PLEASE CHECK [] ONLY ONE BOX:

21-25 26-30 31-35 36-40
41-45 46-50 51-55 56-60

3. Please indicate which speciality you practise in.

PLEASE CHECK [] ONLY ONE BOX:

Accident and Emergency unit
Adult intensive/critical care unit (medical/surgical/cardio-thoracic)
Anaesthetic room
Coronary care unit
Operating room
Recovery room
Other (please specify).....

4. Please indicate your rank in nursing:

Trauma trained nurse specialist
Registered Nurse
Staff Nurse
Nursing Auxillary
Other

5. Please state how many years' experience you have in your current speciality.

PLEASE CHECK [] ONLY ONE BOX:

0-5 6-10 11-15 16-20 greater than 21

6. Please state how many years' experience you have in nursing.

PLEASE CHECK [] ONLY ONE BOX:

0-5 [] 6-10 [] 11-15 [] 16-20 [] greater than 21 []

Please proceed to section 2 of the questionnaire.

Section 2: FAMILY PRESENCE: EXPERIENCES

- This section is about your personal experiences
- Please answer only YES or NO to each of the questions

PLEASE CHECK [] ONLY ONE BOX

		Yes	No
1	Have you experienced a situation in which family members were present during CPR?		
2	Has a family member ever asked you if they could be present during CPR?		
3	Have you ever invited a family member to be present during CPR?		
4	Does your unit/ward have a protocol or policy document on family presence during CPR?		
5	Have you had one or more positive experiences of family members being present during CPR?		
6	Have you had one or more negative experiences of family members being present during CPR?		

Please proceed to section 3 of the questionnaire.

Section 3: FAMILY PRESENCE: ATTITUDES

- This section is about your personal attitudes.
- Please indicate your strength of agreement with each of the statements below.
- If you are not sure about your answer, then please check the box that most closely represents your opinion.

PLEASE CHECK [✓] ONLY ONE BOX

		Strongly disagree	Disagree	Do not know	Agree	Strongly agree
1	Family members should always be offered the opportunity to be with the patient during CPR. It should always be their decision					
2	Doctors want relatives to be present during CPR					
3	Nurses do not want relatives to be present during CPR					
4	Nurses should have the responsibility for deciding if family members should be present during CPR					
5	Doctors are responsible for deciding if family members are allowed to be present during CPR					
		Strongly disagree	Disagree	Do not know	Agree	Strongly agree
6	It should be the joint responsibility of all members of the resuscitation team to decide whether (or not) family members are allowed to be present during CPR					
7	There may be a problem of confidentiality in discussing details about the patient if family members are present during CPR					
8	Because family members do not understand the need for specific intervention they are more likely to argue with the resuscitation team					
9	Family members should be present during CPR so					

	that they can be involved in decisions					
10	If present during CPR, family members are more likely to accept decisions to withdraw treatment					
11	Family members are very likely to interfere with the resuscitation process					
12	Family members should not be present during CPR because it is too distressing for them					
13	Nursing and medical staff find it difficult to concentrate when relatives are watching					
14	The performance of the team will be positively affected due to the presence of family members					
15	During CPR the resuscitation team may say things that are upsetting to family members					
16	There are enough nursing staff to provide emotional support and remain with the family member during resuscitation					
17	Most bed areas are too small to have a family member present during resuscitation					
18	It should not be normal practice for family members to witness the resuscitation of a family member					
19	If family members are present during CPR, there should be a member of the resuscitation team whose only role is to look after the family					
20	Family presence during CPR is beneficial to the Patient					
21	Family presence during CPR prevents family members developing distorted images or wrong ideas of resuscitation process					
22	Family members will suffer negative long-term emotional effects if they are present during CPR					

23	Rates of legal action against staff will increase because, when present, family members may misunderstand the actions of resuscitation team					
		Strongly disagree	Disagree	Do not know	Agree	Strongly agree
24	Family presence during CPR helps family members to know that everything is being done for the patient					
25	The resuscitation team are more likely to prolong the resuscitation attempt if a family member is present					
26	Family presence during CPR creates a stronger bond between family and nursing team.					
27	Family presence during CPR <i>is not</i> beneficial to the Patient					
28	Family presence during CPR helps the family member with the grieving process, if the patient does not survive					
29	Family presence during CPR prolongs emotional readjustment at the loss of the family member					
30	Family presence during unsuccessful CPR is important because it enables family members to share the last moments with the patient					

Do you have further comments on comments on Family Witnessed Resuscitation? Yes [] No []

If yes please elaborate :

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GAUTENG PROVINCE

HEALTH
REPUBLIC OF SOUTH AFRICA

CHARLOTTE MAXEKE JOHANNESBURG ACADEMIC HOSPITAL

Enquiries:

Ms. L. Mngomezulu

Tell: (011) 488-3792

Fax: (011) 488-3753

18th September 2013

Ms. T.L Motsepe
Department of Nursing Education
University of Witwatersrand

Dear Ms. Motsepe

RE: "Nurses experiences and attitudes towards family witnessed resuscitation in Accident and emergency Unit Charlotte Maxeke Johannesburg Academic Hospital"

Permission is granted for you to conduct the above research as described in your request provided:

1. Charlotte Maxeke Johannesburg Academic hospital will not in anyway incur or inherit costs as a result of the said study.
2. Your study shall not disrupt services at the study sites.
3. Strict confidentiality shall be observed at all times.
4. Informed consent shall be solicited from patients participating in your study.

Please liaise with the Head of Department and Unit Manager or Sister in Charge to agree on the dates and time that would suit all parties.

Kindly forward this office with the results of your study on completion of the research.

Approved not approved


Ms. G. Bogashi
Chief Executive Officer

Gill Smithies

Proofreading & Language Editing Services

59, Lewis Drive, Amanzimtoti, 4126, Kwazulu Natal

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

Work Certificate

To	TSHEPO LILLET MOTSEPE
Address	Wits Dept of Nursing Education
Date	18/2/2015
Subject	NURSES EXPERIENCES AND ATTITUDES TOWARDS FAMILY WITNESSED RESUSCITATION IN ACCIDENT AND EMERGENCY UNITS IN TWO SOUTH AFRICAN HOSPITALS, by TSHEPO LILLET MOTSEPE
Ref	SS/GS/05

I, Gill Smithies, certify that I have proofed and language edited:

Masters: Forward and Chapters 1 to 5 by Tshepo Lillet Motsepe,

NURSES EXPERIENCES AND ATTITUDES TOWARDS FAMILY WITNESSED RESUSCITATION IN ACCIDENT AND EMERGENCY UNITS IN TWO SOUTH AFRICAN HOSPITALS,

to the standard as required by Wits Dept. of Nursing Education.

Gill Smithies
18/2/2015