

Chapter 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

Death anxiety and attitudes of nurses working in a private acute care hospital in Gauteng were investigated. In this chapter the methods and procedures used in this study will be reviewed. The research design, research setting, study population, the sample, sampling methods and data collection procedures will be discussed. In addition, reliability and validity was also addressed. The chapter further highlights the ethical considerations in the course of the study.

3.2 RESEARCH DESIGN

In order to address the following research questions:

- What are the death anxieties and attitudes of nurses towards dying patients in a private acute care hospital?
- Is there an association between nurses' levels of death anxiety and their attitudes towards dying patients?

This study adopted a quantitative, descriptive, correlational survey design in-order to examine the relationship between death anxiety and nurses' attitudes toward terminally ill patients working in a private acute care hospital in Gauteng. The purpose of this study was to identify, explore and describe nurses' personal fear of death (death anxiety) and explore whether an association exists between death anxiety and their attitudes towards dying patients in a private acute care hospital in Johannesburg. In identifying these death anxieties and attitudes, this study will also indicate whether there is a need for ongoing institutional support and education regarding end of life care.

This design enables collection of data and analysis of the relationships between death anxiety and death attitudes of nurses. A survey was chosen because it is designed to obtain information from a population regarding their anxieties and attitudes towards death and dying issues as they currently exist within a particular population using self-reports.

The objectives of this study were:

- To identify nurses' attitudes towards death.
- To measure the level of nurses' death anxiety through their responses to death and dying.
- To explore whether an association exists between nurses' death anxiety and their attitudes toward the dying patient.
- To describe the association between nurses' different levels of death anxiety and their attitudes towards dying patients.
- To identify the need for ongoing institutional support and education regarding end of life care.
- To suggest recommendations for appropriate institutional support and education regarding end of life care for nurses caring for dying patients.

At descriptive level, research is aimed at describing a phenomenon of which little is known (Polit and Hungler, 1997). Hence such a design was appropriate for the study since there is a lack of information on the death anxieties and death attitudes of nurses in private acute care hospitals. No attempt will be made to control or manipulate the situation as it is currently occurring. The results of the study could act as baseline data to determine the need for ongoing institutional support and education regarding end of life care.

3.3 RESEARCH SETTING

The private hospital chosen for this study is one of the largest in its private group of healthcare facilities in Gauteng. It has a bed capacity of 400 and offers a variety of specialized health care services. Having realized the need for terminal care within the private sector, palliative care teams are currently being trained to offer these services and are seconded to units to address terminal care issues. However it is also important for nurses working in the unit to provide the continuity of care needed in terminal care and therefore death anxieties and attitudes of all nurses involved in patient care was addressed.

3.4 STUDY POPULATION AND SAMPLE

The study population consisted of all categories of nursing personnel who met the sampling criteria and consent to participate in the study. These include registered nurses, enrolled nurses, auxillary nurses and nursing students.

The sample criteria were non-exclusive to gender, ethnic background, educational, religious or professional status.

The sample inclusion criteria consisted of:

- Being a nurse in the hospital
- Working within the same private acute care hospital
- Having worked with a terminally ill patient in the last six months.

The inclusion of all nursing staff from the various units may be justified on the basis that although exposure to death and dying may vary, staff working in units with lower mortality rates e.g. maternity units are frequently seconded by management to assist in other units for various reasons, which may have a higher mortality rate. Therefore nursing staff is exposed to terminal care and terminal care issues. The fact that the nursing staff were from the same hospital was important in that all the nurses who answered the questionnaire were subject to similar pressures, priviledges, standards and demands of the institution. Nurses who had nursed a terminally ill patient within the given time frame only were included, on the basis of their recent exposure as opposed to

those who hadn't and as a result may have introduced a bias to the study. The total population of 394 nurses within one private hospital's employ were used, although only half of that population was expected.

3.4.1 Sample size

Sample size calculation employed the nQuery Advisor V5 software (1995-2000). On the assumption that 20% of nurses without death anxiety would have a positive attitude towards working with dying patients a sample of 84 nurses will have 80% power to detect an increase of 50% negative attitude among nurses with death anxiety in a 1:2 sampling plan i.e. twice as many nurses with death anxiety are included than those without death anxiety. The sample comprised of volunteers in a survey amongst all nursing staff at the private hospital where this study was conducted. (N=394)

It is reasonable to assume that the above sample size requirements will be met even in a response as low as 30%. Assuming that only half the total population may have experienced nursing terminally ill patients in the last six months and the fact that nurses in the hospital's employ are also involved in non-nursing posts example, administrative, managerial, clinical facilitation and other duties, a population size of 197 was to be expected.

3.5 METHODOLOGY

3.5.1 Instruments

All nurses who met the selection criteria and agreed to participate in the study completed a self-administered questionnaire. A questionnaire is described as a method that seeks written or verbal responses from people to a set of written questions or statements (Parahoo, 1997). In this case, self-report bias may be a limitation to this study, as assessment of all variables represented in this study depended on self-report measures and as such only represent acknowledged death anxiety and attitudes. However, a self-administered questionnaire has the following advantages: it provides absence of

interviewer effect; it is low in cost; it involves a large number of subjects; it has a fair degree of reliability since wording and order is the same and respondents remain anonymous (Parahoo, 1997). The tool consisted of open-ended and closed-ended questions. Although some questions required factual information, most of the questions required individual responses to eliminate bias in favor of the researcher's opinion.

This research questionnaire comprised of three sections as follows:

3.5.1.1 Demographic Data

The first section was used to collect demographic data such as: the respondent's age group, number of years in the nursing profession and gender. In addition respondents were asked if they felt that they had adequate training in dealing with death and dying concerns; whether they felt they had the support of their unit/hospital and to explain their response. They were also asked if they had nursed a terminally ill patient in the last six months.

3.5.1.2 Neville Strumpf Death Attitude Scale

The second section of the questionnaire assessed attitudes towards death. This survey included eight items from a possible twelve-item questionnaire developed by Neville Strumpf in his survey of knowledge, attitudes. An additional two items were added to the existing scale addressing the feelings of anger after consultation with a team of experts in the health field that included a psychologist, a clinician, a researcher and an anaesthetist.

All items were scored on a 5-point Likert scale ranging from "strongly agree" to "strongly disagree".

This scale applied the five basic patterns to death attitude, identified by Phillippe Aries and cited by Doyle et.al (1998). The patterns identified were: death of self and the implication of suffering (Questions 1 and 2), death of the other (Questions 3-5), forbidden death

(Questions 6 and 8) and tame-death (Question 7). Questions 9 and 10 addressed the feelings of anger (refer to Appendix G).

Permission for use of this scale was obtained from the project manager for the study, Diane Stilman. Items that measured knowledge, skills and behaviors were omitted, as this was not relevant for this study. Each item was scored from 1-5 reading from right to left. Lower numbers indicated less discomfort or positive attitude in caring for the dying patient. The median score of twenty-five or less characterized a positive attitude, with scores of more than twenty-five indicating more discomfort or a negative attitude in caring for the dying patient.

3.5.1.3 The Revised Collett-Lester Fear of Death Scale

The Revised Collett-Lester Fear of Death Scale was used in the third section of the questionnaire to measure death anxiety. This scale consists of 32 questions and include four sub-scales which measure the subject's fear of his or her own death (Questions 1-8); one's fear of someone else's dying (Questions 9-16); fear of someone else's death (Questions 17-24) and lastly fear of one's own dying (Questions 25-32). A respondent can respond to each question using a Likert scale of 1-5 with one and two being low death anxiety, three and four being somewhat anxious and five being very anxious (Lester, 1990). The Collett-Lester Scale's cut off score for low death anxiety is two or less for each question, therefore scores of sixty-four or less indicate lower levels of anxiety while scores of more than sixty-four indicate higher levels of anxiety. Permission for use of this scale has been obtained from David Lester who made this scale available for the use of all researchers on the website www.dunamai.com.

3.6 DATA GATHERING METHODS

3.6.1 Pilot Study

A pilot study was completed as a trial of the main study. It comprised of a sample of ten nurses of the same population. The purpose of the pilot study was to verify the clarity of the questionnaires administered and to assess the feasibility of the study. Data from this pilot study were not included in the analysis of the sample.

- The following changes were implemented: the word ‘nursing home’ was replaced in question six on the Death Attitude Scale by ‘hospital’ and two more items were added to the scale on the suggestion of the University Postgraduate Committee addressing the feeling of ‘anger’ that was not included on this scale. This was justified because of the pre-existing literature on the phases of grief by Kubler-Ross who provided an essential framework for understanding the process of psychological reactions to death and dying. She outlined five stages in the process of facing terminal illness:
 - Denial and isolation
 - Anger
 - Bargaining
 - Depression
 - Acceptance

The questions added to the Death Attitude Scale were:

- *I sometimes get angry when certain people die (death of others or anger).*
- *I sometimes feel angry with the person who has died (death of others or anger).*

3.6.2 Collection of data

Data were collected over a period of six weeks. Questionnaires with both information letter and consent form were posted in each unit in the hospital and made available to all

nursing staff in the hospital's employ. Completed questionnaires were posted in sealed collection boxes available in each unit and collected over a period of four weeks.

3.6.3 Analysis of Data

Data from this study were predominantly categorical in nature and summary statistics used were frequencies, cross tabulations and percentages, while group comparisons mainly relied on Pearson's correlations or the chi-square test. Fischer's exact test was used if samples were < 30% and if expected frequency was small (<5%). Testing was done at the 0.05 level of significance.

3.7 RELIABILITY AND VALIDITY

The Neville Strumpf Death Attitude Scale is limited as it is an investigator developed tool and was not evaluated for reliability and validity. It was originally developed for a survey on attitudes towards death of nurses caring for the dying in nursing homes and the content is therefore appropriate for this study. Both questionnaires, however, were subject to face and content validity testing at the University of Witwatersrand, South Africa. The revisions suggested by the panel of experts have been discussed.

The Revised Collett-Lester scale has concurrent validity with other Fear of Death Scales. Nine studies have, between them, provided 18 sets of correlations between the subscales of the Collett-Lester scale. The median correlations are: death of self and death of others 0.36, death of self and dying of self 0.50, death of self and dying of others 0.30, death of others and dying of self 0.26, death of others and dying of others 0.32, and dying of self and dying of others 0.36. These are all positive and moderate, suggesting that the four fears measured by the Collett-Lester scale are not independent, but rather, moderately associated. The test-retest Pearson correlations were 0.85 for death of self, 0.79 for dying of self, 0.86 for death of others, and 0.83 for dying of others. The Spearman-Brown correlations were 0.91, 0.90, 0.72, and 0.88, respectively.

3.8 ETHICAL CONSIDERATIONS

In order to protect the rights of human subjects and also to meet the standards of any scientific enquiry, certain procedures were followed prior to conduction of the study and in the course of the study. These were:

- The research was only conducted in the hospital after obtaining permission from the hospital's Nursing Service Manager for use of this setting, which was granted subject to the approval of the research proposal by the University of Witwatersrand.
- Ethical clearance from the Human Research Ethics Committee (Medical) of the University of Witwatersrand was requested and granted.
- The research proposal was presented to the Postgraduate Committee of the University of the Witwatersrand, Faculty of Health Sciences, for their perusal and permission to conduct the study. Permission was granted subject to certain additions that the committee members recommended.
- In addition, verbal consent from the ward managers was requested and obtained.
- All prospective respondents were provided with essential information for informed consent and were asked to sign a consent form. The following points were clarified; participation in the study was voluntary, without coercion, and that participants were free to withdraw at any time. Participants had no direct benefits from participation (refer to Appendix E).
- Any participant or volunteer experiencing or communicating any emotional distress either verbally or non-verbally was offered counselling if required from the hospital social worker who had agreed to provide these services if needed.

- To ensure privacy and anonymity, numbers instead of participants' names were used on the questionnaires. Only grouped data were analyzed.
- To ensure confidentiality, all completed or uncompleted questionnaires were posted in a sealed collection box available on each unit for return to the researcher. All completed questionnaires were kept in a locked cupboard and used for the intended purpose only. Only the researcher and supervisor had access to data. Data will be destroyed on completion of the study.
- Permission for the use of study instruments was also requested and granted from the respective people as already cited.

3.9 SUMMARY

In this chapter, the methods and procedures for achieving the purposes of this study have been presented. The sampling methods, the method of data collection and the instrument have been described. The validity and reliability of instruments used have also been discussed. In the following chapter the analysis of the data and research findings will be discussed.