

**MANAGEMENT OF STRESS BY PROFESSIONAL NURSES IN THE HOSPITALS OF  
VHEMBE DISTRICT IN LIMPOPO PROVINCE,  
SOUTH AFRICA**

by

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## DECLARATION

I declare that **MANAGEMENT OF STRESS BY PROFESSIONAL NURSES IN THE HOSPITALS OF VHEMBE DISTRICT IN LIMPOPO PROVINCE, SOUTH AFRICA** is my own work, and all sources that I have used or quoted have been indicated and acknowledged by means of complete references, and that this work has not been submitted before for any other degree at any other institution.

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01/02/2017

## **MANAGEMENT OF STRESS BY PROFESSIONAL NURSES IN THE HOSPITALS OF VHEMBE DISTRICT IN LIMPOPO PROVINCE, SOUTH AFRICA**

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### **ABSTRACT**

#### **INTRODUCTION:**

Stress management is a major challenge in South Africa, as well as other countries. Job stress has negative effect on professional nurses' rendering of patient care. They should thus be able to manage their stress successfully in order to render quality nursing care to the customers. The purpose of the study was to identify and describe factors contributing to stressors among professional nurses, the effects of stressors on the wellbeing of professional nurses and the management of stress by professional nurses.

#### **METHOD:**

A quantitative, exploratory, descriptive design was utilised. The target population of this research study comprised of all professional nurses who were at work the day the researcher visited the sampled hospitals. The questionnaires were used to collect data from the sampled professional nurses, and descriptive statistic was used to analyse the data.

#### **RESULTS:**

The findings revealed that 45% of the professional nurses experienced pressure of work without rest, whereas 75% viewed changes at work as challenging and 15% mostly experienced accidents while on duty. Most of them indicated that they had previously

experienced anxiety and that they did not engage in exercise. The finding further revealed that EAP is not facilitated in most institutions and that 97.4% of the professional nurses like to have more knowledge on management of stress. The results of this study may be useful to the entire population of health professionals, policy makers, curriculum-developers and to the Department of Health. The recommendations were developed based on the findings.

**KEY WORDS:**

Stress, stressor, professional nurse, wellbeing, coping mechanism

## **DEDICATION**

*I dedicated this dissertation to the following:*

- *My children and my siblings who supported me throughout.*
- *My late husband Alph, mom Magdeline, brothers Gerson, Makhado and George, and my best friend Dr Dovahani Ravhengani who did not live long enough to witness my achievements.*
- *All individuals who are willing to manage their stressful situations and/or coping successfully with stress.*

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ANNEXURE F.....	Consent form
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## LIST OF ACRONYMS

<b>AIDS:</b>	Acquired Immune Deficiency Syndrome
<b>EAP:</b>	Employee Assistant Programme
<b>HIV:</b>	Human Immunodeficiency Virus
<b>LP:</b>	Limpopo Province
<b>OBSE:</b>	Organisational Based Self-esteem
<b>SA:</b>	South Africa
<b>SPSS:</b>	Statistical Package for Social Sciences
<b>USA:</b>	United States of America
<b>UK:</b>	United Kingdom

## CHAPTER 1

### ORIENTATION TO THE STUDY

#### 1.1 INTRODUCTION

Nurses are the backbone of the health system, and they are commonly exposed to several stressors at their workplace. Moustaka, Theodoros and Contantinidis (2010:211) indicate that there has been increase in stress experienced by hospital nursing staff, and that nurses are subjected to a more general stress which arises from the physical, psychological and social aspect of work environment. High levels of stress result in staff burnout and turnover and adversely affect patient care. Absenteeism and sick leave are mainly observed among the professional nurses. These behaviours might be perpetuated by the shortage of nursing personnel, environmental pressure and inadequate support among nurses. This is supported by Ghanei, Valiei, Rozaei and Rozaei (2013:3) who state that job stress has currently become a challenge for the nursing profession and that it can lead to loss of creativity, job dissatisfaction, feelings of inadequacy and reduced quality of nursing care. Maloney (2012:111) maintains that stress and related disorders in nursing appear to be contributing to more than half of job associated absenteeism. Xianyu and Lambert (2006:147) add that nursing has been identified as an occupation that has high levels of stress, therefore, the issue of job stress and coping is of universal concern to all managers in the area of health care. Chang, Karen, Hancock, Johnson, Dally and Jackson (2005:57) further indicate that role stress in nurses continues to be an area of great interest to the profession, particularly as stress affects the mental and physical health of the nurses. The researcher has over 28 years of experience in nursing and she realized that there is a high level of stress related problems among nurses at Vhembe district of Limpopo province, South Africa. Professional nurses have many responsibilities in nursing therefore they should be able to manage their stress successfully in order to render quality care to patients.

Problems of stress is now recognised as part of the employer's duty in taking reasonable care of the health and safety of the employees (Spector, 2011: 274). The

main focus of this study was to identify and describe management of stress by professional nurses at Vhembe district of Limpopo province, South Africa.

## 1.2 BACKGROUND OF THE STUDY

According to Lambert and Lambert (2008:39), cross-cultural studies conducted in China, Japan, South Korea, Thailand, USA, Australia and New Zealand have suggested a number of similarities exist among nurses regarding workplace stressors and ways of coping with these stressors. For example, hospital nurses working in China, Japan, South Korea, Thailand, and The USA (Hawaii) all indicated workload and dealing with death and dying to be the two most common workplace stressors. Given the role and practice of nurses varies among this countries, it certainly is telling that the most two major workplace stressors were found to be the same regardless of country of origin. Akbar, Elahi, Mahammadi and Khoshknab (2015:55) concur that nursing staff encounter a lot of physical, psychological and social stressors at workplace. They encounter stressors such as high pressure of work, exposure to threat, unstable conditions and weak teamwork. This subsequently have negative effect on their health and on the quality of care services they provide. Job stress can also cause weakness in decision making, poor concentration, anxiety, apathy, absenteeism and burnout. Similarly, a study by Xianyu and Lambert (2006:151) add that of 92 Chinese nurses from the two hospitals, the findings revealed that the sources of workplace stress were workload, dying of patients and conflict with physicians. The coping strategies identified were positive reappraisal, meaning-full problem solving and self-control.

Gibb, Cameron, Hamilton and Murphy (2010:839) indicate that higher rates of stress-related sicknesses are found in health care professionals when compared with other sectors. Evidence suggests that increased clinical demand, long hours, low staffing and lack of support from colleagues and management are contributing to absenteeism, somatic complaints and health problems among health care workers. This is supported by Oke and Dawson (2012:317); Pereira, Fonseca and Carvalho (2012:374) when they mention that stress usually lead to a number of physical, emotional and psychological

problems to nurses and other employees and that could result in increased absenteeism. The sources of stress were cited as administration or organisational issues, poor nurse relationships, limited resources, professional self-doubt, poor supervision, client-related issues and staff conflicts. Milar and Drasic (2006:9) add that high stress levels are associated with increased health care cost, absenteeism, turnover and reduced productivity. Lambert and Lambert (2008:39) further maintain that nurses cannot avoid encountering an increase in workplace stressors as the worldwide shortage of nurses has been acknowledged by World Health Organization (WHO). Identified problems included inability to concentrate, constant worrying, loss of objectivity, weight gain or loss, headache, neglecting responsibility, moodiness and picking fights with others. Abualrub and Al-zaru (2008:227) add on the findings of the survey conducted to Jordanian hospital nurses on 'job stress, recognition, job performance, and intention to stay at work'. Job stress was ranked the first among top factors affecting turnover. It was indicated that increased level of stress can lead to high staff turnover, low quality of care and organisational inefficiency.

Nigerian study by Anasoga, Ogbemor and Ojo (2013:477) on 'the experiences of stress by nurses' reported that 73% of nurses experienced headache and fatigue, 40% experienced anger (emotional stress), 2% experienced increased blood pressure, 12% acknowledged frustration, and 44% experienced lack of concentration and withdrawal. It was concluded that nurses are more susceptible to occupational stress because of intense daily activities. Rothmann, Van der Colff and Rothmann (2006:8) caution that nurses have more stress than most people due to the nature of the job and the system within which they work. Findings of the study further indicated that professional nurses as compared to enrolled nurses and assistant nurses experienced more stress regarding the possibility of making a mistake when treating a patient, on disagreement with medical practitioner concerning treatment, and when a nurse feel helpless towards the patient. The factors that contribute to a stressful work environment for nurses were identified as impaired support by supervisor, high responsibility, and task overload. Van der Colff and Rothmann (2009:4) add that occupational stress has several negative effects such as reduction in productivity, diminished levels of customer service,

absenteeism, alcohol and drug use, and destructive behaviour. Nyathi and Jooste (2008: 27) conducted a study on 'Working conditions that contribute to Absenteeism among nurses in a Provincial hospital in the Limpopo Province' and the findings rated workload higher, and that results to lack of motivation, irritability and lowering of the quality of patient care may occur.

Professional nurses are the pillars of the nursing profession, thus it is important for them to always be of sound mind in order to perform their duties appropriately. Spector (2011:274) describes occupational stress as a process that includes psychological reactions, physical reactions and behavioural reactions. The psychological reactions involve emotional responses like anxiety, depression and frustrations. Physical reactions include symptoms such as short-lived migraines, backache and heart conditions. Behavioural reaction includes irritability, avoidance behaviour and querulous relationships like fighting with the employer. The study conducted by Pillay (2009:7) revealed that public sector professional nurses where most dissatisfied with their pay, workload poor resources and work environment. This may result in a decrease in morale, increase turnover, increase pressure decreased productivity. Rees (2006:1) further adds that the experience of stress in the workplace has undesirable consequences, both for the health and safety of individuals and for the wellbeing of the organisation.

According to Nahrgang, Morgason and Hofman (2011:71), job demands such as risk, hazards and complexity impair an employees' health and positively relate to burnout. A victim of violence and abuse can become dysfunctional at work, resulting in low self-esteem, and rage over unmet needs, impaired ability to trust, insecurity, perceived wrongs, repressed anger, guilt and hostility. Akbar, Elahi, Mahammadi and Khoshnab (2016: 55) add that stress affects the nurses' quality of life and increase the risk of injuries at work. They further indicate that job stress can have a significant impact on individuality of nurses and their ability to accomplish the tasks, and in particular also causes poor decision making, lack of motivation and reduced efficacy. Job stress leads

to long term conditions like hypertension, asthma, infections, psychosomatic disorder and depression.

This study therefore focused on identifying and describing management of stress by professional nurses in the hospitals of Vhembe district in Limpopo Province, South Africa.

### **1.3 PROBLEM STATEMENT**

Professional nurses are exposed to multiple stressors at their workplace and in the community. Poor management of stress has been noted among professional nurses. Evidence shown by the Nursing Operational Managers' absenteeism rate records indicate that most of the professional nurses suffer from stress-related symptoms such as headache, general fatigue, irritability, anxiety, poor concentration, and poor interpersonal relationships. Quality patients' care is thus not rendered to the clients effectively because of the stressors encountered by professional nurses. For the past 28 years, the researcher has been working in a rural community hospital of the Limpopo province and has witnessed the nurses presenting with stress related problems and low morale that lead to the shortage of professional nurses in this country. The above-mentioned-situation leads to the increase in absenteeism and makes it difficult for the remaining professional nurses to cope with the amount of work expected of them. Stress is the body's response to any demand or pressures. These demands are called stressors, which include major life events, such as caring for more patients than you can handle due to shortage of staff. The nature of the nursing profession focuses on promoting, preventive, curative and rehabilitative health. For nurses to provide these aspects effectively, they need to have the ability to manage the stressful situations successfully. Therefore, this study sought to identify and describe the management of stress by professional nurses in the hospitals of Vhembe district in Limpopo province, South Africa.

### **1.4 RESEARCH QUESTIONS**

To guide the research study, the researcher generated the following research questions:

- What are the factors contributing to stressors among professional nurses in the hospitals of Vhembe district in Limpopo province, South Africa?
- What are the effects of stressors on the well-being of professional nurses in the hospitals of Vhembe district in Limpopo province, South Africa?
- How are the strategies put in place in support of professional nurses to cope with stressful situations in the hospitals of Vhembe district in Limpopo province, South Africa?
- How are the measures used by professional nurses in the management of stress in Vhembe district of Limpopo province, South Africa?

### **1.5 PURPOSE OF THE STUDY**

The purpose of the study was to identify and describe factors contributing stressors among professional nurses, the effects of stressors on the wellbeing of professional nurses and the management of stress by professional nurses in the hospitals of Vhembe district in Limpopo province, South Africa.

### **1.6 OBJECTIVES OF THE STUDY**

To achieve the purpose of the study, the researcher formulated the following objectives:

- To identify and explore the factors contributing to stressors among professional nurses in the hospitals of Vhembe district in Limpopo province, South Africa;
- To explore and describe the professional nurses' 'perceived' effects of the stressors on their well-being;
- To identify and describe the strategies put in place in support of the professional nurses to cope with the stressful situations in the hospitals of Vhembe district in Limpopo province, South Africa;
- To identify the measures used by professional nurses in the management of stress in the hospitals of Vhembe district in Limpopo province, South Africa;

- Based on the findings, to draw recommendations that could be added to the body of knowledge in the prevention and management of stress by professional nurses.

### **1.7 SIGNIFICANCE OF THE STUDY**

Significant of the study should reflect on the excellent of the contribution made by the study to improve our understanding, to change a concept or to promote a new hypothesis in a particular field of study Maillard (2013:1). This study is important because it may empower professional nurses with information that may enable them to manage stress successfully. The patients may also benefit as the nurses render quality patient care. The research study was done to increase in the body of knowledge and help others in coping with stress. The findings of this study may also be useful to other nurses, nurse managers, policy makers, curriculum developers, other health care workers, and personnel from other departments and companies. There may be improvement on stress prevention at the workplace, coping with stressful situations, and in developing proper management strategies of stressors. The study provided the Department of Health and the Nursing directorate with valuable information necessary when planning strategies in relation to management of stress.

### **1.8 OPERATIONAL DEFINITION OF CONCEPTS**

According to Brink (2008:87), operational definition describes how the variable under study is to be observed and measured. The concepts used in this study are described below:

#### **1.8.1 Stress**

According to Staub (2007:84), stress is a process by which a person both perceives and responds to events that are judged to be challenging or threatening. Sarafino and Smith (2012:30) add that stress is the circumstance in which transactions lead a person to perceive a discrepancy between the physical or psychological demands of a situation, and the resource of his or her biological, psychological or social system. Moustaka,

Theodoro and Constantinidis (2010: 2011) maintain that stress is neutral, but when we exceed our limits or we are below them, burnout or rust out occur respectively. Sadock and Sadock (2007:813) describe stress as a circumstance that disturbs, or is likely to disturb, the normal physiological or psychological functioning of a person.

In this study, stress refers to a state of mental or emotional strain on professional nurses resulting from negative or demanding circumstances.

### **1.8.2 Stressor**

Bergh and Theron (2005:398) state 'stressor' refers to the cause or stimuli for stress reaction. It can arise from a single biological, psychological, social-cultural or external factors or a combination of these. Effects of stressors can be assessed according to life changes or events occurring in people's lives during the stressed-period. Straub (2007:83) maintains that stressors are demanding events or situations that trigger coping adjustments in a person. Fink (2007:653) adds that a stressor may be physical or psychological; physical stressor includes trauma, injury, noise, excessive heat or any physical exertion when the body is being forced to operate beyond its capacity; and psychological stressors include time-pressured tasks, interpersonal conflicts, isolation or a traumatic life event.

In this study, stressor refers to work stressor that professional nurses encounter in the hospitals.

### **1.8.3 Professional nurse**

According to South African Act 33 of 2005, professional nurse is a person registered as professional nurse in terms of section 31 of the Nursing Act. Mosby's Medical Dictionary (2009) adds that a professional nurse is a nurse who has completed a course of study at an approved and accredited school of nursing and who has passed the National Council of licensure examination, he/she is licenced to practice by individual states.

In this study, professional nurses refer to professional nurses working in the hospitals of Vhembe district in Limpopo province, South Africa.

#### **1.8.4 Well-being**

Dodge, Daly, Huyton and Sanders (2012:225) indicate that well-being refers to feeling satisfied and happy, developing as a person, being fulfilled and positive functioning. Collins Dictionary adds that well-being refers to a condition of being contented, healthy, or successful welfare; a good or satisfactory condition of existence, a state characterised by health, happiness and prosperity.

In this study, well-being refers to the state of the professional nurses of being happy and productive in the hospitals.

#### **1.8.5 Coping mechanism**

Bergh and Theron (2005:2010) indicate that coping mechanism include ways of managing stress, adjusting to a situation, changing unfavourable situation, controlling emotional distress and controlling or appraising the meaning of stressors. Straub (2007:118) adds that it is the way we deal with stressful situations, and that it is intended to moderate, or buffer the effect of stressors on our physical and emotional well-being. Folkman (2011:36) concurs that coping strategies are the ways that people react to and deal with real stressors in their daily lives. The ways of coping include constructive responses and maladaptive responses.

In this study, coping mechanism refers to the way the professional nurses cope with stressful situations in the hospitals.

### **1.9 RESEARCH METHODOLOGY**

According to Fink (2014:55), methodology is the methods to be followed to investigate a research problem and the rationale for the application of specific techniques of identify, select, process and analyse information. It refers to a way of obtaining, organizing and analysing data. Methodology decisions depend on the nature of research questions. This study described the research settings, design, population, sampling and sampling methods, research instrument, validity and reliability of the instrument, ethical

consideration, data collection process, and data analysis. These concepts were elaborated in chapter 3 of this dissertation.

### **1.9.1 Research setting**

Burns and Grove (2007:325) describe a research setting as an environment in which the study takes place, and it can be a natural or controlled environment. Natural settings are real life study environments without any changes made for the purpose of the study. The study was conducted in the four sampled hospitals of Vhembe district in Limpopo province, South Africa, namely Elim, Hayani, Siloam, and Donald Frazer hospitals, where the professional nurses are employed. It was conducted in the wards of the above-named hospitals.

### **1.9.2 Research Design**

A research design is defined by Fink (2014:55) as the way in which its subjects or participants are organised and measured. It is a set of guidelines and instructions to be followed in addressing the research problem. Frazer, Cooper and Nolte (2010:66) concur that the researcher's understanding of the issue relating to the design will demonstrate the approach that will seek to answer the research questions. A quantitative, descriptive, explorative design was utilized. A self-administered questionnaire was used to collect data. The respondents consisted of a sample of professional nurses who were on duty the day of data collection.

#### **1.9.2.1 Quantitative research design**

According to Burns and Grove (2007:26), quantitative research is a formal, objective, systematic process in which numerical data are used to obtain information about the world. Quantitative research is used to describe variables and determine the relationship between them. In this study well-designed questionnaires were used to collect data from the professional nurses. The quantitative data was analysed. The service of the statistician was employed to identify and calculate appropriate statistics.

#### **1.9.2.2 Explorative research design**

Polit and Beck (2008:20) indicate that explorative research explores and gathers information on what factors are related to a phenomenon and studies it in order to

answer the research question Burns and Grove (2007:3) add that explorative research is conducted to gain new insight, discover new ideas and/or increase knowledge of a phenomenon. In this study, the topic was explored and information relevant to the study gathered. The researcher also gained new insight and discovered new ideas on the management of stress by professional nurses in the hospitals.

#### **1.9.2.3 Descriptive research design**

According to Brink (2008:104), a descriptive design describes the variables in order to answer the research question. Walliman (2011:10) adds that it is an attempt to examine situations in order to establish what is in the norm. Depending on the information sought, people can be interviewed, questionnaire distributed or visual records made. In this study, the researcher identified and described the management of stress by professional nurses in the four randomly sampled hospitals of Vhembe district in Limpopo province, South Africa.

#### **1.9.3 Research population**

Brink (2008:123) defines population as the entire group of persons or objects that meet the criteria that the researcher is interested in studying. In this study, research population comprises of all professional nurses that meet the criteria for inclusion in the study. The target population comprised of all professional nurses who were at work on the day and time on which the researcher visited the four sampled hospitals of Vhembe district in Limpopo province, South Africa, to collect data.

#### **1.9.4 Sampling and sampling methods**

According to Burns and Grove (2007:43); Walliman (2011:93), sampling is a subset of a population selected to participate in a research study. The sample is chosen from the study population that is commonly referred to as the 'target population'. In this study probability sampling and non-probability sampling were used. The probability simple random sampling was used to sample the hospitals of Vhembe district in Limpopo province, South Africa. The non-probability convenience sampling was used to sample professional nurses in the four sampled hospitals of Vhembe district in Limpopo province, South Africa.

#### **1.9.4.1 Sampling of the hospitals**

Simple random sampling was used to sample the hospitals. In simple random sampling the elements are drawn in a simple random way from the sampling frame. Every element of the population has equal chance of being selected (Brink, 2008:124). In this study a list of all hospitals of Vhembe district was obtained from the Department of Health in Vhembe district. The list obtained reflected eight hospitals and the required sample size of the study was four. The researcher wrote the names of the eight hospitals on small pieces of papers (slips) and placed them in a container. The researcher shook the bowl and drew a slip, she noted the name of the hospital on the slip, and put it back into the container. She repeated the process until she obtained the required sample of the four hospitals. The names of the four sampled hospitals were Elim, Hayani, Siloam and Donald Frazer hospital.

#### **1.9.4.2 Sampling of professional nurses**

Convenience sampling is the most readily available or the most convenient grouping of people for the sample. The respondents are included in the sample because they happened to be there at the right time (Brink, 2008:132). In this study, convenience sampling was used to select a sample of professional nurses in the four sampled hospitals, who meet the eligible criteria for the study. The required sample size was 120 professional nurses, 30 from each of the four sampled hospitals. The convenience sample of this study consisted of 30 professional nurses per hospital who completed the designed questionnaires and who were on duty the day the researcher visited the hospital to collect data. The researcher made arrangement with the Nurse Managers of the four sampled hospitals. She distributed questionnaires to professional nurses of different wards in each of the selected hospitals, who meet the eligible criteria for the study, 30 professional nurses per hospital. The researcher visited the four sampled hospitals, namely, Elim, Hayani, Siloam and Donald Frazer on different days, and a total of 120 professional nurses completed the questionnaires as arranged.

#### **1.9.4.3 Inclusion criteria**

The inclusion criteria are a set of predefined characteristics used to identify the subjects who will be included in the research study (Salkind, 2010:7). Respondents who were included in this study had the following qualities:

- A professional nurse;
- Be employed in the sampled hospitals of Vhembe district in Limpopo province, South Africa;
- Having at least two year experience working as a professional nurse;
- A male or female professional nurse aged between 25 -60 years.

#### **1.9.4.4 Exclusion criteria**

Exclusion criteria are characteristics that exclude a population from the study (Polit & Beck, 2005:71). Those who were excluded in the study had the following qualities:

- A professional nurse below 25 years;
- A professional nurse above 60 years;
- Be a professional nurse employed in the districts of Limpopo province, South Africa;
- Professional nurse who did not consent.

#### **1.9.5 Research Instrument**

Polit and Beck (2008:755) define an instrument as a device that is used to collect data, such as a questionnaire, test and interview schedules. In this study the researcher used a self-administered, structured questionnaire to collect the data. Burns and Grove (2005:426) indicate that questionnaire refers to a printed self-report form designed to elicit information and is developed with specific items to assist with the data collection. The researcher then developed the questionnaire guided by the objectives of the study, following a literature review. The questionnaires were developed in English. Closed-ended questionnaires were developed to be responded to by 120 sampled professional nurses from four sampled hospitals. Each questionnaire consisted of five sections, namely, demographic details, nature of stress, effects of stressors, available support systems and important strategies to be utilised. The final questionnaire was discussed with both the researcher's supervisors and statistician.

#### **1.9.5.1 Development of questionnaire**

According to Meyer, Naude, Shangase, and Van Niekerk (2011:14), the researcher can use either open-ended, closed-ended or both. Open-ended questions are used when variables are unexplored or unknown to the researcher, and enable the researcher to explore the variables better. Close-ended questions make it possible for the respondents to choose from the variables included according to the instructions of the research. The participants should understand the meaning of closed-ended questions better and questions are answered within the same framework, thereby making it easier to compare the responses. In this research study the questionnaire was designed and developed after an in-depth literature review. The developed questionnaire had closed-ended questions. The questionnaire met the objective of the research study, and was related to the research questions. The well designed questionnaire was brief with only relevant essential information, and was simple to read and respond to.

#### **1.9.5.2 Structure of the questionnaire**

In this study, the questionnaire had structured closed-ended questions. The questionnaire was developed in relation to the research questions and the objectives of the research study. Each questionnaire therefore consisted of five sections namely demographic details, nature of stress, effect of stressors, available support system and important strategies to be utilised. Each questionnaire has clear instructions on how the researcher wanted participants to respond to those closed-ended questions. The researcher developed the questionnaire in such a way that it needed to be evaluated by both checklist and rating scale.

#### **1.9.5.3 Rationale for using a questionnaire**

(Wallingman, 2011:97) indicates that questionnaires are a suitable tool for gaining quantitative data, it has structured format, and is easy and convenient for respondents. The respondents feel a great sense of anonymity and are more likely to provide honest answer. Brink (2008:147) supported that the format is standard for all participants, and is not dependent on mood of the researcher. In this study questionnaires were used to collect data from 120 sampled professional nurses in the four sampled hospitals of Vhembe district in Limpopo province, South Africa.

#### **1.9.5.4 Advantages of self-administered questionnaires**

According to Oppenheim (2005:103), self-administered questionnaires ensured a high response rate and accurate sampling as the researcher could be nearby. The researcher could provide necessary explanations if respondents experience some difficulties. Meyer et al (2011:302) agrees that in self-administered questionnaire, the information is easy to tabulate, it is inexpensive to administer, and confidentiality is maintained. Brink (2008:147) maintains that questionnaires are also a quick way of obtaining data from a large group of people. In this study, the researcher collected data and she administered well developed questionnaires to the sampled professional nurses in the four sampled hospitals of Vhembe district in Limpopo province, South Africa.

#### **1.9.5.5 Pre-testing of the instrument**

According to Leedy and Ormrod (2010:196-197), the researcher should conduct a test run of newly designed questionnaires to make sure that the questions are clear and will effectively solicit the desired information. A pre-test is a method used to test the instrument of a proposed study in order to refine the research tool before the actual study is commenced. Frink (2014:104) concur that it involves the trial administration of a newly developed instrument in order to identify flaws as well as time that will be required.

In this study pre-testing of an instrument was conducted to test developed questionnaire. After the development of the research instrument, it was submitted to four professional nurses from four different wards at Siloam hospital of Vhembe district. The selected professional nurses completed the questionnaires. The researcher then evaluated the effectiveness and clarity of the questionnaire. After the pretesting and further discussion, problems that were identified were clarified and corrected to improve comprehension. All professional nurses who participated in the pre-testing were excluded from participating in the actual study.

### **1.9.6. Validity and reliability of the instrument**

For the research study to be acceptable, the aspects of validity and reliability were examined.

#### **1.9.6.1 Validity**

Brink (2008:159) indicates that instrument validity refers to whether an instrument accurately measures what it is supposed to measure, given the context in which it is applied. Fink (2014:106) maintains that validity is the degree to which a measure assesses what it pinpoint to measure.

In this study the researcher ensured validity of the research instrument. Questionnaires were relevant and were constructed so that factual information could be obtained as far as possible. Respondents were selected from four sampled hospitals of Vhembe district ensuring some representative. Pre-testing of the questionnaire was done before the major study was conducted to ensure validity of the instrument.

#### **1.9.6.2 Reliability**

According to Burns and Grove (2007:339), reliability is concerned with how consistently the measurement technique measures the concept of interest. Reliability of an instrument is the degree of consistency with which the instrument measures the attributes. The less variation an instrument produces in repeated measurements of an attribute, the higher its reliability is.

In this study the researcher ensured reliability of the instrument, the questionnaires were reliable because if some questions were put to the participants at a later stage, there would be little or no deviance from the original answers to the questions.

#### **1.9.7. Data collection process**

According to Burns and Grove (2007:423), data collection is a process of selecting participants and gathering data from these participants. Data may be collected on subjects by observing, testing, measuring, questioning and/or recording. Data was collected in September 2014. Data was collected from 120 sampled professional nurses, 30 from each of the four sampled hospitals of Vhembe district, namely, Donald

Frazer, Hayani, Elim, and Siloam hospital. Data was collected from 30 professional nurses from each hospital who were on duty on the day the researcher visited the hospital to collect data. The researcher visited the four sampled hospitals on different days during September 2014. The researcher distributed well designed questionnaires to 30 professional nurses from different wards in each of the four sampled hospitals of Vhembe district in Limpopo province, South Africa. A total of 120 professional nurses completed the questionnaires in their respective hospitals.

#### **1.9.8 Data analysis**

Data analysis refers to systematic organization and synthesis of research data. Quantitative data analysis deals with data in the form of numbers and uses mathematical operations to investigate their properties (Walliman, 2011:113). In this study the collected quantitative data was analysed with the assistance of a Statistician from the University of Venda. Data was subjected to a computer analysis programme. The findings were displayed in the form of tables and graphs.

#### **1.10 ETHICAL CONSIDERATION**

Pera and Van Tonder (2005:5) indicate that ethics are consent with rightness or wrongness, good or bad. The focus of ethics and ethical consideration therefore is to ensure that the participants under study are kept from harm. Vogt, Gardner and Haeffele (2012: 227) add that ethic refer to good conduct towards others. The researcher has a moral obligation to strictly consider the rights of the participants who are expected to provide knowledge. They further mention that the researcher considers it very important to establish trust between the participants and the researcher, and to respect them as autonomous thinking beings, that can make sound decisions.

Nursing research usually involves human-participants, and therefore, special precaution were taken to ensure that the study adheres to sound ethical principles at all times. In this study, the researcher applied ethical consideration throughout the research in the following manner:

#### **1.10.1 Permission to conduct the research study**

The research proposal and the research instruments used were reviewed by the Higher Degree Committee of the School of Health Science, University of Venda. After clearance by the committee it was then forwarded to the University Senate and Ethics committee for final approval. Thereafter permission was sought from the Department of Health at Limpopo province, Vhembe district and the hospitals where data was collected.

#### **1.10.2 Informed Consent**

Informed consent was obtained from all study respondents prior to them responding to the questionnaires. The respondents were informed about the objectives of the study and the ethical handling of the research matters relating to them. Respondents were given information of what was expected from them by the researcher.

#### **1.10.3 Freedom from Harm and Discomforts**

The research study was planned and undertaken in such a manner as to avoid as far as possible any kind of harm to the respondents. The researcher protected the respondents from harm and discomfort, by ensuring that no physical or psychological harm was inflicted on the respondents.

#### **1.10.4 Offer to Answer Questions**

The researcher answered all questions that were raised by respondents. Respondents were provided with information on whom to contact for answers to pertinent questions about the research and research respondents' rights.

#### **1.10.5 The right to privacy.**

The researcher ensured privacy by keeping all information obtained in the research study anonymous by using code numbers for respondents' identities so that even the researcher would not be able to relate the information to the respondents.

#### **1.10.6 Right to respect**

The researcher ensured maintaining of respect and dignity of participants during this research study. The respondents were given the option to withdraw from the study at any stage should they wish to do so, without the possibility of retribution or victimization.

#### **1.10.7 Assurance of Anonymity and Confidentiality**

The respondents were informed that their responses and records were kept safe and confidential, and that data was available to the supervisors only. The respondents were therefore informed that their identity remained anonymous in reports and publications of the study.

#### **1.11 LIMITATIION OF THE STUDY**

There were some limitations in this research study. The study was only conducted in the four sampled hospitals of Vhembe district in Limpopo Province, South Africa, therefore the findings cannot easily be generalised to all hospitals of Vhembe district. The study was done in the four sampled hospitals of only one district of Limpopo province and the remaining districts were not included in the study, therefore the results obtained from the study cannot be generalised to the entire province. Only professional nurses who happened to be at the right place at the right time were included in the sample, and the remaining professional nurses could be having challenges with the management of stress in the hospitals.

#### **1.12 ORGANISATION OF THE RESEARCH REPORT**

The report of the study were organised as follows:

Chapter 1 introduced the study and provided background information on stress management by professional nurses. It also included problem statement, research questions, purpose of the study and objective of the study. Significance of the study, ethical considerations and limitations of the study were also obtained. Operational definitions were also presented.

Chapter 2 discussed the literature review on stress management by professional nurses. Specific attention was given to factors contributing to stress, the effect of stress, and the management of stress with specific reference to nurses, preferably professional nurses.

Chapter 3 discussed the research design and methodology applied in the study, including study design, research method, research population, sample and sampling technique, data collection, research instrument. It also discusses validity of the research instrument, reliability of the research instrument, validity of a research study, research setting, ethical consideration, consent for conducting the research, and method for data analysis.

Chapter 4 discussed the analysis and interpretation of data collected.

Chapter 5 provided the conclusion and recommendation for practice and further research.

### **1.13 SUMMARY**

This chapter presented a background on stress management by professional nurses, indicated problem statement, purpose, objectives, research methodology, validity and reliability, significance, ethical consideration and limitation of the study. In the following chapter, a literature review was presented.

## CHAPTER 2

### LITERATURE REVIEW

#### 2.1 INTRODUCTION

The previous chapter described orientation to the study that includes background to the study, problem statement, research question, the purpose and objectives of the study. It also presented research methodology, significance and ethical consideration of the study. This chapter discussed literature on similar investigation conducted by other researchers about stress management by professional nurses at the workplace. Focus of this literature review was on management of stress by professional nurses, factors contributing to development of stressors among professional nurses, the effect of stress, the available support system, and the strategies that may be possible solutions to the problem.

Literature review refers to the review of relevant literature and it is done before, during and after conducting the study; the study then builds on and is compared with previous researches. The literature review involves finding, reading, understanding, and forming conclusions about the published research and theory as well as presenting it in an organised manner. The literature review enables the researcher to gain a broad understanding of the information that is available and is related to the problem (Burns & Grove, 2007:141; Brink, 2008:67). The researcher reviewed different literatures, journals, previous researches and other relevant information on stress and stress management. The important aspects reviewed were the description of stress, factors contributing to development of stress, effects of stress, management of stress, and whether there are some guidelines developed that guide professional nurses on how to manage their stressors. The purpose of literature of literature review was discussed below.

### 2.1.1 Purpose of literature review

According to Polit and Beck (2005:464), the purpose of literature review is to familiarise the researcher with the scope of the study field, identify trends and development in the research field, and examine existing research on stress management. This is supported by Brink (2008:67) who indicate that the researcher conducts the literature review for the following reasons:

- To determine what is already known about the topic, thus to enable the researcher to obtain a comprehensive picture of the state of knowledge.
- To identify the research problem and refine the research question.
- To obtain clues to the methodology and instrument.
- To refine certain parts of the study, specifically problem statement, conceptual framework, design and data analysis process.
- To compare the findings of existing studies with those of the study at hand.

In this study, the researcher undertook an extensive literature review on the relevant sources on management of stress by professional nurses at the hospitals, in order to have broader knowledge on the phenomenon under study. The literature was reviewed to identify, describe, and explore the relevant information that could assist in answering the following research questions:

- What are the factors contributing to stressors among professional nurses in the hospitals of Vhembe district in Limpopo province, South Africa?
- What are the effects of stressors on the well-being of professional nurses in the hospitals of Vhembe district in Limpopo province, South Africa?
- How are the strategies put into place in support of professional nurses to cope with stressful situations in the hospitals of Vhembe district in Limpopo province, South Africa?
- How are the any measures used by professional nurses in the management of stress in Vhembe district of Limpopo province, South Africa?

### 2.1.2 Key words for the literature review

The results of the literature were presented under the following heading:

- The description of stress;
- Factors contributing to the development of stressors among professional nurses;
- The effect of stressors in the wellbeing of professional nurses;
- Management of stress that includes:
  - Strategies put to place to support of professional nurses to cope with stressful situations;
  - The measures used by professional nurses in the management of stress.

## 2.2 THE DESCRIPTION OF STRESS

According to Sarafino and Smith (2012:30), stress refers to the circumstance in which transactions lead a person to perceive a discrepancy between the physical or psychological demands of a situation and the resources of his or her biological, psychological, or social system. This is supported by Straub (2007:83), who describes stress as a process by which we perceive and respond to events called stressors that we perceive as harmful, threatening and challenging. Onasoga, Ogbebor and Ojo (2013:474) state that stress is derived from the word 'stingi' which means 'to be drawn tight'. Gibbens (2007:17) add that stress experienced from an exciting, creative and successful task is considered positive, while that of dullness, failure or degradation is deemed negative. He also believes that the biochemical effects of stress would always be experienced, whether the situation was perceived as positive or negative.

Chang, Hancock, Johnson, Daly and Jackson (2005:58) mention that the experience of stress occurs when situations are perceived as exceeding one's resources. They further highlighted that work stressors that nurses encounter are physical environment stressors such as workload and social environmental stressors such as death and dying of patients. Rees (2006:1) also states that experience of stress in the workplace has undesirable consequences both for the health and safety of individuals and for the wellbeing of their organisations. Gibbens (2007:25) concurs that research studies

conducted showed that there is an adverse relationship between work-related stress and the general health and wellbeing of the individuals.

Rothman, Van der Colff and Rothman (2006:2) note that nurses are seen as having more stress than most employees due to the nature of the job and the system within which they work. Winwood, Winefield and Lushington (2006:439) concur that nursing provides a wide range of potential workplace stress. Research has shown that nursing is a work environment that is notable for high work stress and high level of fatigue due to high demands. Searward (2006:7) describes three types of stress that could occur in the workplace namely eustress, neustress and distress were identified. Eustress is good stress that could be motivating or inspiring; neustress refers to sensory stimuli that have consequential effect, it is considered neither good nor bad, then lastly distress which is considered bad and is usually called stress. This is supported by Uys and Middleton (2010:214) who indicated that human beings need moderate stress to motivate them, but excessive stress can drain a person's resources.

Onasoga, Ogbemor and Ojo (2013:474) define occupational stress as the harmful, physical, and emotional responses that occur when the requirement of the job does not match the capabilities, resources or needs of the worker. Moustaka, Theodoros and Constantinidis (2010:2012) add that occupational stress refer to physiological and physical effects of negative activity in the workplace as a result of many factors including external events, internal events, job demands and colleague behaviour. Lambert and Lambert (2008:39) concur that workplace stress is the physical and emotional outcomes that occur when there is disparity between the demands of the job and the amount of control the individual has in meeting those demands. Anytime stress occur, it is an indication that the demands placed upon the person have exceeded the person's personal resources. Rothman, Van der Colff and Rothman (2006:2) state that Spielberger State-Trait model of occupational stress conceptualises stress as a complex process that consist of three major components, namely sources of stress that are encountered in the work environment, the perception and appraisal of a particular stressor by an employee, and the emotional reaction that are evoked when a stressor is appraised as threatening. All these indicate that the nursing profession is seen as

stressful and demanding, therefore more information was searched to describe management of stress by professional nurses at hospitals.

### **2.3 FACTORS CONTRIBUTING TO STRESSORS AMONG PROFESSIONAL NURSES**

According to Lambert and Lambert (2008:40) research study conducted on nurses regarding workplace stress revealed the following contributory factors, low job control, high job demands, dealing with death and dying, low supportive relationship at workplace, uncooperative family members and patients, and being moved among different patient care units within the health care organization. In addition studies also have negative effect on the nurse's physical and psychological wellbeing, for example, inadequate educational preparation. Moustaka, Theodores and Constantinidis (2010:2013) concur that work relationships are potential stressors, and that they include conflict with co-workers and lack of staff support. The study conducted showed that lack of social support from colleagues and supervisors contributed significantly to the presence of stress. They further indicate that health institutions are different in size and nature, and nurses are confronted with different work tasks, working hours, and working conditions. Nurses are also understaffed and they encounter other stress related situations like the suffering and death of patients. Organizational factors also has contributory effect to occur of stressors. This include wok overload, completion among hospitals, nursing shortage, lack of task autonomy and feedback, as well as reduced advancement opportunities. Xianyu and Lambert (2006:148) add that major sources of stress for nurses include inadequate participation in decision making and inappropriate staff distribution. The other factors included ineffective communication channels, increased clinical demands and inadequate training.

Sarafino and Smith (2012:44) mention that there are certain incidences that could results in the occurrence of stress, and some are life events and daily hassles. Life events involve major happenings that may occur in a person's life that require some

degree of psychological adjustment for example changing jobs, quarrels at work, death of a close relative or friend. Daily hassles include lesser events that quite likely come to mind, for example bills, deadlines, loss of a wallet, injustice or a loud party next door. This is supported by Folkman (2011:17) who states that traumatic experiences such as witnessing death, severe bodily injury or natural disaster like tornadoes can result in stress. Individual traumas such as rape or car accidents could also lead to stress. Ongoing problems in the organisation such as unresolved conflicts, threats, under rewards and uncontrollable demands can cause stress among employees.

The study conducted by Bianchi (2009:741) showed that four major sources of stress for cardiovascular nurses were work conditions, personnel management, nursing care and coordination of units. The above sources of stress included the following aspects:

- Work conditions included infrastructure, environment, and participation in decision making.
- Personnel management included performance evaluation, staff distribution and education.
- Nursing included direct care provided by nurses in different units to the patient and their family.
- Coordination of units included management of staff and material resources to provide health-care.

Gibbens (2007:20) maintains that stress within the workplace can occur as a result of one or a combination of certain stressors in the organisation. They include stress caused by performing the job, stress occurring as a result of work relationships, and stress resulting from working conditions to which the individuals are subjected.

- Stress caused by performing the job: The stressors found within the work environment include factors such as heavy workload, lack of opportunity to grow, long and irregular hours, and lack of autonomy or insufficient involvement in decision making.
- Stress due to interpersonal relationship: The stressors occurring as a result of work relationships are poor communication, lack of support from colleagues or

supervisors, bullying and harassment at work, and poor management style by supervisors.

- Stress resulting from working conditions: Stress may result from the working conditions to which individuals are subjected. Condition such as overcrowding, organisational changes, and incidences such as armed robbery or killings at workplace can lead to stress of employees.

Sarafino and Smith (2012:42) indicate that jobs that require responsibility for people's lives can be stressful. Medical personnel experience heavy workload and deal with death frequently, and making a mistake can have dire consequences. Chang, Hancock, Johnson, Daly and Jackson (2005:58) add that role stress is associated with work environment factors like having little control in one's job, high job demands, and inadequate support by co-workers and management. Gibbens (2007:51) also mention that inadequate equipment, lack of expected advanced career and promotions are also sources of stress amongst nurses. Gibbs, Hamilton and Murphy (2010:839) concur that increased clinical demand, long hours, low staffing, and lack of support contribute to absenteeism, somatic complaints and health problems among health care workers

The other factors contributing to the development of stressors among professional nurses were described below according to their sources, namely individual and environment.

### **2.3.1 Individual**

#### **2.3.1.1 Type of personality**

According to Janjhua and Chandrakanta (2012:3), the difference in the response of the individuals to similar stressors under similar conditions and situations may be attributed to the personality of the individual. They further indicated that people belong to either one of the two basic type of personality, type A or B. Type A includes very ambitious, aggressive, always in a hurry, chronically high level of arousal and workaholic; and type B is the opposite. It was supported by stress tolerance of. People with type A personality have a higher competitive drive, are intensely ambitious, impatient, in continual state of tension and show extreme level of job involvement. Sarafino and

Smith (2012:66) define the main characteristics of type A personality as competitive achievement orientation, time urgency, hostility and vigorous vocal style. In contrast, type B consists of low level of competitiveness, time urgency, and hostility; and they tend to be more easy going and relaxed. Therefore, type A personality has difficulty in adjusting in certain lifestyle and as such they have higher levels of stress than type B personality.

Andrea (2008:159) identifies the behaviour patterns for type A personality as the following:

- Physical characteristic – loud voice, quick speech, psychosomatic activity and facial muscular tension;
- Attitude and emotion – hostility, impatient, anger and aggression;
- Motivation – high in achievement motivation, competitiveness and ambition;
- Behaviourally alert and high work involvement;
- Cognitive – they want to control the environment.

Type B personality is completely opposite, with high self- esteem, not hostile, and rarely brings tension to the environment. Therefore, people who exhibit type A behaviour pattern are believed to experience more stress.

#### **2.3.1.2 Self-efficacy and self-esteem.**

Straub (2007:184) defines self-efficacy as the belief that one can successfully perform specific behaviour including dealing with potentially stressful situations. Sadock and Sadock (2007:40) describe self-esteem as a measure of one's self-worth based on perceived success and achievements, as well as perception of how much one is valued by peers, colleagues, family members and society in general. Schultz and Schultz (2015:361) concur that self-efficacy refers to the belief in one's ability to accomplish a task and that it is a sense of how adequate and efficient we feel about coping with life's demands. Self-esteem refers to how we feel about ourselves. In the workplace the concept is referred to as Organizational Based Self-Esteem (OBSE). Individuals with low self-efficacy are more affected by job stress than those with high self-efficacy.

People who are low in OBSE are more affected by job stress than people high in OBSE. This is supported by Sanderson (20012:74) who mentioned that people who have a strong sense of self efficacy for a given behaviour are likely to exert considerable efforts to perform the behaviour. People with low self-efficacy have a greater physiological response to stressful situations, including higher heart rate and blood pressure than those with high self-efficacy.

#### **2.3.1.3 Negative affectivity**

According to Sanderson (2012:157) negative effect or neuroticism refers to the tendency of some people to experience negative emotions, such as distress, fear, shame, anger, guilt or nervousness often. People higher in negative affect have greater numbers of physical symptoms. Schultz and Schultz (2015:362) concur that people who measure high in negative affectivity are likely to experience distress and dissatisfaction in all areas of life. They focus on negative aspects of their experiences and dwell on their failures, weakness and shortcomings; people high in negative affectivity are likely to show a high level of stress.

#### **2.3.1.4 Pressure within an individual**

Sanderson (2012:97) caution that the individual's internal pressure can cause stress. This implies that stress can be caused by pressure within the individual, as there are many times that a person is torn between two different goals. Individuals experience some sort of conflict within themselves, namely approach – approach conflict, approach – avoidance conflict and avoidance – avoidance conflict.

- Approach – approach conflict: In this type of conflict, an individual is torn between wanting to do two desirable things that are incompatible, that is, they are contrary or oppose each other. The individual may experience stress when he does not know which goal to achieve.
- Approach – avoidance conflict: This is when one is willing to do something whereas he/she does not want the consequences or the after effects that could occur, for example, when one wants to eat food high in starch (approach) but also wanting to lose weight (avoid).

- Avoidance – avoidance conflict: Here the conflict occurs when an individual is expected to choose between two undesirable things, for example, choosing between chemotherapy (avoid) and radiation (avoid) to treat cancer could result in stress.

Researchers concluded that people who experience such conflicts have more depression and anxiety, as well as more psychosomatic complaints like headache, chest pain, and nausea. Sanderson (2012:97) further add that people also experience considerable stress when they are in a situation where they lack control. When people are exposed to uncontrollable events, such as a problem that cannot be solved thus causing loss of personal freedom, they feel distress.

#### **2.3.1.5 Sex differences**

. Schultz and Schultz (2015:363) indicate that women consistently report higher level of job stress than men do. Women employees report headaches, anxiety, depression, sleep disturbances and eating disorders more frequently than male employees do. However, women are far more likely than men to take advantage of social network to help them cope with stress. Straub (2007:113) concur that previous research studies revealed that on one large scale study, 23% of women and 18% of men reported experiencing significant stress. It was noted that many women today face a particular heavy daily workload because they have to handle not only an outside job, but also most of the chores at home.

## 2.3.2 Environment

### 2.3.2.1 Work environment

- **Role ambiguity and role conflict**

Schultz and Schultz (2015:369) indicate that role ambiguity and role conflict increase the level of stress on employees. Role ambiguity refers to the extent to which employees are unclear about what their job functions and responsibilities are supposed to be. Role conflict refers to when a person is torn by conflicting demands. It may occur in a job's requirements or between the job's demands and the employees' value and expectations. Gibbens (2007:151) adds that the research conducted showed that individuals that subjected to role ambiguity were at higher risk of job related strain, greater feelings of ineffectiveness and lower levels of self-confidence. Karimi, Omar, Alpour and Karim (2014:5) supported the citing that there is a positive relationship between role ambiguity and occupational stress. The nurses who are unaware of their objectives and goals are more of the risk of developing high stress. There is also a significant relationship between role conflict and occupational stress. The nurses who encounter different tasks simultaneously experience more stress.

- **Work overload**

The findings of the research study by Karimi, Omar, Alpour and Karim (2014:5) support the relationship between role overload and occupational stress. Nurses who work longer hours, more shifts, deal with more injured and dying patients, they feel more stress and tiredness. (Schultz & Schultz, 2015:367) concur that quantitative overload is the condition of having too much work to do in the time available. A person may be competent at a demanding job but frequent interruptions, time pressure, long hours and lack of appropriate rest can trigger stress reactions. Workload is an obvious source of stress and has been linked to coronary heart disease. Qualitative overload involves work that is too difficult. Having insufficient ability to perform a job is stressful. Straub (2007:108) adds that people who feel they have to work too long and too hard at too many tasks feels more stressed. They suffer more health problems and experience more accidents, than do other workers.

- **Organisation problems**

According to Schultz and Schultz (2015:368), employees who see change as a threat are more vulnerable to stress than those who see changes as exciting and challenging. Most employees resist change, preferring the familiar so that they know what to expect. Stressful changes may include a new supervisor, revised work, procedures, required training courses, younger skilled workers amongst others. Edward and Timothy (2012:42) caution that people could experience stress when they have little opportunity to learn new skills and to make decisions on their own. Workers get stressed when they feel they are being treated unfairly, as when they do not get the recognition they believe they deserve. Shirey (2009:36) concurs that the relationship with the physicians is cited as a potential source of stress. The disruptive behaviour of certain physicians results in nurses' disrespectful behaviour; this threatens the working relationship of nurses and doctors and it has implications on quality and safety of patient care.

### **2.3.2.2 Social environment**

According to Spector (2011:277), interpersonal conflict and poor relationship with others can lead to a variety of strains. Many studies indicate that people who live alone and who are not involved with other people or organisations are more vulnerable to a variety of stresses. They widely maintain that a support system facilitates better coping, rehabilitation and recovery. This is supported by Chang, Karen, Hencock, Johnson, Dally and Jackson (2005:58) who highlighted other factors that contribute to stress as low supportive relationships, uncooperative family members, and poor relationship with supervisors, co-workers and physicians. Sarafino and Smith (2012:43) add that the relative wealth versus poverty of a neighbour or peer is another important source of stress. Individual income and level of education could contribute to stress. People's perceived social status or rank in community can also influence stress.

### **2.3.2.3 Burnout**

Straub (2007:109) defines burnout as a job-related state of physical and psychosocial exhaustion that occurs among individuals who work with other people in some capacity. Burnout includes feelings of mental and physical exhaustion, increase in stress-related ailments such as headaches, backaches, depression and shortness of temper. Cooper

(2011:8); and Sarafino and Smith (2012:227) add that burnout is a state of psychosocial and physical exhaustion that results from chronic exposure to high levels of stress and little personal control. They further describe burnout according to its three dimensions, namely emotional exhaustion, depersonalization and inefficacy.

- Exhaustion is the central quality of burn-out, and it prompts actions to distance oneself emotionally and cognitively from one's work, presumably as a way to cope with work overload. The person feel drained of emotional resources, and is unable to help others on a psychological level.
- Depersonalization is an attempt to put distance between oneself and service recipients by actively ignoring the qualities that make one unique and engaging people. The individual develops lack of personal regard for others and then treats people as objects.
- Inefficacy refers to reduced personal accomplishment, and having low personal expectations for work performance.

#### **2.3.2.4 Life events**

According to Folkman (2011:18) life events are generally defined as major events that occur to individuals such as bereavement, divorce or job loss. They could increase an individual's susceptibility to stress-related illnesses. Sarafino and Smith (2012:46) concur that life events are major happenings that can occur in a person's life that require some degree of psychological adjustment. They include death of a close relative, change in financial state, change in responsibility at work, trouble with the supervisor, and changes in working hours. Most life events result in stress among individuals.

Rout (2000:306) reports that the other factors contributing to stress at work or home interface with social life, and that they include:

- Demand of job on social life or family life.
- Lack of support at home.
- Having too much work to do.
- Social interruption.

Sarafino and Smith (2012: 39) concur that marital strain and divorce can result in stress. When conflict in marriage becomes more frequent and severe, it may be the major source of stress. Divorce procedures may result in stress for members of the affected family as they deal with changes in their social, residential, and financial circumstances. They then add that people experience stress when they lose their jobs, or think they are likely to be fired at work.

#### **2.4 THE EFFECT OF STRESSORS ON THE WELLBEING OF PROFESSIONAL NURSES**

According to Abualrub and Al-zaru (2008:227) an increased level of stress can lead to high staff turnover, low quality of care, absenteeism and poor interaction with co-workers and family members. Gibbens (2007:25) adds that research studies conducted indicated that there is an adverse relationship between work-related stress and general health and wellbeing of individuals. Shirey (2009:2) states that stress contributes to rising health care cost, disability, and employee fatigue that worsen the nursing shortage and predispose to significant medical errors. Cooper (2011:202) indicates that some studies have detected evidence of a relation between long working hours and increased risk of occupational injuries and illnesses among workers in specific organisations. In one study involving the manufacturing sector, an increased risk of severe hand injuries was found in Hong-Kong factory workers working more than 115 hours per day.

Kaptein and Weinman (2010:127) show that exposure to stressors may have an effect on health related outcomes as indicated below:

- People exposed to a high level of stressors may report more symptoms, and may more often consult a health care professional, but most of the time they detect nothing.
- Exposure to stressors may facilitate the development of mental and somatic disease.
- There could be delay in recovering from diseases.

- The effect of medical intervention may be nullified as a consequence of exposure to stressors.
- The information processing capacity of the individual under stress may be affected, preventing a clear understanding of medical information, and it may result in lack of compliance to prescriptions.

#### **2.4.1 Physical consequences of stress**

Sarafino and Smith (2012:12) report that an increased level of stress affects people's health. A high level of stress is associated with high blood pressure and abnormally enlarged heart. Stress also negatively affects the metabolic system, including levels of insulin, cholesterol and other blood fats that may result in illness. They further add that stress lowers the immune system resulting in health conditions like common colds and herpes virus infections. The research has also shown that stressors are common triggers of migraine and tension headaches. Other conditions that are commonly associated with stress are ulcers, asthma, and eczema. Sanderson (2012:94) concurs that stress has a negative effect on the immune system of individuals. The study conducted showed that on the days in which people experience more positive events, their bodies produce more antibodies; whereas on the days with more negative events, their bodies produce few antibodies. This implies that when individuals are happy, more antibodies are secreted to fight the diseases, and when they are stressed, few antibodies are secreted, resulting in a low immune system. The experience of stress can even lower the rate of wound healing.

Monstaka, Theodoros and Constantinidis (2010:212) state that the physical problems commonly associated with stress include dizziness, nausea, muscular weakness, migraine, headache, hypertension, faintness, acne, allergies, chest pain, diarrhoea, difficulty in breathing, constipation, backache, coronary heart disease, eye condition, enuresis, and asthma. Sarafino and Smith (2012:174) caution that negative emotion affects eating and weight gain. Evidence indicates that stress can induce eating, and thus many people claim to eat more when they are anxious or upset. The food that people eat when they are stressed, tend to be sweet and high in fat, that is, 'comfort

food'. All these can lead to overweight and obesity. Sanderson (2012:124) concur that people who are experiencing stress engage in numerous behaviours that can impair their health. This include eating junk food, smoking cigarettes, drinking caffeine, staying up late or skipping exercise. People exposed to stress may engage in more reckless behaviour and more substance abuse.

#### **2.4.2 Psychological consequences of stress**

Sarafino and Smith (2012:12) indicate that stress can affect behaviour, which in turn, can lead to illness or worsen an existing condition; for example, people with high stress are more likely to eat a high fat diet and drink more alcohol. They further show that stress can cause poor concentration and attention that could lead to errors at work and accidents. Sanderson (2012:125) mentions that stress can lead to cognitive problems as it impairs people's memory and attention. Individuals could end up making poor impulsive decisions. Stress can lead to a variety of negative emotions such as fear, anxiety, and sadness. In extreme stressors like war or severe assault, posttraumatic stress disorder can occur. Gibbens (2007:26) concur that the mental health problems commonly associated with stress include psychosomatic disorder, tension, depression, irritability, low self-esteem, anger, psychological fatigue, syndrome, psychotic reaction, suicide, low-concentration, reduced production at work, insecurity and withdrawal. Klaasen (2013:21) adds that chronic stress from long working hours has been reported to cause sleeplessness in workers. Sleep deprivation in turn has been shown to impair alertness, attention, and vigilance necessary for quality decision making.

#### **2.4.3 Stress reactions**

Straub (2007:84) caution that the body's overall reaction to stress is regulated by the central nervous system (CNS). The nervous system consists of two parts, namely the central nervous system and the peripheral nervous system. The peripheral nervous system is divided into autonomic nervous system (ANS) and the somatic nervous system. The ANS is finally divided into sympathetic nervous system (SNS) and parasympathetic nervous system (PNS). The SNS plays a major role in stress reaction. Kaptein and Weinman (2010:125) further mention that stress reactions can occur if an

individual appraises a situation as a potential threat. Stress reactions can occur at each of the following four levels:

- **The physiological level**

Exposure to a threatening situation may induce fight or flight reaction, characterized by increased activation of the sympathetic nervous systems, and that results in increased heart rate and elevated blood pressure. Conservative – withdrawal reaction occur which is the opposite of fight or flight reaction. The individual would feel helpless, become passive and the heart rate slow down. At this level there may be activation versus depression.

- **Emotional level**

There could be feelings of helplessness, frustration, fear, depression, anger and anxiety. In other situations guilt, denial and shame may occur.

- **Cognitive level**

At this level, the individual may experience poor concentration, forgetfulness and worrying. Performance disruption, repetitive or morbid thought, and flashback of bad experiences may occur.

- **Behavioural level**

The last level includes a wide variety of reactions, including crying, smoking, social withdrawal, use of alcohol and drugs, absenteeism and aggression. These behaviours may have damaging effects on a person's physical wellbeing.

#### **2.4.4 Models of occupational health**

Michie and Abraham (2008:256) describe model of occupational health showing the effects of stressors on the individuals. The model of occupational health includes the demand – control model and effort reward model.

- **Demand – control model**

The model proposed an interaction between work demand (for example, pressure) and job control (for example, skill utilization). Those in high demand –low control working conditions, will be more susceptible to work – related ill health including stress. This model indicates that low social support increases strain, and a combination of high demand, control, and support increases motivation and learning

- **Effort reward model**

This model is based on the imbalance between effort put into work and rewards received. Rewards could include esteem, money, certificates, or career opportunities. A large imbalance, that is, an individual's high effort for little reward, results in increased occupational ill health and stress.

## **2.5 MEASURE OF MANAGEMENT OF STRESS BY PROFESSIONAL NURSES**

Sarafino and Smith (2012:91) indicate that stress management refers to any programme of behavioural and cognitive techniques that is designed to reduce psychological and physical reaction to stress. Fink (2007:539) states that coping encompasses cognitive and behavioural efforts to reduce or adapt to stressful conditions and associated emotional distress. Sanderson (20012:128) and Straub (2007:118) then describe coping as an individual's effort to manage the stressful demands of a specific situation. The coping strategies are categorized as either problem-focused or emotion-focused. Problem- focused coping is used to deal directly with the stressful situation either by reducing its demand or by increasing the capacity to deal with the stressor, while the emotion-focused coping is focused on managing the emotional effect of a stressful situation. The strategies put in place in support of the professional nurses to cope with stressful situations, and the measures used by professional nurses in the management of stress, are described below.

### **2.5.1 The strategies put in place in support of the professional nurses to cope with stressful situations**

Lambert and Lambert (2008:40) define coping as a constantly changing cognitive behavioural efforts to manage internal and/or external demands that are appraised as taxing or exceeding the resources of the person. They add that coping activities may be problem-focused or emotion-focused. Problem-focused coping activities are directed externally and involve attempts to manage or change the problem causing the stress. They include problem solving activities, recognizing one's role in solving a problem and confronting the situation. Emotion-focused coping activities are internally directed and it involve attempts to alleviate emotional distress. They include wishful thinking, avoidance of confront behaviour, and detachment from the situation. Individuals could use both problem-focused coping and emotion-focused coping when dealing with stress-full situations. The other coping strategies include confront coping, distancing, self-control, seeking social support and positive reappraisal

Fink (2007:539) concurs that coping strategies are divided into the following:

- Coping strategies that are orientated towards approaching and confronting the problem. Nurses in this category tend to adapt better to life stressors, because they rely on problem solving and information seeking.
- Coping strategies that are orientated towards reducing tension by avoiding dealing directly with the problem. Nurses in this category will present more psychological distress as they use avoidance approach such as denial and wishful thinking.

Akbar, Elahi, Mohammadi and Khoshknab (2015: 60) mention that coping reaction to stress include activities in the social and spiritual side of human, and thus it is considered as calming and stabilising agent which may help individual in maintaining their mental peace during stressful events. They further add that people who take problem-based coping strategy to reduce stress are able to show better performance than those who adopt defensive- sensitive strategies. Biachi (2009:742) add that other coping strategies are accepting responsibility and plan-full problem solving; and having confidence, sense of humour, religious or spiritual convictions.

HBD Guide (2014:1) identifies important aspects for defeating stress as the following:

- Cut yourself some slacks: The employees should avoid dwelling on their mistakes, failures and weaknesses; they should just learn from their mistakes and then to look forward and succeed.
- See the bigger picture: When faced with a mountain of tasks, draw energy and motivation, by thinking about the greater purpose and positives results that will follow their achievements.
- Rely on routines: Use routines and guidelines to reduce the number of decisions you need to make. You need to focus your decision-making energy.
- Do something interesting: When feeling tired of doing a certain task, refresh and do something you can enjoy, for example listening to music.
- Add when and where to do to your list: Add a specific when and where on your list. Planning reduce stress.
- Articulate your desired response: Make an if-then plan that links your desired response. Whatever thoughts or action work for your, make them part of your if-then plan.
- Focus on improving not perfecting: focus on performing jobs successfully and improving where necessary, do not strive for extraordinary.
- Appreciate the progress that you have already made: Do not be hard on yourself when certain projects are incomplete, appreciate the efforts and progress that you have made and continue further.
- Know what motivates you to perform successfully: People have different ways of motivating themselves for performing jobs successfully, thus you should know your motivations. These may include setting goals or a time-frame, having positive role models or reading motivational materials.

#### **2.5.1.1 Controlling the organisational climate**

Klassen (2013:11) indicates that a healthy work environment for nursing practice is necessary for maintaining an adequate nurse workforce, and also for promoting quality patient care and safety. Schultz and Schultz (2015:375) concur that the organisation

should produce sufficient support to enable employees to adapt to changes. The employees should be allowed to participate in decisions about changes at their workplace. Participation may enabled them to accept change and allows them to express their opinions, thus preventing or reducing stress.

#### **2.5.1.2 Defining employee's roles**

According to Schultz and Schultz (2015:375), it is necessary for managers to tell their subordinates clearly what is expected of them and what their job responsibilities are to prevent role ambiguity. Freedom to participate in decision making as well as having control over certain aspects of their task plan, could contribute to the employees increased level of self-esteem and job satisfaction.

#### **2.5.1.3 Eliminating work over-load and work under-load**

Schultz and Schultz (2015:375) maintain that work over-load and work under-load can be eliminated by appropriate employees' selection and training programmes, equitable promotion decisions, fair distribution of work, and proper matching of job requirements with employees' abilities. Major problems can also be avoided if symptoms of stress are identified early.

#### **2.5.1.4 Use of cognitive-behavioural therapy**

According to Sadock and Sadock (2007:827) cognitive-behavioural therapy methods are also used to help individuals better manage their responses to stressful life events. The therapy approaches to stress management have the following aims:

- To help individuals to become more aware of their own cognitive appraisal of stressful events
- To educate individuals about how their own cognitive appraisals of stressful events can influence negative emotional and behavioural response
- To teach individuals how to develop and maintain the use of variety of effective cognitive and behavioural stress management skills.

#### **2.5.1.5 Providing stress-management programmes**

Schultz and Schultz (2015:376) indicate that Employee assistance programmes are necessary for teaching individuals stress control and inoculation techniques such as relaxation, biofeedback and so forth. A study was conducted in Netherlands, where 130 employees participated in stress-management training programme. The results included significant reduction in anxiety and psychological distress and improvement in assertiveness. Sadock and Sadock (2007:828) add that effective problem solving by the individuals is very important in coping with stressors. The clients should try to apply the best solution to the problem situation, and then review their progress.

According to Omodona (2010:46), the findings of the research study on 'Stress management for professional caregiver', revealed that leadership has an essential role to play in the reduction of work-related stress. The managers should implement stress education and other management strategies. This can be done through team building strategies, balancing priorities, enhancing social and peer support, and adopting strategies to build commitment. This is supported by Shirey (2009:8) who states that managers can significantly reduce stress, increase communication, and strengthen collaboration, to enhance elements of the work environment conducive to job satisfaction and patient safety.

#### **2.5.1.6 Providing for social support**

Sarafino and Smith (2012:53) mention that social support refers to comfort, caring, esteem, or help available to a person from other sources such as other people, person's spouse, friends, doctors or community organisations. Sanderson (2007:137) cautions that people who receive support from friends and family may possibly cope with stressful events, and may therefore see these stressful events as non-significant. Harris, Winkowski and Engdahl (2007:150) add that social support has a direct effect on the degree of stress or strain experienced by an individual. They further highlight that it includes a variety of interpersonal behaviours among workers that enhance individuals' psychological or behavioural functioning. They note that workplace social support is positively predictive of job satisfaction and other positive outcomes. Schultz

and Schultz (2015:375) maintain that social support network can reduce employees' vulnerability to stress effects. Organisations can enhance social support by promoting united work groups, by training supervisors to show empathy and concern for subordinates and by inviting motivational speakers. Sarafino and Smith (2012:53) show that social support also provides for basic functions as indicated below:

- Emotional or esteem support – by conveying empathy, caring, concern, encouragement, comfort and reassurance.
- Tangible or Instrumental support – this involves direct assistance that includes helping with something in times of need, giving or lending money, helping to get a job or to get a new house.
- Informational support – this includes giving advice, direction, suggestions, or feedback about how the person is doing.
- Companion support - this aspect includes availability of others to spend time with the person, acceptance in a group of people who share positive interest and social activities.

According to Taylor (2008:266), social support contributes to physical health, and may therefore reduce health care costs. The health benefits of a supportive organisational environment are identified by Taylor as follows:

- Women with social support at work experience fewer complications during pregnancy and child birth.
- People who feel supported in their work environment are less likely to experience a heart attack.
- A supportive work environment is helpful in combating adverse effects of stress.
- People are less likely to appraise potential stressful events as threatening if they are in a supportive work environment.
- A socially supportive culture in ways that improve a worker's mental and physical health and reduce mental and physical health disorders, especially stress.

Hauck, Snyder and Cox - Fuenzalida (2008:116) mention that social support changes the perceptions of stressors in such a way that strains is reduced. As such, social support is regarded as the most known situational variable that has been proposed as potential buffer against job stress. This was supported by Klaasen (2013:53) wherein the research findings revealed that social support has a positive effect on the degree of strain or stress experienced by individuals, and that social support also reduces the degree of strain regardless of the level of stressors being experienced.

#### **2.5.1.7 Time management**

According to Sadock and Sadock (2007:828), time management methods are designed to help individuals restore a sense of balance to their lives. The individuals should write a programme of how they spend their time each day, noting important aspects like work, family, exercise, leisure and others. Alternatively, the individuals may list the important areas in their lives. They should estimate the amount of time spent on important activities, and the amount of time that they would like to spend on those activities. By doing so the individuals become aware of any differences, and they will become motivated to make changes. They may then improve in their time management and thus stressors will be reduced.

#### **2.5.2 The measures used by professional nurses in the management of stress**

There are several individual techniques for dealing with stress; some can be taught in the organisation-sponsored Employees Assistance Programme (EAP) or Stress Reduction programmes, others can be adopted personally. Some important measures used by individuals in the management of stress are described as follows:

##### **2.5.2.1 Breathing exercise**

Breathing exercise reduces stress. Breathing helps remove waste material from the blood and clears thinking. Poorly oxygenated blood may contribute to fatigue, mental confusion, anxiety, muscular tension and depression. Deep breathing can lower blood pressure, release muscle, and clear minds. Breathing exercise includes awareness of breathing, deep breathing and alternate-nostril breathing

### **2.5.2.2 Humour**

Sanderson (2012:135) indicates that having a sense of humour can lead to improved physical health. Research conducted showed that after the students had watched various funny videos, they showed improvement on how functioning of their immune system. Using humour like laughing or joking as a coping mechanism is also associated with lower blood pressure. Straub (2007:140) adds that laughter and sense of humour help many people cope with stress.

### **2.5.2.3 Relaxation technique**

- **Progressive muscle technique**

Schultz and Schultz (2015:377) maintain that muscular tension increases the feeling of anxiety, and deep muscle relaxation decreases physiological tensions and blocks anxiety. In progressive relaxation, the clients are taught to concentrate on one part of the body after another, systematically tensing and relaxing the muscles. They then focus on the sensation produced by the relaxed state. Progressive relaxation can be practiced while lying down or sitting in a chair. Sanderson (2012:134) concur that progressive muscle relaxation helps patients learn to distinguish states of tension from states of relaxation, thereby helping them learn how to calm themselves in any stressful situations.

- **Meditation**

According to Sarafino and Smith (2012:97) meditation is the practice of yoga that was promoted by 'Maharish Mahash Yogi' as a means of improving physical and mental health and reducing stress. Meditation is a practice of sitting or reclining comfortably and quietly with eyes closed for 10 to 20 minutes using a mental focus to quiet the mind, thereby quieting the body. Meditation is a kind of self-discipline that helps one to achieve inner peace and harmony by focusing uncritically on one thing at a time, for example sound, word or phrase. Meditation decreases anxiety, depression, aggression and irritability, and increases self-esteem and emotional stability

- **Autogenic training**

Autogenic training is used across the country in reducing stress and teaching self-regulation on the autonomy of the autonomic nervous system. The technique is usually practiced by focusing self-suggestions of warmth and heaviness in specific muscle groups throughout the body. It can be done for 30-60 minutes, but limited positive results can be experienced even when done for 5 minutes. Autogenic relaxation can reduce tension headaches, hyperventilation, hypertension, smoking, addictions, alcoholism, sleep disorder, pain, anxiety, irritability, and fatigue (Schultz & Schultz 2015:377).

#### **2.5.2.4 Biofeedback**

According to Sarafino and Smith (2012:97), biofeedback is a technique on which an electro mechanical device monitors the status of a person's physiological process, such as heart rate or muscle tension, and immediately reports that information back to the individual. Biofeedback is a technique for gaining conscious control over involuntary bodily changes and functions such as blood pressure, heart rate or muscle tension. Biofeedback technique is based on control of the function to a degree, once thought impossible. It is based on giving continuous feedback about the result of each conservative attempt at control. Biofeedback is necessary for treatment of tension or migraine headaches, insomnia, hypertension, anxiety and phobias.

#### **2.5.2.5 Nutrition**

Sarafino and Smith (2012:177) caution that research has clearly demonstrated that obesity is associated with developing hypertension, high cholesterol level, and heart disease. Obese people tend to have low self-esteem that could result in stress. Therefore following nutrition advice leads to normal weight and improvement in self-esteem thus reduction in stress level. A healthy well balanced diet containing proper nutrition is also necessary to help cope with stress. It is important to control weight. Over-weight may result in a heart attack, hypertension and low self-image that may result in stress. Individuals that eat properly, feel good about themselves.

#### **2.5.2.6 Cognitive-behavioural therapy**

Sadock and Sadock (2007:827) indicate that cognitive-behaviour therapy is useful to combat stressful life events. Cognitive-behavioural therapy approaches to stress management have the following aims:

- To help individuals become more aware of their own cognitive appraisals of stressful events
- To educate individuals about how their appraisals of stressful event can influence negative emotional and behavioural responses
- To teach individuals how to develop and maintain the use of a variety of effective cognitive and behavioural stress management skill

#### **2.5.2.7 Religion**

Sanderson (2012:137) showed that religion plays an important role in the lives of many people. People who are involved in religion experience better psychological and physical health. Religious involvement is associated with lower levels of heart rate, stroke and suicide. Many people use religion as a way of coping with potential stressful events like marital problems, financial problems, domestic violence and other issues.

#### **2.5.2.7 Exercise**

Sarafino and Smith (2012:89) indicates that exercise plays a major role in releasing physical tension; lifts one out of an emotional sink, and provides time to plan solutions. Exercise can help individuals to have strength to cope. Exercise boosts individual self-esteem, and therefore may become more stress resistant. add that people who exercise often report less anxiety, depression and tension in their lives than people who do not exercise, therefore they would unlikely develop stress.

## **2.6 SUMMARY**

This chapter discussed the literature review on stress management by professional nurses. Specific attention was given to factors contributing to stress, the effect of stress, and the management of stress by nurses, preferably professional nurses. The nurses were said as having work overload, lacking support and dealing with death and dying of

patients. The nurses ended up having poor interaction with others, absent from work and rendering poor nursing care. Management of stress included regular support, improved communication and counselling. Following this chapter, research design and methodology was described.

## CHAPTER 3

### RESEARCH DESIGN AND METHODOLOGY

#### 3.1 INTRODUCTION

In chapter 2 literature conducted by other researchers on similar investigations was described. This chapter outlined the research design and methodology used in the study. According to Rayasekar, Philominathan and Chinnathambi (2013:5), research methodology is a systematic way to solve a problem. It is the procedure by which researchers describe and explain phenomenon. Polit and Hungler (2008:233) concur that methodology refers to ways of obtaining, organizing and analysing data. Burns and Grove (2005:216) further maintain that methodology decisions depend on the nature of research questions and that methodology in research can be considered to be the theory of correct scientific decisions. In this study, methodology referred to how the research was conducted and its logical sequence. The main focus of this study was to identify stress management by the professional nurses. The research approach was quantitative.

This chapter described the following aspect, quantitative, explorative descriptive research design; population and sampling of hospitals and professional nurses; data collection instrument; data collection process; the validity and reliability of the instrument; ethical consideration of the study; limitation of the study; and the data analysis.

#### 3.2 RESEARCH QUESTIONS

In order to guide the research study, the researcher generated the following questions:

- What are the factors contributing to stressors among professional nurses in the hospitals of Vhembe district in Limpopo province, South Africa?
- What are the effects of stressors on the well-being of professional nurses in the hospitals of Vhembe district in Limpopo province, South Arica?

- How are the strategies put in place in support of the professional nurses to cope with stressful situations in the hospitals of Vhembe district in Limpopo province, South Africa?
- How are the measures used by professional nurses in the management of stress in Vhembe district of the Limpopo province, South Africa?

### **3.3 PURPOSE OF THE STUDY**

The purpose of the study was to identify and describe factors contributing to stressors among professional nurses, the effects of stressors on the well-being of professional nurses, and the management of stress by professional nurses in the hospitals of Vhembe district in Limpopo province, South Africa.

### **3.4 OBJECTIVES OF THE STUDY**

To achieve the purpose of this study, the researcher achieved the following objectives:

- To identify and explore the factors contributing to stressors among professional nurses in the hospitals of Vhembe district in Limpopo province, South Africa;
- To explore and describe the professional nurses' 'perceived' effects of the stressors on their well-being;
- To identify and describe the strategies put in place in support of the professional nurses to cope with the stressful situations in the hospitals of Vhembe district in Limpopo province, SA;
- To identify the measures used by professional nurses in the management of stress in the hospitals of Vhembe district in Limpopo province, South Africa;
- Based on the findings, to draw recommendations that could be added to the body of knowledge in the prevention and management of stress by professional nurses.

### 3.5 RESEARCH DESIGN

According to Fink (2014:55) research design refers to the way in which its subjects or participants are organised and measured, it the overall plan guiding the researchers how data should be collected and analysed, ensuring validity of the study. Frazer, Cooper and Nolte (2010:66), maintain that the researcher's understanding of the issue relating to the design will demonstrate the approach that will seek to answer the research questions. Burns and Grove (2007:211) further indicated that designing a study helps the researcher to plan and implement the study in a way that will help them obtain the intended results.

The design employed in this study was quantitative, descriptive, and explorative in nature, it identified and described the management of stress by professional nurses in the hospitals of Vhembe district in Limpopo province, South Africa. The well designed questionnaires were used to collect data from sampled professional nurses. The participants consisted of a sample of professional nurses who were on duty on the days data was collected in the four sampled hospitals, namely Siloam, Elim, Donald Frazer and Hayani hospital in September 2015. The dimension of the research design used were discussed below, the quantitative, descriptive, and explorative research.

#### 3.5.1 Quantitative research

According to Burns and Grove (2007:26), quantitative research is a formal, objective, systematic process in which numerical data are used to obtain information about the world. Quantitative research is used to describe variables and determine the relationship between variables. Brink (2008:11) further indicates that a quantitative research focuses on a relatively small number of concepts that is concise and use structured procedures and formal instruments to collect information. It is usually this is done under conditions of control and the information is analysed using statistical procedures. In this study, data was collected from sampled professional nurses using a well-designed questionnaire. The quantitative data collected was analysed. The researcher together with the statistician used frequency tables and graphs to analyse and interpret data.

### **3.5.2 Explorative research design**

According to Polit and Beck (2008:20), explorative research design explores and gathers information on what factors are related to a phenomenon and studied it in order to answer the research question. Burns and Grove (2007:3) concur that explorative research is conducted to gain new insight, discover new ideas and or increase knowledge of a phenomenon.

In this study, the topic was explored and the information relevant to the study gathered. The researcher gained new insight and discovered new information on the management of stress by professional nurses in the hospitals of Vhembe district in Limpopo province, South Africa.

### **3.5.3 Descriptive research**

Walliman (2011:10) indicated that descriptive research attempts to examine situations in order to establish what is in the norm. It refers to research studies that have as their main objectives, the accurate portrayal of the characteristics of persons, situations, or groups. This is supported by Brink (2008:102) who stated that descriptive design is used in studies where more information is required in a particular field through the provision of a picture of the phenomenon as it occurs naturally. It describes the variables in order to answer the research question.

In this study descriptive design was adopted, and it therefore identified and described the management of stress by professional nurses in the four sampled hospitals of Vhembe district in Limpopo province, South Africa.

## **3.6 RESEARCH SETTING**

Burns and Grove (2007:325) describe a research setting as an environment in which the research study takes place, and can be a natural or controlled environment. Natural settings are real life study environments without any changes made for the purpose of the study.

The study was conducted in the four sampled hospitals of Vhembe district in Limpopo province, South Africa, namely Elim, Hayani, Siloam, and Donald Frazer hospital, in their different wards.

### **3.7 RESEARCH METHODS**

Polit and Beck (2008:188) indicated that a research method includes steps, procedures and strategies for gathering and analysing the data in a research investigation. Population and sampling of this study will be discussed below.

#### **3.7.1 Population and Sampling**

##### **3.7.1.1 Target population**

According to Burns and Grove (2007:43), research population includes all elements that meet certain criteria for inclusion in a study. Brink (2008:123) concurs that population is the entire group of persons or objects that meet the criteria that the researcher is interested in studying. The target population of this study was all professional nurses employed at Vhembe district, that were at work on the day and time on which the researcher visited the four sampled hospitals, namely Siloam, Donald Frazer, Hayani and Elim hospital.

##### **3.7.1.2 Sampling and sampling methods**

Brink (2008:124) defines sampling as the researcher's process of selecting the sample from a population in order to obtain information regarding a phenomenon. The sample then represents the population of interest. Burns and Grove (2007:43); Polit and Hungler (2004:290) further indicate that sampling is a subset of population selected to participate in a research study. It refers to the selected groups of elements, that is, individuals, groups or organisations. The sample is chosen from the study population that is commonly referred to as the 'target population'. Jooste (2010:302) state that sampling is a process whereby the participants are selected from the target population.

Brink (2008:126) describes two sampling approaches, namely probability sampling and non-probability sampling. Probability sampling implies that the sample is much more

likely to be representative of the population, and all elements of the population have an equal chance of being included in the sample. Leedy and Ormrod (2010:205) concur that in probability sampling, the components of the sample are chosen from the larger population by random selection process, therefore every element in the population has an equal chance of selection in the sample. Brink (2008:132); Walliman (2011:96) indicate that non-probability sampling may not accurately represent the population, the extent of sampling error cannot be estimated and bias may be present. The sampling elements are chosen from the population by non-random method, therefore not all elements of the population have an opportunity for selection in the sample.

In this study probability sampling and non-probability sampling were used. Probability simple random sampling was used to sample the hospitals, and non-probability convenience sampling was used to sample professional nurses in the four sampled hospitals.

#### **3.7.1.2.1 Sampling method for hospitals at Vhembe district**

Simple random sampling was used in this study. In simple random sampling the elements are drawn in a random simple way from the sampling frame. Every element of the population has an equal chance of being selected. Simple random sampling is easy when the population is small and all its elements are known (Brink 2008:128; Leady & Ormrod 2010:207)).

In this study a list of all hospitals at Vhembe district was obtained from the Department of Health at Vhembe district of Limpopo province. The total of all the hospitals at Vhembe district of Limpopo province are eight (8), they are Elim, Musina, Louis Trichardt Memorial, Siloam, Tshilidzini, Hayani, Malamulele, and Donald Frazer hospital. The required sample size of the research study was four hospitals. The researcher wrote the names of eight hospitals on slips of papers and placed them in one container (bowl). The researcher shook the bowl and drew a slip, noted the names of the hospital on the slip, and replaced the slip. She shook the bowl again and repeated the process until the names of the four hospitals were obtained. The

researcher noted that each slip has been replaced after each selection to ensure that every hospital had an equal independent chance of being selected each time. When the hospital was selected twice, the researcher ignored the duplicate and repeated the process until she had the required sample of four hospitals. The four selected hospitals were Elim, Hayani, Siloam and Donald Frazer hospital.

#### **3.7.1.2.2 Sampling method for professional nurses at four sampled hospitals**

Convenience sampling was used in this study. Convenience is the most readily available or the most convenient grouping of the people for the sample. Nurses were included in the sample because they happen to be at the right place at the right time Brink (2008:132).

In this study convenience sampling was used to select a sample of professional nurses at the sampled hospitals, who meet the eligible criteria for the study. The four sampled hospitals listed above had a total of 553 professional nurses, Siloam hospital has 120 professional nurses, Elim hospital has 154 professional nurses, Donald Frazer has 117 professional nurses and Hayani hospital has 162 professional nurses. The required sample size for professional nurses was 120, 30 from each of the sampled hospitals. The convenience sample of this study consisted of 30 professional nurses per hospital, who were on duty the day the researcher visited the hospital to collect data, that is, who completed the designed questionnaires. The researcher visited the hospitals on the days when the professional nurses were many, on Tuesday, Wednesday, or Thursday depending on the hospital. The researcher obtained consent to conduct research study from the following:

- Department of Health at Limpopo province and Vhembe district;
- Chief executive officers and nurse-managers of the sampled hospitals;
- Operational managers of the wards;
- The sampled professional nurses.

The researcher made arrangement and distributed questionnaires to at least 30 professional nurses in the different wards of each of the four sampled hospitals, who were on duty on the day she visited the hospitals, and who meet the eligible criteria for

the study. The 30 professional nurses per hospital completed the questionnaires. The researcher visited the four sampled hospitals on different days, and a total of 120 professional completed the questionnaires as arranged.

#### **3.7.1.2.3 Inclusion criteria**

The sampled professional nurses met the inclusion criteria for the study. The inclusion criteria are the qualities or criteria for including a participant in the study (Polit & Hungler 2008:290). The respondents included in this study had the following qualities:

- A professional nurse
- Be employed at the sampled hospitals of Vhembe district in Limpopo province, South Africa
- Having at least two years of experience working as a professional nurse
- A male or female professional nurse aged between 25 – 60 years.

#### **3.7.1.2.4 Exclusion criteria**

Polit and Beck (2008:71) indicate that exclusion criteria are characteristics that exclude a population from the study. To be excluded in this study, the respondent was:

- A professional nurse below 25 years
- A professional above 60 years
- Be a professional nurse employed at the districts in Limpopo province, SA
- A professional nurse who did not consent.

#### **3.7.2 Data collection instrument**

Polit and Beck (2008:755) define an instrument as a device that is used to collect data, such as questionnaire or a test and interview schedules. Brink (2008:142) maintains that the researcher must use a research instrument to gather the data. The research instruments vary, and the researcher may use one type or more, they include interview, observation, recording, measuring, questionnaires and others.

In this study questionnaires were used to collect data from the sampled professional nurses in the four sampled hospitals of Vhembe district in Limpopo province, SA. Burns and Grove (2005:426) indicate that questionnaire refers to a printed self-report form

designed to elicit information and is developed with specific items to assist with the data collection. Brink (2008:146) concur that questionnaires are self-reporting instruments, where the participants write their answers in response to printed questions on the document, it is a set of questions on a form which is completed by the respondents in respect of a research project. In this study the questionnaire was prepared in English. A closed-ended computer coded questionnaire was used. The final questionnaire was discussed with the researcher's supervisor and statistician. The questionnaire consisted of five sections namely demographic details, nature of stress, effects of stressors, available support systems and important strategies to be utilised.

#### **3.7.2.1 Development of questionnaire**

Meyer, Naude, Shangase and Van Niekerk (2011:14) indicate that the researcher can use either open-ended, closed-ended or both. Open-ended questions are used when variables are unexplored or unknown to the researcher, and enable the researcher to explore the variables better, closed-ended questions make it possible for the participants to choose from the variables included according to the instruction of the research. The participants usually understand the meaning of closed-ended questions better and questions are answered within the same framework, thereby making it easier to compare the responses. In this research study the questionnaire was designed and developed after an in-depth literature review. Meyer et al (2011:385) maintain that certain principles are to be followed in order to ensure a quick and complete response when using a questionnaire:

- Decide on the type of information needed for the research.
- Even though necessary information should be gathered, the questionnaire should not take too much of the participant's time.
- Questions should be relevant to the research.
- Questions and alternatives for answering should not show any bias from the researcher.
- The format of the questionnaire should be on the level of the participants and sentences should be clear and brief.

The questionnaire was developed in consultation with the supervisors of the study and the statistician of the University of Venda. They critically reviewed and verified the interpretations of the questions in the questionnaire before finalizing it. The questionnaire was also evaluated by experts in the research unit under the Department of Health at the regional and provincial levels. The developed questionnaire has close-ended questions. The questionnaire met the objective of the research study, and was related to the research questions. The well designed questionnaire was simple to read and respond to, and was brief with only relevant essential information.

#### **3.7.2.2 Structure of the questionnaire**

In this study, the questionnaire had structured closed-ended questions. The questionnaire was developed in relation to the research questions and the objectives of the research study. The questionnaire therefore consisted of five sections namely: SECTION A: Demographic details of the professional nurses, SECTION B: Factors contributing to the development of stress, SECTION C: Effects of stressors, SECTION D: Available support system to cope with stressful situations and SECTION E: Strategies to be utilized in the management of stress. The questionnaire had clear instructions on how the researcher wanted participants to respond to those closed-ended questions. The researcher developed the questionnaire in such a way that it needed to be evaluated by both checklist and rating scale.

#### **3.7.2.3 Rationale for using a questionnaire**

In this study questionnaires were used to collect data from sampled professional nurses in the four sampled hospitals of Vhembe district in Limpopo province, SA. Wallingman (2011: 97) indicates that questionnaires are a suitable tool for gaining quantitative data, it has structured format, and is easy and convenient for respondents. Participants feel a great sense of anonymity and are more likely to provide honest answers. (Brink, 2008:147) supported that the format is standard for all participants, and is not dependent on mood of the researcher. Polit and Hungler (2004:262) maintain that questionnaires can be distributed to a large number of participants simultaneously.

#### **3.7.2.4 Advantages of self-administered questionnaires**

According to Oppenheim (2005:103), self-administered questionnaires ensured a high response rate and accurate sampling as the researcher could be nearby. The researcher could provide necessary explanations if respondents experience some difficulties. Meyer et al (2011:302) added that in a self-administered questionnaire, the information is easy to tabulate, it is inexpensive to administer, and confidentiality is maintained. In this study, the researcher collected data. She administered well developed questionnaires to the sampled professional nurses in the four sampled hospitals of Vhembe district in Limpopo province, SA.

#### **3.7.2.5 Pre-testing of the instrument**

According to Leedy and Ormrod (2010:196-197), the researcher should conduct a test run of newly designed questionnaires to make sure that the questions are clear and will effectively solicit the desired information. A pre-test is a method used to test the instrument of a proposed study in order to refine the research tool before the actual study is commenced. Polit and Hungler (2008:264) maintain that pre-testing involves the trial administration of a newly developed instrument in order to identify flaws as well as time that will be required. The rationale for pre-testing the research instrument was to:

- Determine reliability and validity of the research instrument
- Identify gross inadequacies before doing the full scale study.
- Determine the feasibility of the sampling method.
- Detect unforeseen problems and flaws.
- Acts as a miniature trial run of methodology planned for the main study.
- Eliminate bias as far as possible.
- Evaluate the questionnaire for clarity of questions, effectiveness of the instruction completeness of the instruction, and completeness response set.

In this study pre-testing of an instrument was therefore an important step in the research process. After development of the research instrument, the research

instrument was submitted to the categories of people. Four professional nurses from four different wards at Siloam hospital of Vhembe district

After the pretesting and further discussion, problems that were identified were clarified and corrected to improve comprehension. All professional nurses who participated in the pre-testing were excluded from participating in the actual study.

### **3.7.3 Validity and Reliability of the instrument**

For the research study to be acceptable, the aspects of validity and reliability were examined.

#### **3.7.3.1 Validity**

Brink (2008:159) indicates that instrument validity refers to whether an instrument accurately measures what it is supposed to measure, given the context in which it is applied. There are different types of validity. For the purpose of this study, the researcher tested for face validity and content validity.

- Face validity - This means that the instrument appears to measure what it is supposed to measure. It is essentially based on an intuitive judgement made by expert in the field (Brink, 2008:160). In this study the questionnaire was given to a number of experts in the field, and the objectives and purpose of the research study explained to them. They were asked to also comment on the face validity of the instrument, that is, whether on the face of things, the instrument appears to empirically measure what it is supposed to measure. Comments were analysed and changes made to the questionnaire to improve face validity.
- Content validity - Brink (2008:160) defines content validity as an assessment of how well the instrument represents all the components of the variable to be measured. In this study the structured questionnaires were developed from relevant literature. The content validity of the instrument was measured by giving the questionnaire to the researcher's supervisors and various experts from the initial stage of its development. The instrument was also reviewed by the statistician from the University of Venda, and pretested on four professional

nurses who did not participate in the actual study. Depending on the feedback, the researcher made the necessary changes.

In this study the researcher ensured validity of the research instrument. The questionnaires were relevant and were constructed so that factual information could be obtained as far as possible. The respondents were selected from four sampled hospitals of Vhembe district in Limpopo ensuring some representative. Pre-testing of the instrument was done before the major study was conducted to ensure validity.

#### **3.7.3.2 Reliability**

According to Burns and Grove (2007:339), reliability is concerned with how consistently the measurement technique measures the concept of interest. Polit and Beck (2004:416) maintain that reliability of an instrument is the degree of consistency with which the instrument measures the attributes. The less variation an instrument produces in repeated measurements of an attribute, the higher is its reliability. It was indicated that there is a dependent relationship between validity and reliability of an instrument

In this study the researcher ensured reliability of the instrument. The questionnaires were reliable because if some questions were put to the respondents at a later stage, there would be little or no deviance from the original answers to the questions.

### **3.8 DATA COLLECTION PROCESS**

According to Burns and Grove (2007:423), data collection is a process of selecting participants and gathering data from these participants. Data may be collected on subjects by observing, testing, measuring, questioning and/or recording. Polit and Beck (2004:213) maintain that data collection involves the gathering of information to address a research system.

Data was collected in September 2015. Data was collected from 120 sampled professional nurses, 30 from each of the selected four sampled hospitals of Vhembe district, namely, Donald Frazer, Hayani, Elim, Malamulele, and Siloam hospital. Data was collected from 30 professional nurses from each hospital who were on duty on the day the researcher visited the hospital to collect data. The researcher visited the four sampled hospitals on different days in September 2015. The researcher distributed well-designed questionnaires to 30 professional nurses from different wards in each of the four sampled hospitals of Vhembe district in Limpopo, SA. The sampled 120 professional nurses completed the questionnaires in their respective hospitals.

### **3.9 ETHICAL CONSIDERATION**

Pera and Van Tonder (2005:5) indicate that ethics are consent with rightness or wrongness, good or bad. The focus of ethics and ethical consideration therefore is to ensure that the participants under study are kept from harm. Vogt, Gardner and Haeffele (2012:227) add that ethics refer to good conduct towards others. The researcher has a moral obligation to strictly consider the rights of the participants who are expected to provide knowledge. The researcher considers it very important to establish trust between the participants and the researcher, and to respect them as autonomous thinking beings, that can make sound decisions.

Nursing research usually involves human respondents therefore special precaution was taken to ensure that the study adheres to sound ethical principles at all times. In this study, the researcher applied ethical consideration throughout the research in the following manner:

#### **3.9.1 Permission to conduct the research study**

The research proposal and the research instruments used were reviewed by the Higher Degree Committee of the School of Health Science, University of Venda. After clearance by the committee it was then forwarded to the University Senate and Ethics

committee for final approval. Thereafter permission was sought from the Department of Health at Limpopo province, Vhembe district and hospitals where data was collected.

### **3.9.2 Informed consent**

According to Brink (2008:35), informed consent has the following three elements:

- The researcher must provide the participant with comprehensive and clear information regarding his/her participation in the study.
- The participant should understand information given. The information should be clear and in the language the participant understands.
- The researcher should not force the participant to participate in the study. He/she should decide voluntarily whether or not to participate in the study. The participant has the choice of whether or not to give consent.

Informed consent was obtained from all study respondents prior to them responding to the questionnaires. The respondents were informed about the objectives of the study and the ethical handling of the research matters relating to them. The respondents were given information of what is expected from them by the researcher.

### **3.9.3 Freedom from harm and discomforts**

The research was planned and undertaken in such a manner as to avoid as far as possible any kind of harm to the participants. The researcher protected the respondents from harm and discomfort, by ensuring that no physical, psychological, emotional or spiritual harm was inflicted on the participants.

### **3.9.4 Offer to answer questions**

The researcher answered all questionnaires that were raised by respondents. Respondents were provided with information on whom to contact for answers to pertinent questions about the research and research respondents' rights.

### **3.9.5 The right to privacy.**

Privacy means that a person can behave as he pleases without interruption and without the possibility that private conduct or thoughts may later be misused to embarrass or humiliate the client or participant. The researcher ensured privacy by keeping any information obtained in the research study anonymous by using code numbers for respondents' identities so that even the researcher would not be able to relate the information to the respondents.

### **3.9.6 Right to respect**

The researcher ensured maintaining of respect and dignity of respondents during this research study. The respondents were given the option to withdraw from the study at any stage should they wish to do so, without the possibility of retribution or victimization.

### **3.9.7 Assurance of anonymity and confidentiality**

According to Brink (2008:34), the process of ensuring anonymity refers to the researcher's act of keeping the participants' identities a secret with regard to their participation in the research study. Burns and Grove (2005:163) further supported that anonymity is guaranteed if the participants' identity cannot be linked to the data collected.

In this study, the researcher did not use names of respondents in any way during data collection. The respondents were informed that their responses and records were kept safe and confidential. The collected data was revealed to the supervisors, statistician, and other personnel relevant to the study. The respondents were therefore informed that their identity details would remain anonymous in reports and publications of the study.

### **3.10 LIMITATION OF THE STUDY**

There were some limitations in this research study. The study was only conducted in the four hospitals of Vhembe district in Limpopo province, therefore the findings cannot easily be generalised to all hospitals in the province. Only professional nurses who

happen to be at the right place at the right time were included in the sample, and the remaining professional nurses could be experiencing challenges with stress management. The study was done in the sampled hospitals of only one district of Limpopo province and the remaining districts were not included in the study, therefore the results obtained from the study cannot be generalised to the entire province. The study was conducted in one district of one of the provinces therefore the findings cannot be generalized to other provinces in South Africa.

### **3.11 DATA ANALYSIS**

Polit and Hungler (2008:455) describe data analysis as a systematic organisation and synthesis of research data. Brink (2008:170) maintains that data analysis involves categorizing, ordering, manipulating and summarising the data and describing them in meaningful terms.

In this study the collected quantitative data was analysed with the assistance of a statistician from the University of Venda. Data was subjected to a computer analysis programme to establish frequencies and percentages of the responses. The findings were displayed in the form of tables and graphs.

### **3.12 SUMMARY**

This chapter discussed the research design and methodology that was used in this research study. This included research questions, purpose of the study, objectives of the study, research design, research setting, target population, sampling and sampling methods, data collection instrument, data collection process, and data analysis. Measures were adhered to in order to enhance the validity and reliability of the research results. Ethical concerns that would have imparted on the research study were addressed. Limitation of the study were discussed. Chapter 4 presented the analysis

and discussion of the data obtained from completion of 120 questionnaires by sampled professional nurses in the four sampled hospitals of Vhembe district in Limpopo province, South Africa.

## CHAPTER 4

### DATA ANALYSIS AND INTERPRETATION

#### 4.1 INTRODUCTION

In the previous chapter, the research design and methods were discussed. This chapter discussed the analysis and interpretation of data collected. According to Brink (2008:170), data analysis involves categorizing, ordering, manipulating, and summarising the data and describing them in meaningful terms. This chapter deals with the analysis and interpretation of data on management of stress by professional nurses in the hospitals of Vhembe district in Limpopo province, South Africa. In this study data were analysed statistically.

The statistical information was derived from a sample of 120 respondents who completed the questionnaires. Some of the respondents chose not to complete certain items within specific sections, presumably because of reasons known to them. The percentages were calculated on the number of responses to each item (valid percentage), not on the total number of questionnaires received. Data analysis was done by a statistician at the University of Venda, using SPSS version V.22.0. Frequencies, percentages and total percentages were used to describe different variables. Graphic presentations as well as tables were used to show relevant values. The response was therefore presented according to the sections on the questionnaires:

- SECTION A: Demographic details of the professional nurses
- SECTION B: Factors contributing to the development of stress
- SECTION C: Effects of stressors
- SECTION D: Available support system to cope with stressful situations
- SECTION E: Strategies to be utilized in the management of stress

## 4.2 RESEARCH OBJECTIVES

The objectives that were used as the conceptual framework to guide this study were:

- To identify and explore factors contributing to stressors among professional nurses in the hospitals of Vhembe district in Limpopo province, South Africa;
- To explore and describe the professional nurses 'perceived' effects of the stressors on their well-being;
- To identify and describe the strategies put in place in support of the professional nurses to cope with the stressful situations in the hospitals of Vhembe district in Limpopo province;
- To identify the measures used by professional nurses in the management of stress in the hospitals of Vhembe district in Limpopo province;
- Based on the findings, to draw recommendations that could be added to the body of knowledge in the prevention and management of stress by professional nurses.

## 4.3 DISCUSSION OF RESEARCH RESULTS OBTAINED FROM QUESTIONNAIRES

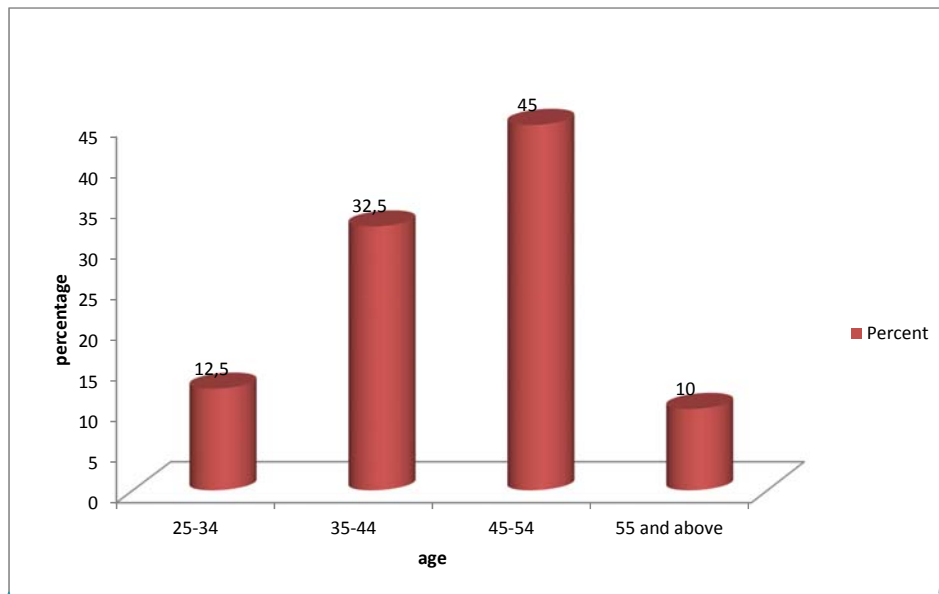
### SECTION A

#### 4.3.1 Demographic data

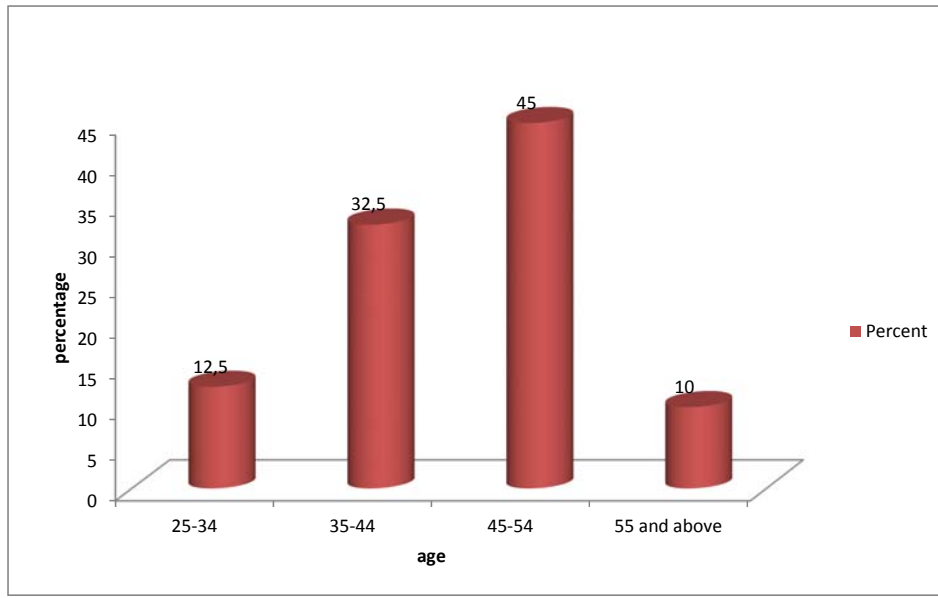
This section presented and discussed the demographic data of the respondents including age, gender, years of experience, marital status, highest- level of qualifications, residential address and number of children. According to Brink (2008:86), the demographic variables cannot be manipulated or influenced by the researcher and these variables are analysed to form a picture of the sample, for example marital status. The purpose of providing demographic information is for the rest of the information to be contextualized against the background. Demographic data of the sample are presented in the tables and figures below.

#### 4.3.1.1 Age of respondents

Figure 4.1 Age distribution of respondents (n=120)



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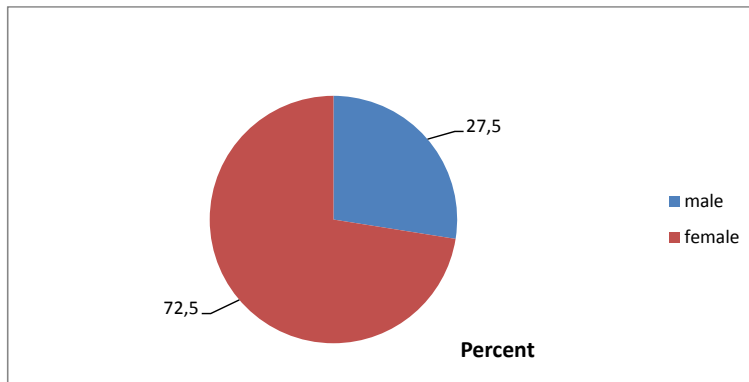
**Figure 4.1** Age distribution of respondents (n=120)

Out of 120 respondents who completed the questionnaires, 15 (12.5%) were from 25 to 34 years, 39 (32.5%) were from 35 to 44 years, 54 (45%) were from 45 to 54 years and 12 (10%) were from 55 years and above. The findings reveal that all age groups responded in the study, but the largest response was from those of 45 to 54 years (54). Age distribution was important in this study for identification of the ages of the respondents who completed the questionnaires as most researchers say stress affects people of different age groups differently. This was supported by Chang et al (2005:60) who state that older nurses cope better with stressors of workload, death and dying of patients more than younger nurses.

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#### 4.3.1.2 Gender of respondents

**Figure 4.2** Gender distribution of the respondents (n=120)

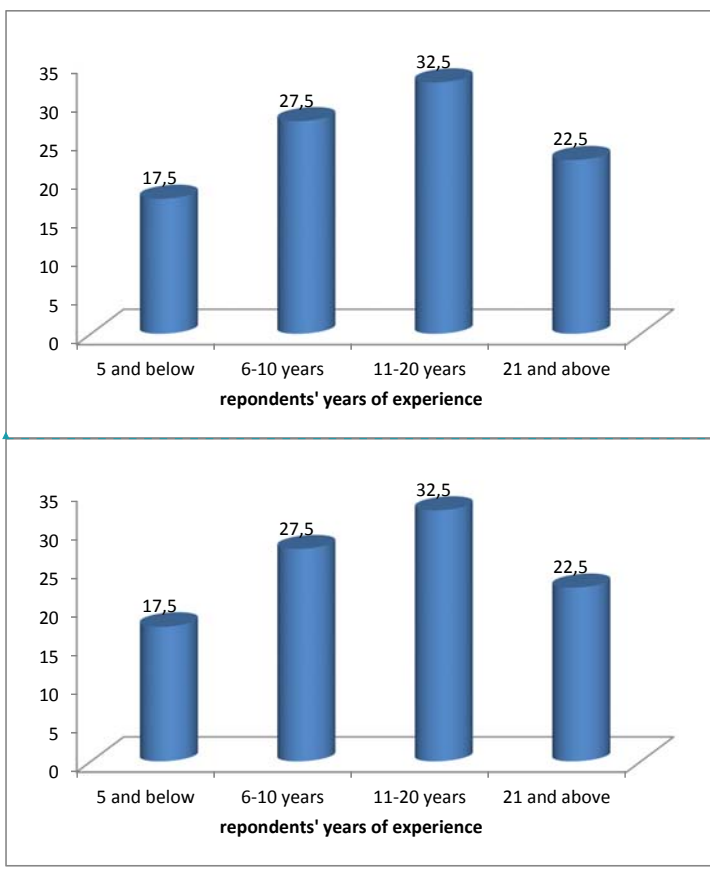


**Figure 4.2** Gender distribution of the respondents (n=120)

The study comprises 120 respondents of which 33 (27.5%) were males and 87 (72.5%) were females. Gender was included in this study to verify whether all sexes responded to the questionnaires. The findings indicated that the study was conducted with more females (87) than male professional nurses (33), and that concurred with the current situation in the nursing profession where there are more female nurses than male nurses at the hospitals. Gender of respondents was necessary in this study to find out how females and male manage their stress. Sanderson (2012:140) mentions that men react to stress more than women, and added that men prefer less social interaction during times of stress whereas women prefer to affiliate with others.

#### 4.3.1.3 Respondents' years of experience

**Figure 4.3** Respondents' years of experience (n= 120)



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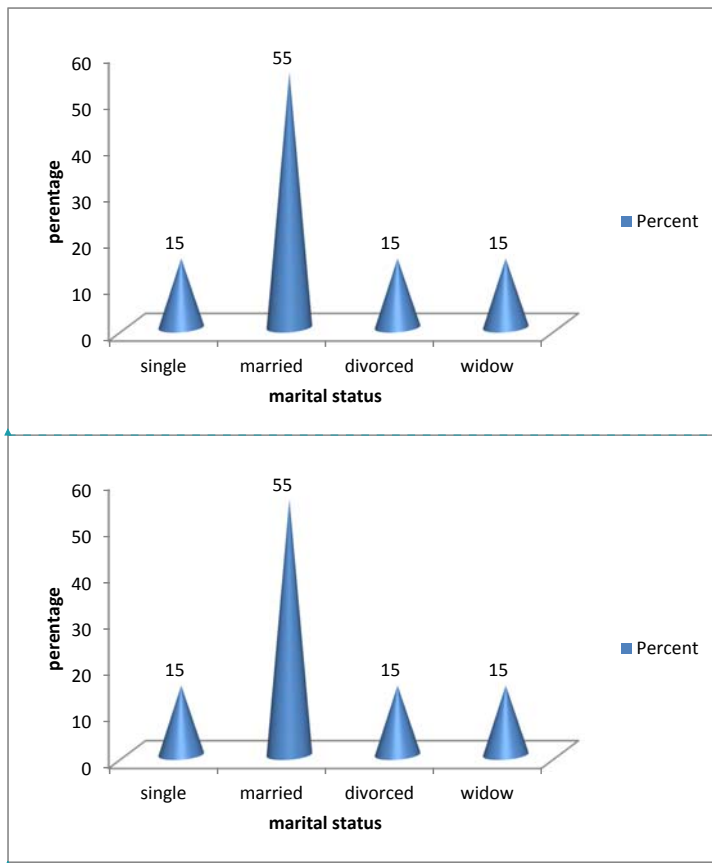
**Figure 4.3** Respondents' years of experience (n= 120)

Figure 4.3 indicates that out of 120 respondents who completed the questionnaires, 21 (17.5%) have work experience of 5 years and below, 33 (27.5%) have work experience of from 6 to 10 years, 39 (32.5%) have work experience of from 11 to 20 years, 27 (22.5%) have work experience of 21 and above. The figure showed that as many as 39 (32.5%) respondents had 11 to 20 years of experience working as professional nurses. The respondents' years of experience as professional nurses was important in this

study, to enable the researcher to be aware of respondents' experience, and to determine whether years of experience affects management of stress. According to Sarafino and Smith (2012:91), people acquire coping skills through their experiences, which may involve strategies they have tried in the past or methods they have seen others use.

#### **4.3.1.4 Marital status of the respondents**

**Figure 4.4** Marital status of the respondents (n=120)



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**Figure 4.4** Marital status of the respondents (n=120)

Figure 4.4 outlines that of 120 respondents, majority of them 66 (55%) were married, 18 (15%) were single, 18 (15%) were divorced and the remaining 18 (15 %) were widows. The findings therefore reveal that more than half of the respondents were married (66). The aspect of marital status was of vital importance in this study as different individuals' activities with their families could have an effect on their coping with stressors. Sanderson (2012:205) indicated that married men cope with stress better than divorced and widowed ones. Women in general benefit in social support by their husbands, but

after loss of spouse they are likely to rely on their children, friends, and other family members for social support, thus they could still cope with stress

#### 4.3.1.5 Number of respondents' children

Figure 4.5 Number of respondents' children (n=120)

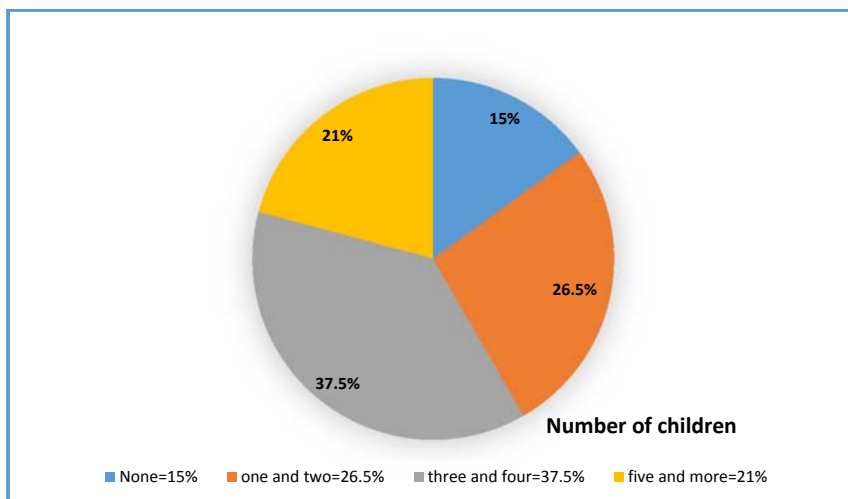


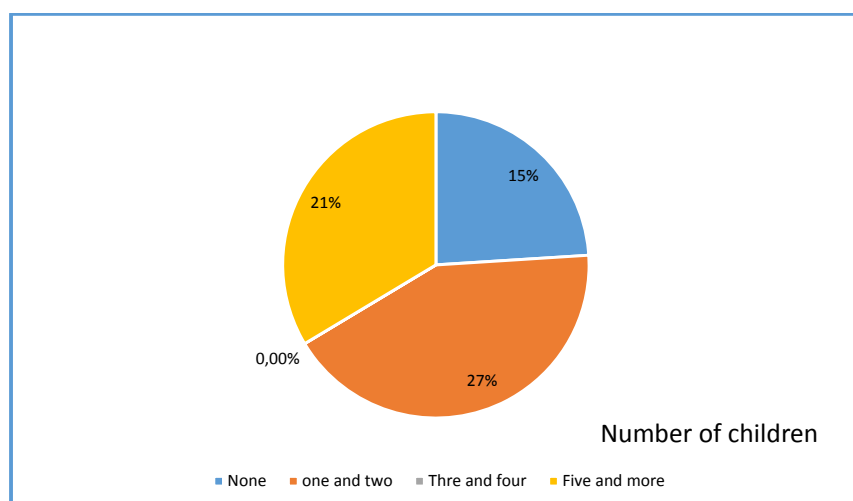
Figure 4.5 Number of respondents' children (n=120)

The figure showed that as many as 45 (37.5%) of the respondents have three to four children, whereas 32 (26.5) have one to two children; 25 (21.0%) of the respondents have five and more children, and the remaining 18 (15%) has no children. The findings reveal that as many respondents as 45 (37.5) have three to four children, and thus many professional nurses have three to four children. The number of the respondents'

children was necessary as children have certain effects in their parents' lives. According to Dube (2013:4), a survey conducted in US, mothers of three children stress more than moms of one to two, while mothers of four or more actually report lower stress levels. Seventy five percent of the respondents in that survey said mothers of three stress more about the pressure they put in themselves of being perfect than the pressure of being judged by other moms. When you have four or more kids, there's just not enough space in your head for perfectionism.

#### 4.3.1.6 Respondents' highest educational qualifications

**Figure 4.6** Respondents' highest educational qualifications (n=120)



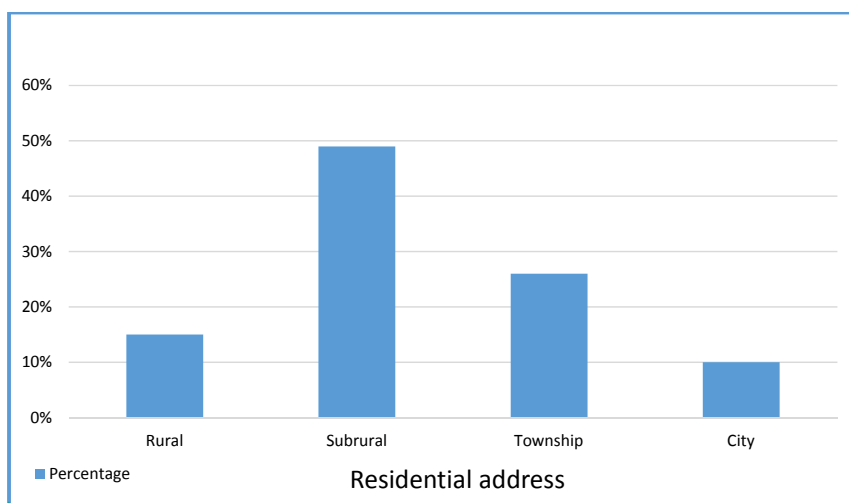
**Figure 4.6** Respondents' highest educational qualifications (n=120)

Out of 120 respondents who completed the questionnaire, 49 (41%) have a diploma, 28 (23%) have advanced course/ post-basic course, 25 (21%) has degree and 18 (15%) have honours degree and higher. The findings show that only 28 (23%) of the respondents have an advanced course/ post-basic course, that is, they have specialized knowledge. It was necessary to include educational qualifications in this study for the researcher to know the educational background of the participants. Survey conducted in

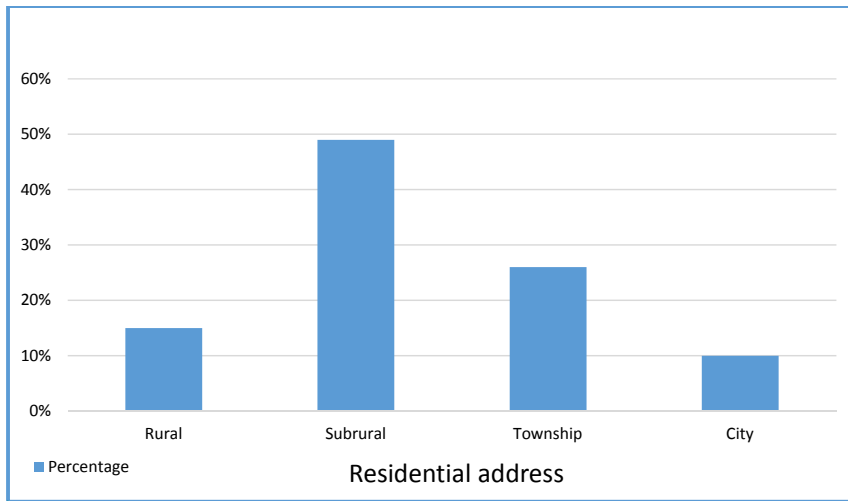
US indicated that employees with PhD were most engaged with the highest level of stress about job security, work-related stress, and work life balance. The more you know, the more people rely on you (Hohlbaum, 2011:26)

#### 4.3.1.7 Residential address

Figure 4.7 Respondents residential address (n=120)



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**Figure 4.7** Respondents residential address (n=120)

Four residential areas where the respondents live were distinguished as indicated in table 4.1. Out of 120 respondents who answered questionnaires, 18 (15%) reside in rural areas, 59 (49%) reside in sub-rural areas, 31 (26%) reside in townships, and lastly 12(10%) reside in the city. The findings showed that most respondents stay in sub-rural area 59 (49%). The aspect of residential areas was important in this research study to find out where most respondents reside, as one's residential area affects behaviour and coping strategies of certain individuals. Rishi and Khuntia (2012:5) indicated that the study to assess the perceived urban environmental stressors and the coping strategies adopted by the people was conducted in Bhopal city of India. The findings revealed that there was a high level of stress due to noise, waste accumulation, polluted air and an unhealthy environment in slums.

## SECTION B

### 4.3.2 Factors contributing to the development of stress

Aspects discussed under this section included professional nurses' importance at their workplace, focus on negative experience, clarity on job function, pressure of work, view of their experience at work, view concerning changes at work and their characteristics. This is supported by Johnson, Cooper, Cartwright, Donald, Taylor and Millet (2005:2) who indicates that the amount of stress a person experienced at work is likely to be the result of the type of work, the amount of support they receive, coping mechanism, and their participation on work decisions.

#### 4.3.2.1 The respondents' self-worth at workplace

**Table 4.1** The respondents self-worth and importance at work (n=120)

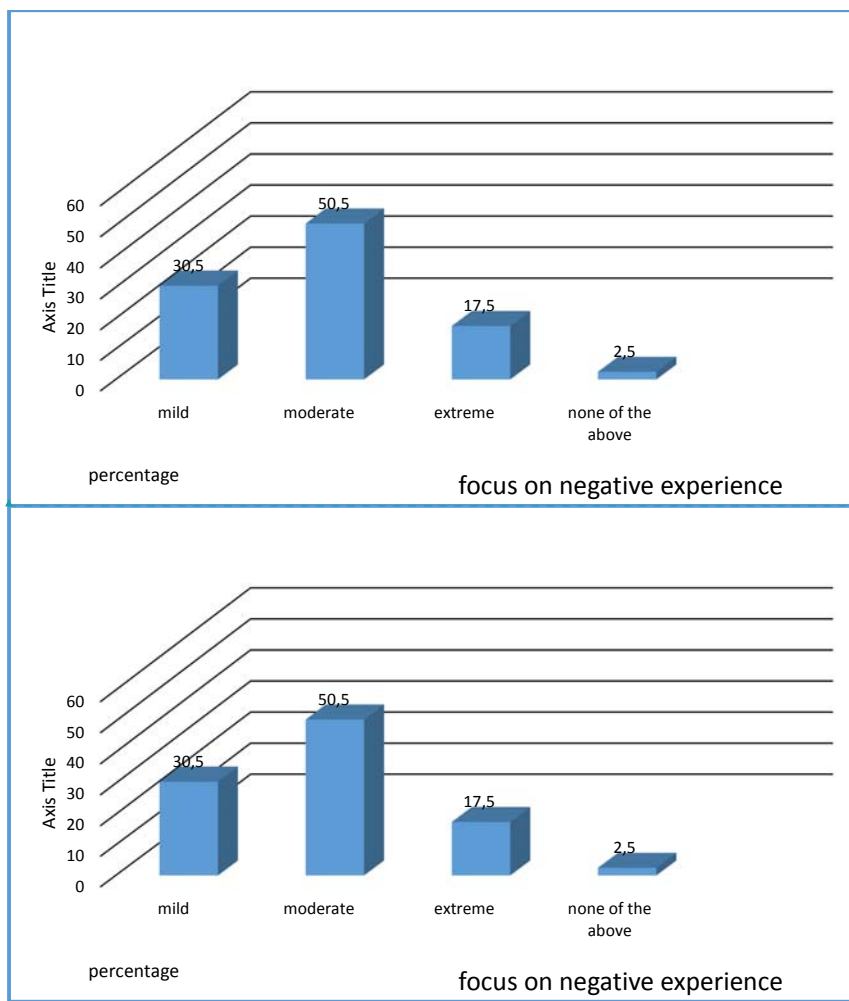
Self-worth at work	Frequency(n)	Percent (%)
no	12	10.0
Valid yes	108	90.0
Total	120	100.0

**Table 4.1** The respondents self-worth and importance at work (n=120)

108 (90%) of the respondents indicated that they see themselves as important and worthwhile at their workplace, and 12 (10%) said they do not feel worthwhile at their work. The findings reveal that a majority of the respondents 108 (90%) see themselves as worthwhile at their workplace. This implies that most professional nurses who participated in the study feel important at work. Straub (2007:110) states that workers feel more stress when they have little or no control over the procedures and other aspects of their job, thus they feel unimportant.

#### 4.3.2.2 Degree of focus on negative experience

**Figure 4.8** Degree of focus by respondents on negative experience like failure, weakness and shortcomings (n=120)



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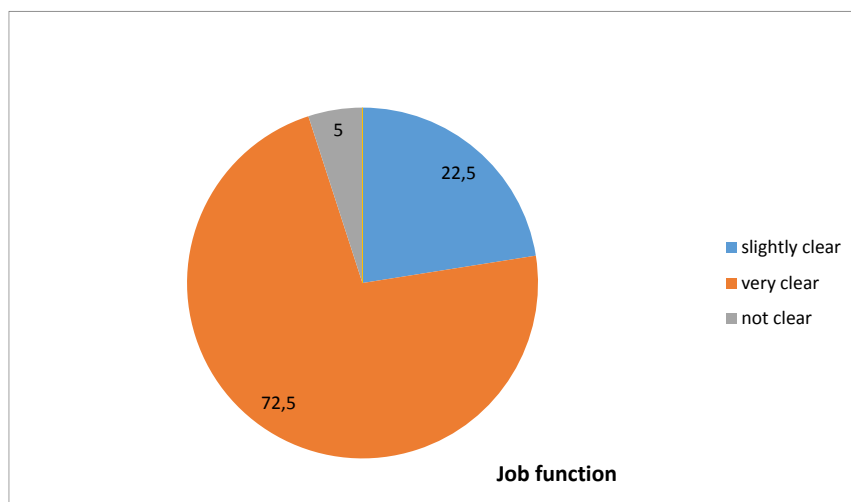
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**Figure 4.8** Degree of focus by respondents on negative experience like failure, weakness and shortcomings (n=120)

Out of 120 respondents who completed the questionnaires, 60 (50%) of respondents focus moderately on negative experience, 36 (30%) focus mildly on negative experience, 21 (17.5%) focus extremely on negative experience and 3 (2.5%) did not focus on any of the above. The findings showed that half of the respondents (60) focus moderately on negative experience, whereas (21) focus extremely on negative experience like failure, weaknesses and shortcomings. Most researchers indicated that focus on negative experience could result in development of stress therefore some of the professional nurses were susceptible to stressors. This was supported by Sarafino and Smith (2012:38) who state that most common and significant stressors arise from the motives or goals of the individuals. Their experience of conflict, competitions, failure and disrespect are central sources of stress.

#### 4.3.2.3 Job function and key responsibilities at workplace

**Figure 4.9** The respondents' clarity of job function and key responsibilities at workplace (n=120)



**Figure 4.9** The respondents' clarity of job function and key responsibilities at workplace (n=120)

Out of 120 respondents who completed the questionnaires, 87 (72.5%) of respondents are clear about their job function, 27 (22.5%) are slightly clear about their job function, 6 (5%) are not clear about their job function. The findings showed that more than half of the respondents 87 (72.5%) are clear about their job function. It is important for professional nurses to be clear about their job function in order to perform their duties perfectly as such they would be able to cope with stressors.

#### 4.3.2.4 Pressure of work without rest

**Table 4.2** Respondents having pressure of work without any appropriate rest (n=120)

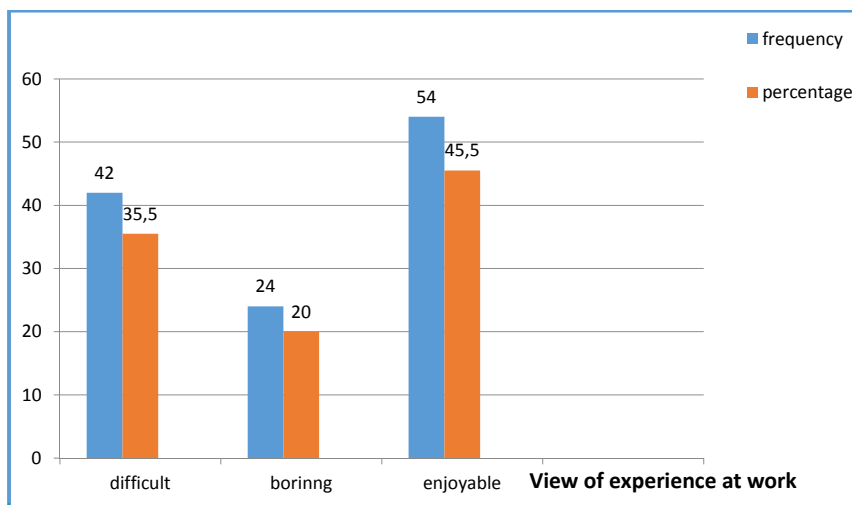
Pressure of work	Frequency (n)	Percent (%)
yes	54	45.0
Valid no	66	55.0
Total	120	100

**Table 4.2** Respondents having pressure of work without any appropriate rest (n=120)

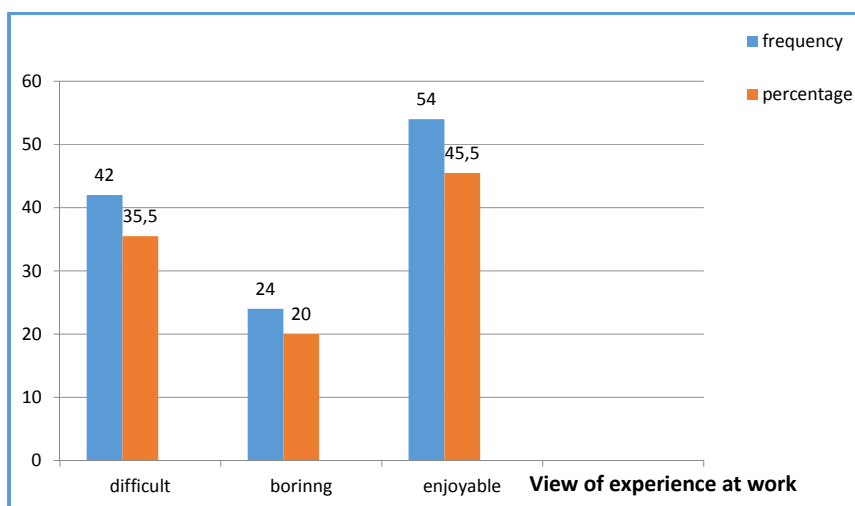
Table 4.2 reveals that 66 (55%) of the respondents denied having pressure of work without rest and 54 (45%) agreed that they experience pressure of work. The findings indicated that about half (54) of the respondents agreed experiencing pressure of work without rest. This showed that most professional nurses are experiencing work-overload and that could result in stress as they are tired most of the times. Straub (2007:108) mentioned that people who work for too long hours, and have too many tasks, feel more stressed and they could also have poorer health habits.

#### 4.3.2.5 View of experience at work

Figure 4.10 Respondents view of experience at work (n=120)



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**Figure 4.10** Respondents view of experience at work (n=120)

Out of 120 professional nurses who responded to the questionnaire, 42(35%) of the respondents view work as difficult, 24 (20%) view work as boring and 54 (45%) view work as enjoyable. The findings revealed that almost half (42) of the professional nurses who responded to questionnaires view work as difficult and (24) of them view work as boring. The professional nurses need to enjoy their duties in order to work perfectly, thus experiencing difficulties at work could lead to development of workplace stress. According to Straus (2007:111), role ambiguity occurs when workers are unsure of their jobs or the standard used to evaluate their performance.

#### 4.3.2.6 Changes at work

**Table 4.3** The respondents view of changes at work like new supervisors, revised work and skilled worker (n=120)

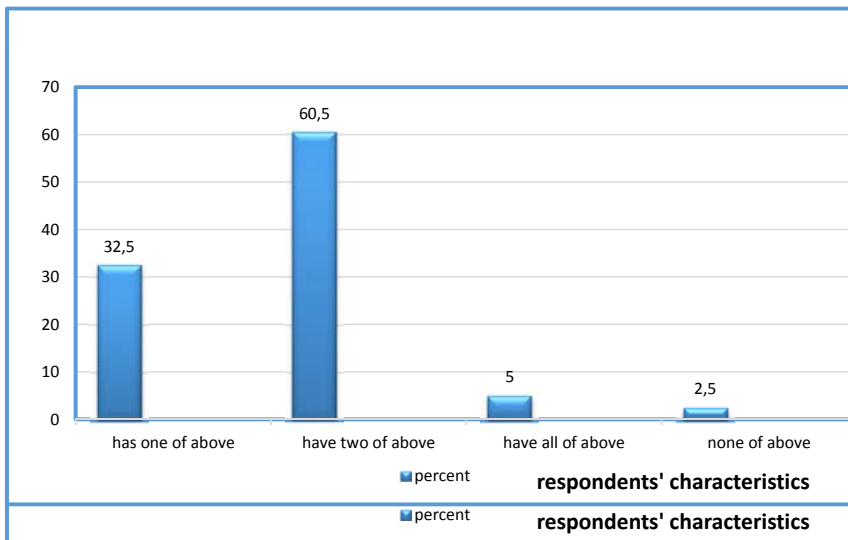
Change at work	Frequency (n)	Percent (%)
exciting	27	22.5
Valid challenging	90	75.5
none of above	3	2.5
Total	120	100.0

**Table 4.3** The respondents view of changes at work like new supervisors, revised work and skilled worker (n=120)

90 (75%) of the respondents, view changes at work as challenging and 27 (22.5%) view changes at work as exciting. This shows that more than half of the respondents (90) view changes at work as challenging. The majority of the professional nurses who responded to questionnaires, experience changes at work like new supervisor or revised work as uncomfortable. The challenges could result in anxiety of professional nurses at work. Rout (2000:306) concurs saying that sources of stress includes coping with new technology, too much variety in one's job and having to work long hours.

#### 4.3.2.7 The respondents' characteristics

**Figure 4.11** Respondents extreme characteristics like high competitive drive, very ambitious and extreme level of job involvement (n=120)



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**Figure 4.11** Respondents extreme characteristics like high competitive drive, very ambitious and extreme level of job involvement (n=120)

72 (60%) of the respondents have two of the listed characteristics, 39 (32.5%) have one of the listed characteristics, 6 (5%) have all listed characteristics and 3 (2.5%) have none. The findings reveal that most respondents have two of those extreme characteristics (72) and (2), therefore they could easily develop stress. This is supported by Rees (2006:2) stating that this is more evident in individuals who are high on type-A characteristics, such as being competitive, ambitious and excessively time conscious

## SECTION C

### 4.3.3 Effects of stressors

Aspects discussed under this section included respondents experience of difficulties in concentration, ability to solve problems, sleeping pattern, experience of psychosomatic conditions, accidents at work, mood problem, depression and suicidal thoughts. Sarafino and Smith (2012:12) reported that increased levels of stress have effect on people's health'. Abuhub and Al-zaru (2008:227) supported showing that an increased level of stress can lead to low quality of care, absenteeism and poor interactions with co-workers and others.

#### 4.3.3.1 Experience of difficulties in concentration

**Table 4.4** Respondents experience of difficulties in concentration (n=120)

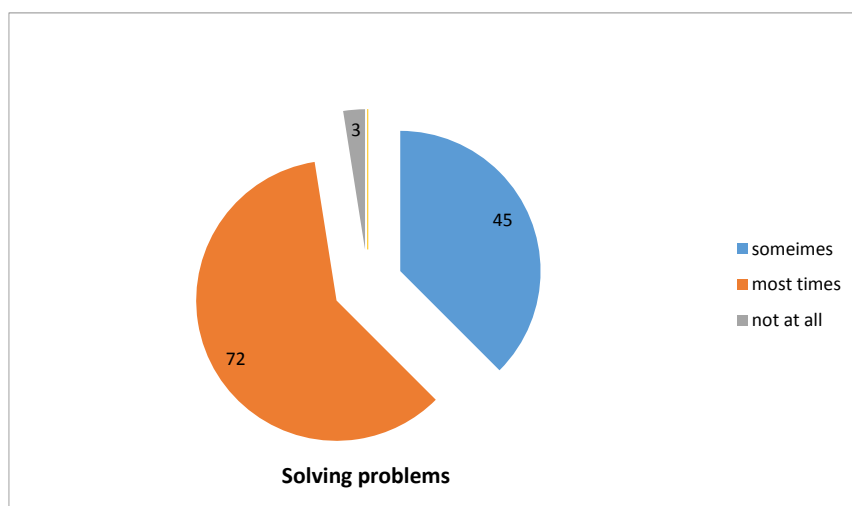
Difficulty in concentration	Frequency (n)	Percent (%)
sometimes	90	75.0
Valid most of the time	6	5.0
not at all	24	20.0
Total	120	100.0

**Table 4.4** Respondents experience of difficulties in concentration (n=120)

90 (75%) of the respondents sometimes experience difficulty in concentration, 6 (5%) experience difficulties in concentration most of the time and 24 (20%) have good concentration. The findings reveal that most respondents had poor concentration level, 96 of 120 participants. Professional nurses are responsible for ensuring quality care to patients and also supervising activities of the subordinates, thus professional nurses should always have good concentration while on duty. This shows that a majority of professional who responded to questionnaires could be experiencing characteristics of stress. Sarafino and Smith (2012:12) added that stress can cause poor concentration and attention that could lead to errors and accidents at work.

### 4.3.3.2 Ability to solve problems

**Figure 4.12** Respondents ability to solve problems (n=120)



**Figure 4.12** Respondents ability to solve problems (n=120)

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Out of 120 respondents who completed the questionnaire, 72 (60%) of the respondents has the ability to solve problems, 45 (37.5%) can sometimes solve problems, and 3 (2.5%) are unable to solve problems. This indicated that majority of the respondents (72) have the ability to solve problems whereas almost half of them (45) and (3) have poor problem solving skills. Problem solving is an important aspect in nursing and the professional nurses are senior personnel in the wards, therefore they should have good problem solving skills.

#### 4.3.3.3 Sleeping pattern

**Table 4.5** Sleeping pattern of respondents (n=120)

Sleeping pattern	Frequency (n)	Percent (%)
sleep well	51	42.5
sleep disturbance sometimes	60	50.0
Valid sleep disturbance most of the time	9	7.5
Total	120	100.0

**Table 4.5** Sleeping pattern of respondents (n=120)

60 (50%) of respondents sometimes have sleep disturbances whereas 51(42.5%) sleep well, and the remaining 9 (7.5%) have sleep disturbances most of the time. The findings reveal that half of the respondents (60) sometimes have sleep disturbances and (9) do not sleep well most of the time. Most researchers maintain that professional nurses who did not sleep well during the night are not productive at work and could easily make mistakes, and that it could be due to stressors. Akbar, Elahi, Mohammadi and Khohknab (2015:57) indicate that work-related stress could lead to sleeping and rest disturbances.

#### 4.3.3.4 Physical problems experienced

**Table 4.6** Physical problems experienced by respondents for example headache, general body pains, tiredness, and palpitations (n=120)

Physical problems experienced	Frequency (n)	Percent (%)
one of the above	42	35.0
two and more	60	50.0
Valid none of above	18	15.0
Total	120	100.0

**Table 4.6** Physical problems experienced by respondents for example headache, general body pains, tiredness, and palpitations (n=120)

Out of 120 respondents who completed the questionnaire, 60 (50%) experienced two and more of the listed physical problems, 42 (35%) experienced one of the listed physical problems, and 18 (15%) experience none of the listed physical problems. The findings showed that half of the respondents (60) experienced stress-related physical problems such as headache, general body pains, palpitations or tiredness. This means that most professional nurses who responded to questionnaires could easily develop stress. Sarafino and Smith (2012) report that an increased level of stress affects peoples' health, for example, increase blood pressure, tension headache and ulcers.

#### 4.3.3.5 Experience of accidents happening at work

**Table 4.7** Experience of accidents happening at work during the respondent shift (n=120)

Experience of accident	Frequency (n)	Percent (%)
sometimes	69	57.5
most of the time	18	15.5
Valid not at all	33	27.5
Total	120	100.0

**Table 4.7** Experience of accidents happening at work during the respondent shift (n=120)

Out of 120 respondents who completed the questionnaire, 69 (57.5%) of the respondents sometimes experienced accidents at work, 33 (27.5%) do not experience accidents at work and 18 (15%) experience accidents at work most of the time. The findings reveal that more than half of the respondents 69 (57.5%) sometime experience accidents at work and 18 (15%) of the respondents, experienced accidents most of the time, therefore many professional nurses are experiencing accidents happening at work during their shifts. Many respondents therefore experienced accidents happening at work, and it could be due to a preoccupied mind and sometimes stressors. Stefano and Smith (2012:12) reported that stress can cause poor concentration and attention that could lead to errors and accidents at work.

#### 4.3.3.6 Mood of the respondents

**Table 4.8** The level of mood of the respondents most of the time (n=120)

Mood of the respondents	Frequency (n)	Percent (%)
low	21	17.5
moderate	78	65.0
Valid high	18	15.0
none of above	3	2.5
Total	120	100.0

**Table 4.8** The level of mood of the respondents most of the time (n=120)

Out of 120 respondents who completed the questionnaire, 78 (65%) experienced moderate mood most of the time, 21 (17.5%) experienced low mood, and 18 (15%) experienced high mood, and 3 (2.5%) did not experience any of the above. This showed that majority of the respondents 78 (65%) have moderate mood which are good moods. It is important for professional nurses to be in a good mood while performing their duties at their workplace as it could lead to good job performance, and therefore quality patient care. People who are in a good mood, rate themselves as healthy and they report fewer illness-related memories, whereas people in a bad mood report more symptoms of illness and believe they are less capable of alleviating their symptoms.

#### 4.3.3.7 Involvement in the unit

**Table 4.9** The respondent extent of involvement in the unit (n=120)

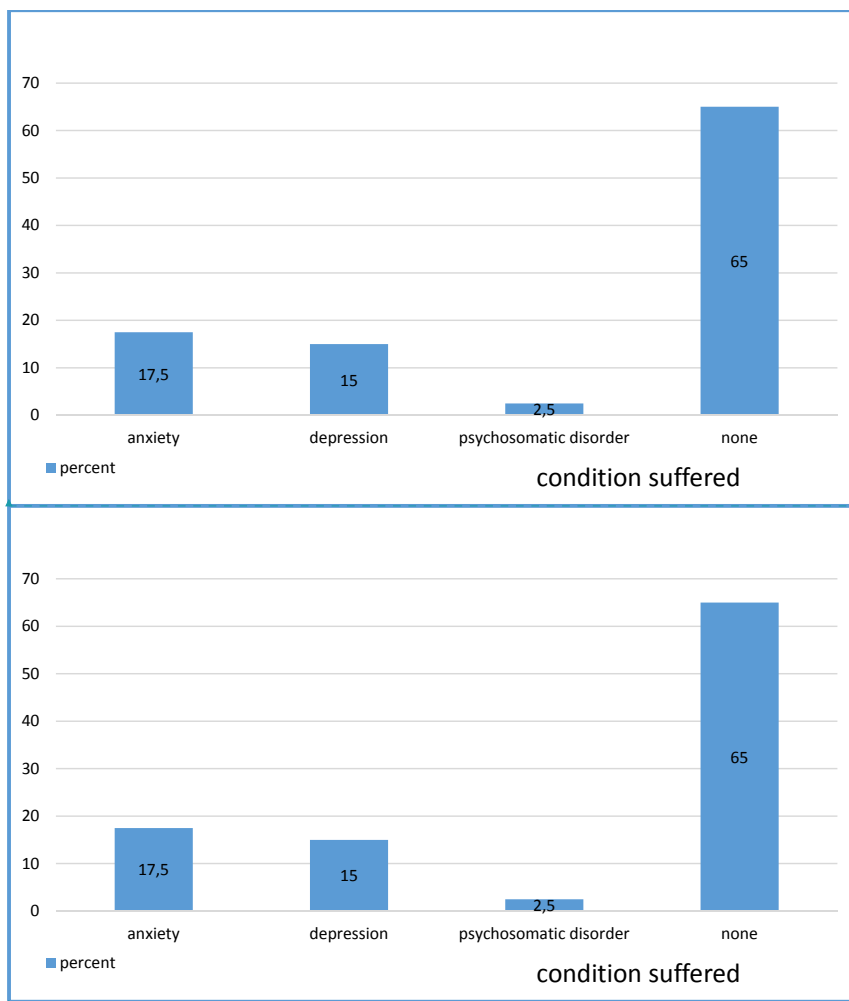
Involvement in the unit	Frequency (n)	Percent (%)
part of the team	114	95.0
Valid isolated	6	5.0
Total	120	100.0

**Table 4.9** The respondent extent of involvement in the unit (n=120)

Out of 120 respondents who completed the questionnaire, 114 (95%) are involved as part of the team in the unit, 6 (5%) feel isolated in the unit. The findings report that most of the respondents are actively involved in the unit and they are accepted as part of the team. In this research study almost all the professional nurses who responded to the questionnaires (114) do not feel isolated at work, they are accepted and involved. It was important to find out whether there was involvement of the unit and respondents formed part of team-work at their workplace.

#### 4.3.3.8 The conditions the respondents suffered

Figure 4.13 The stress-related conditions the respondents were treated for (n=120)



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Figure 4.13 The stress-related conditions the respondents were treated for (n=120)

Figure 4.13 showed that 21 (17.5%) of the respondents have been treated for anxiety, 18 (15.5%) have been treated for depression, 3 (2.5%) have been treated for psychosomatic disorders, and 78 (65%) have never been treated for such conditions. The findings reported that there were some respondents who were treated for anxiety (21) and depression (18). The professional nurses play a major role in ensuring quality care to patients, therefore they should be mentally stable and be able to cope with stressors, free from anxiety, depression and psychosomatic disorders and burnout.

#### 4.3.3.9 Suicidal thoughts

**Table 4.10** Suicidal thoughts of the respondents (n=120)

Suicidal thought	Frequency (n)	Percent (%)
Yes	3	2.5
Valid no	117	97.5
Total	120	100.0

**Table 4.10** Suicidal thoughts of the respondents (n=120)

Table 4.10 reveals that 3 (2.5%) of respondents have suicidal thoughts, and 117 (97.5%) has no suicidal thoughts. According to the findings, (3) professional nurses who responded to questionnaires indicated having suicide. Professional nurses should be able to cope with stressful situations to function successfully, and in this study few of them are stressed as they have suicide. Gibbens (2007:26) states that mental health problems commonly associated with stress include psychosomatic disorder, depression, anger, low self- esteem and suicide.

## SECTION D

### 4.3.4 Available support system

In this section, the researcher strived to assess whether the professional nurses are being supported at their workplace, their lifestyle and what the respondents did when they have problems. Sanderson (2007:137) caution that people who receive support from friends and family may possible cope with stressful events, and may see them as significant.

#### 4.3.4.1 Knowledge about the employment assistant programme (EAP)

**Table 4.11** Respondents knowledge about EAP (n=120)

Knowledge of EAP	Frequency (n)	Percent (%)	Valid percent
yes	78	65.0	66.7
Valid no	39	32.5	33.3
Total	117	97.5	100.0
Missing system	3	2.5	
Total	120	100.0	

**Table 4.11** Respondents knowledge about EAP (n=120)

Out of 120 respondents who completed the questionnaire, 78 (66.7%) of the respondents knew about EAP, 39 (33.3%) did not know about EAP. The findings reported that 39 professional nurses who responded to the questionnaires did not have any knowledge about EAP, therefore they do not know where to get counselling at work when they have stress. In the nursing profession all professional nurses are expected to

know about the Employment Assistant Programme (EAP) in order to get professional help when they encounter stressors. The professional nurses are also expected to refer subordinates to EAP and Occupational health nurses (OHS) when the need arises. In the study conducted by Gibb, Hamilton and Murphy (2010:842), the results revealed that a third of the mental health nurses surveyed were unaware of the Occupational Health Services (OHS) offered at the hospitals.

#### 4.3.4.2 EAP at workplace

**Table 4.12** Facilitation of EAP at the respondents' workplace (n=120)

EAP at workplace	Frequency (n)	Percent (%)
yes	42	35.0
Valid no	78	65.0
Total	120	100

**Table 4.12** Facilitation of EAP at the respondents' workplace (n=120)

Table 4.12 show that 78 (65%) of the respondents indicated that the EAP is not facilitated at their workplace, 42 (35%) indicated that EAP is facilitated at their workplace. The results revealed that there are still some challenges at our hospitals as some respondents (78) stated that EAP is not facilitated. There is a need a counselling facility at the hospitals to enable professional nurses and other staff members to get help immediately when they experience problems as many respondents indicated that EAP is not there. Gibb, Hamilton and Murphy (2010:839) stated that National Health Service (NHS) provide counselling service through their OHS department, with a mixture of referral methods, including self-referral.

#### 4.3.4.3 Advisory talk at workplace

**Table 4.13** The respondents' attendance of advisory talk by a motivational speaker at workplace (n=120)

Advisory talk at workplace	Frequency (n)	Percent (%)	Valid percent (%)
yes	108	90.0	92.3
Valid no	9	7.5	7.7
Total	117	97.5	100.0
Missing system	3	2.5	
Total	120	100.0	

**Table 4.13** The respondents' attendance of advisory talk by a motivational speaker at workplace (n=120)

Out of 120 respondents who completed the questionnaire, 108 (92.3%) of have attended advisory talk by a motivational speaker at the workplace, 9 (7.7%) have never attended an advisory talk by a motivational speaker at the workplace. The findings revealed many respondents (108) have already attended an advisory talk at their workplace. An advisory talk is necessary for boosting morale of the employees, and

therefore it is good when a majority of respondents have attended it. Perry (2005:356) stated that administrators within the hospitals should provide programmes designed to relieve stress, including arrangements for stress-reduction classes at the workplace.

#### 4.3.4.4 Involvement in decision making

**Table 4.14** Respondents involvement in decision making by management (n=120)

Involvement in decision making	Frequency (n)	Percent (%)	Valid Percent (%)
sometimes	81	67.5	69.2
most of the time	30	25.0	25.6
Valid not at all	6	5.0	5.1
Total	117	97.5	100.0
Missing system	3	2.5	
Total	120	100.0	

**Table 4.14** Respondents involvement in decision making by management (n=120)

According to Table 4.14, 81 (69.5%) of the respondents are sometimes involved in decision making at the workplace, 30 (25.6%) are involved most of the time in decision making, and 6 (5.1%) are not involved at all. The findings showed that involvement in decision making was not done consistently, that it was done sometimes (67.5%) as

indicated above. Professional nurses are part of the supervisory team, and in this study they are not fully involved in decision making, thus there is a need for them to be involved.

#### 4.3.4.5 Attendant of in-service training and workshop

**Table 4.15** The respondents' attendance of in-service training and workshop (n=120)

Attendance of in-service training and workshop	Frequency (n)	Percent (%)	Valid percent (%)
sometimes	81	72.5	74.4
regularly	24	20.0	20.5
Valid never attended	6	5.0	5.1
Total	117	97.5	100.0
Missing system	3	2.5	
Total	120	100.0	

**Table 4.15** The respondents' attendance of in-service training and workshop (n=120)

Out of 120 respondents who completed the questionnaire, 87 (74.4%) sometimes attended in-service training and a workshop at their workplace, 24 (20.5%) attended regularly and 6 (5.1%) never attended. The results showed that only few respondents

(6) had never attended a workshop at their workplace. Workshops and in-service training remind employees how certain procedures are done and update them on new developments in relation to patient care, therefore it is important for all professional nurses to attend. Chang et al (2005:61) indicated that a range of strategies could be implemented to assist nurses with experience. They include orientation and mentoring programmes, team building strategies, and continuing staff development opportunities.

#### 4.3.4.6 Participation on sport activities

Figure 4.14 Respondents' participation in sports activities (n=120)

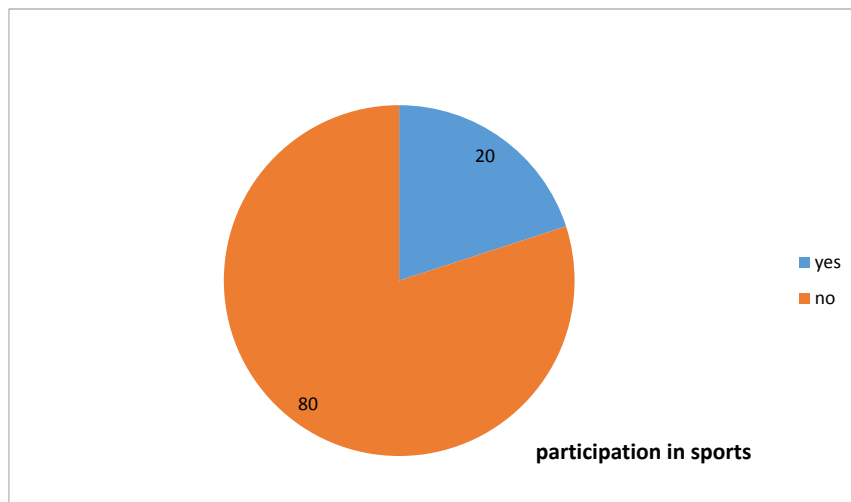


Figure 4.14 Respondents' participation in sports activities (n=120)

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96 (80%) of respondents do not participate in sport activities and 24 (20%) participate in sport activities. The findings revealed that most respondents (80%) do not take sports seriously as they did not participate at all. According to Perry (2005:355), a study conducted to 20 certified registered nurse anaesthetists showed that all 20 respondents stated that they engage in a variety of hobbies, 18 of them reported that their personal hobbies help them cope with job-related stressors. Other researchers suggest that physically active people have lower rates of anxiety and depression.

#### 4.3.4.7 Type of sport

**Table 4.16** The type of sport the respondent like most (n=120)

Type of sport	Frequency	Percent (%)
none	96	80.0
netball	3	2.5
Valid soccer	18	15.0
volley ball	3	2.5
Total	120	100.0

**Table 4.16** The type of sport the respondent like most (n=120)

Out of 120 respondents who completed the questionnaire, 18 (15%) of the respondents liked soccer, 3 (2.5%) liked netball, 3 (2.5%) liked volleyball, and 96 (80%) did not participate in sports. The results reported that many respondents (96) did not participate in sport. Professional nurses have many responsibilities at the hospitals, therefore they should participate in sports activities to be able to manage stress that could be

encountered. Exercise plays a major role in releasing physical tension, boost individual self-esteem strength to cope and therefore can give individuals the strength to cope.

#### 4.3.4.8 Exercise

**Table 4.17** The respondents' engagement in exercise (n=120)

Engagement in exercise	Frequency	Percent (%)
yes	60	50.0
Valid no	60	50.0
Total	120	100.0

**Table 4.17** The respondents' engagement in exercise (n=120)

60 (50%) of the respondents engaged in exercise, 60 (50%) did not engage in exercise. The findings revealed that half of the respondents (60) did not engage in exercise, whereas exercise is important for the health of all nurses to enable them to deal with stress successfully. This was supported by Sarafino and Smith (2012:137) who stated that another technique for coping with stressful situations is exercise, and that exercise improves mood and reduces anxiety and depression.

#### 4.3.4.9 Type of food preferred

**Table 4.18** The type of food preferred by the respondents (n=120)

Type of food preferred	Frequency (n)	Percent (%)
junk	12	10.0
Valid well balanced food	105	87.5
no appetite	3	2.5
Total	120	100.0

**Table 4.18** The type of food preferred by the respondents (n=120)

Out of 120 respondents who completed the questionnaire, 105 (87.5%) preferred a well-balanced diet, 12 (10%) preferred junk food, and 3 (2.5%) lacked appetite. Majority of the respondents (105) ate well balanced food. There is a saying that eating healthy leads to a healthy body and a healthy mind, therefore it is important for professional nurses to eat a well-balanced diet in order to function well at the hospitals. A healthy well balanced diet containing proper nutrition is also necessary to help cope with stress and that people who eats sensibly feel good about themselves.

#### 4.3.4.10 Type of religion preferred

**Table 4.19** The respondents type of religion (n=120)

Type of religion preferred	Frequency (n)	Percent (%)
Christianity	102	85.0
Valid ancestral	9	7.5
none of the above	9	7.5
Total	120	100.0

**Table 4.19** The respondents type of religion (n=120)

Out of 120 who responded to the questionnaire, 102 (85%) of the respondents believe in Christianity, whereas 9 (7.5%) has ancestral beliefs and the remaining 9 (7.5%) do not belong to any religion. The findings reported that most of the respondents (85%) belong to Christianity. According to Burnard, Edward, Fothergill, Hannigan and Coyle

(2000:525), factors that help individuals to cope with stress include having sense of humour, having confidence and having some sort of religious spiritual convictions.

#### 4.3.4.11 Sharing problems

**Table 4.20** The respondents sharing of problems with friends and relatives (n=120)

Sharing of problems	Frequency (n)	Percent (%)
sometimes	78	65.0
Valid most of the time	42	35.0
Total	120	100.0

**Table 4.20** The respondents sharing of problems with friends and relatives (n=120)

According to table 4.20, 78 (65%) of the respondents sometimes share problems with close friends and relatives, 42 (35%) share problems most of the time. The results showed that more than half of the respondents (78) sometimes share problems with friends and relatives. Sharing of problems is an important aspect in nursing as without sharing many stress-related incidences occurring at the hospitals could affect you. Rout (2000:307) mentioned that the most popular coping strategy was talking to someone about how one is feeling, and talking to someone who could do something about the problem.

#### 4.3.4.12 Counselling facilities at workplace

**Table 4.21** The respondents use of counselling facilities at workplace (n=120)

Counselling at work	Frequency (n)	Percent (%)	Valid percent (%)
yes	75	62.5	64.1
Valid no	42	35.0	35.9

Total	117	97.5	100.0
Missing system	3	2.5	
Total	120	100.0	

**Table 4.21** The respondents use of counselling facilities at workplace (n=120)

Out of 120 respondents who completed the questionnaire, 75 (64.1%) preferred to use counselling facilities at their workplace, and 42 (35.9%) would not use facilities at their workplace. The findings revealed that some respondents (42) did not prefer to be counselled at the workplace. Gibb, Hamilton and Murphy (2010:842) indicated that occupational health services are rendered at the workplace, and self-referral is mostly preferred.

#### 4.3.4.13 Counselling facilities outside workplace

**Table 4.22** The respondent use of counselling facilities outside workplace (n=120)

Counselling outside work	Frequency (n)	Percent (%)	Valid percent (%)
yes	99	82.2	86.8
Valid no	15	12.5	13.2
Total	114	95.0	100.0
Missing system	6	5.0	
Total	120	100.0	

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**Table 4.22** The respondent use of counselling facilities outside workplace (n=120)

Out of 120 respondents who completed the questionnaire, 99 (86.8%) preferred to use facilities outside their workplace, 15 (13.2%) did not want to use facilities outside their workplace. The findings reported that majority of the respondents (99) preferred to be counselled outside the workplace, and that could be due to when the counselling facilities at the hospital are not available. Gibb, Hamilton and Murphy (2010:839) mentioned that within the NHS board area surveyed a variety of counselling approaches are used.

## SECTION E

### 4.3.5 Strategies to be utilized in the management of stress

This section presented and discussed participants' knowledge about management of stress, workshop or lecture attended, material read, and whether the respondents would like to be informed on management of stress. In the study conducted by Biachi (2004: 742), coping strategies used by the respondents were positive reappraisal, seeking support, self-controlling, plan-full problem solving and accepting responsibility.

#### 4.3.5.1 Knowledge about management of stress

**Table 4.23** Respondents knowledge of stress management (n=120)

Knowledge about management of stress	Frequency (n)	Percent (%)	Valid percent (%)
yes	96	80.0	82.1
Valid no	21	17.5	17.9
Total	117	97.5	100.0
Missing system	3	2.5	
Total	120	100.0	

**Table 4.23** Respondents knowledge of stress management (n=120)

According to table 4.23, 96 (82.1%) of the respondents indicated that they have knowledge on management of stress, 21 (17.9%) indicated that they do not have any knowledge on management of stress. The results indicated that few respondents (21) did not know about stress management, whereas it is important for all professional nurses to be well informed about stress management in order to manage stress successfully. According to Chang, Hancock, Johnson, Daly and Jackson (2005:57), role stress in nursing continues to be an area of great interest to the profession, as stress affects the mental and physical health of the nurses.

#### 4.3.5.2 Workshop or lecture on stress management

**Table 4.24** Respondents attendance of workshop or lecture on management of stress (n=120)

Workshop on stress	Frequency (n)	Percent (%)	Valid percent (%)
yes	48	40.0	41.0
Valid no	69	57.5	59.0
Total	117	97.5	100.0
Missing system	3	2.5	
Total	120	100.0	

**Table 4.23** Respondents knowledge of stress management (n=120)

48 (41%) of the respondents indicated that they have attended a workshop or lecture on management of stress, 69 (59%) indicated that they have never attended of workshop or lecture on management of stress. The findings showed that more than half of the participant (69) had never attended a workshop or lecture on management of stress. It is necessary for the majority of professional nurses to attend workshop or lecture on stress management, to be able to manage stress at their workplace. Chang et al (2005:61) indicated that a range of strategies could be implemented to assist nurses with experience. They include orientation and mentoring programmes, team building strategies, and continuing staff development opportunities.

#### 4.3.5.3 Reading of materials on stress management

**Table 4.25** The respondents reading of materials on stress management (n=120)

Material on stress	Frequency (n)	Percent (%)	Valid percent
yes	78	65.0	66.7
Valid no	39	32.5	33.3
Total	117	97.5	100.0
Missing system	3	2.5	
Total	120	100.0	

**Table 4.25** The respondents reading of materials on stress management (n=120)

Out of 120 respondents who completed the questionnaire, 78 (66%) indicated that they have read materials on management of stress, and 33% (39) have never read such materials on management of stress. The results reported that (39) of the respondents did not read materials on management of stress. Professional nurses should read materials on management of stress in order to have adequate knowledge on the subject. According to Chang et al (2004:62), it is necessary for nurses to be committed to reducing stress, revising and rehearsing what you would do a next time the stressful event occurs.

#### 4.3.5.4 Knowledge on management of stress

**Table 4.26** The respondents' interest to have knowledge on management of stress (n=120)

Knowledge on management of stress	Frequency (n)	Percent (%)	Valid percent (%)
yes	114	95.0	97.4
Valid no	3	2.5	2.6
Total	117	97.5	100.0
Missing system	3	2.5	
Total	120	100.0	

**Table 4.26** The respondents' interest to have knowledge on management of stress (n=120)

Out of 120 respondents who completed the questionnaire, 114 (97.4%) indicated that they would like to have some knowledge on management of stress, 3 (2.6%) do not want knowledge on management of stress. The findings indicated that most respondents (114) show interest in obtaining knowledge on management of stress such knowledge is important in the nursing profession, especially professional nurses who play vital roles in nursing. According to Chang et al (2004:62), it is important to utilise stress education and management strategies to reduce the negative effect of stress.

#### 4.4 CONCLUSION

This chapter discussed the data analysis and interpretation, whereby frequencies and percentages were indicated by means of tables and graphs. The following aspects were analysed and interpreted: factors contributing to the development of stress, effect of stressors, available support system to cope with stressful situations, strategies to be utilised in the management of stress. Chapter 5 presented the findings, limitation and recommendations of the research study.

## **CHAPTER 5**

### **FINDINGS, LIMITATIONS AND RECOMMENDATIONS**

#### **5.1 INTRODUCTION**

The previous chapter described the data analysis and interpretation of data. The findings of this study were presented in tables, pie charts and bar charts to ensure clarity. Chapter 5 presented the findings based on research results of the study in relation to the research questions and the objectives of the study. The limitations of the study were then discussed, and the recommendations were finally provided.

#### **5.2 RESEARCH OBJECTIVES**

This chapter discussed the findings in relation to the research results and the objectives that guide the study. The objectives were:

- To identify and explore factors contributing to stressors among professional nurses in the hospitals of Vhembe district in Limpopo province, South Africa;
- To explore and describe the professional nurses 'perceived' effects of the stressors on their well-being;
- To identify and describe the strategies put in place in support of the professional nurses to cope with the stressful situations in the hospitals of Vhembe district in Limpopo province;
- To identify the measures used by professional nurses in the management of stress in the hospitals of Vhembe district in Limpopo province;
- Based on the findings, to draw recommendations that could be added to the body of knowledge in the prevention and management of stress by professional nurses.

## **5.3 FINDINGS**

The findings were presented according to the sections on the questionnaire.

### **SECTION A**

#### **5.3.1 Demographic details of the respondents**

The demographic details of the respondents explored and discussed in this study included the age, gender, marital status, year of experience, number of children, highest qualification obtained and residential address.

#### **5.3.1.1 Age of respondents**

The researcher selected the age group, to determine which age group responded to questionnaires as stress affects people of different age groups differently. The findings show that many respondents were from 45 to 54 years (54), followed by 35 to 44 years (39). This indicates that all age groups responded to the questionnaires, but the largest response was from older professional nurses, ages 45 to 54 years (54).

#### **5.3.1.2 Gender of respondents**

Out of 120 respondents who completed the questionnaires, 87 (72.5%) were females and 33 (27.5%) were males. The findings indicated that the study was conducted to more females (87) than male professional nurses (33), and that is similar to the present situation in the nursing profession where there are more female nurses than male nurses at the hospitals.

#### **5.3.1.3 Respondents' years of experience**

The study comprises of 120 respondents, more respondents (39) had from 11 to 20 years work experience, followed by (33) respondents with work experience of 6 to 10 years. The findings showed that as many as 39 (32.5%) respondents had 11 to 20 years of experience, which indicates that most respondents have more experience in the nursing profession, thus they were able to manage stress better.

#### **5.3.1.4 Marital status of the respondents**

Out of 120 respondents who completed the questionnaires, more than half of the respondents (66) were married, (18) were single, (18) were divorced and (18) were widows. The findings therefore reveal that more than half of the respondents were married (66), but all other categories of marital status also responded to questionnaires. This concludes that professional nurses with different marital status contributed in providing information on stress management.

#### **5.3.1.5 Respondents' number of children**

Many respondents (45) have three to four children, followed by (32) respondents who have one to two children. The other (25) respondents have five or more children and the remaining (18) respondents have no children. This indicates that the questionnaire was

completed by respondents belonging to different categories in relation to number of children, therefore views about stress management was from professional nurses with different numbers of children.

#### **5.3.1.6 Respondents' highest educational qualifications**

The findings indicate that many respondents (49) have a diploma in nursing, followed by professional nurses with advanced course/ post-basic course (28), and then those with degree (25), and lastly by respondents with honours and higher qualifications (18). This reveals that respondents had different educational qualifications.

#### **5.3.1.7 Residential address**

Of the respondents who answered the questionnaires, the largest group (49) were from sub-rural areas or villages, followed by (28) respondents from suburban areas or townships, (27) from rural areas and then (16) from urban areas. This shows that respondents were from different residential areas, and many of them were from sub-rural, therefore professional nurses from different residential areas completed questionnaires.

## **SECTION B**

### **5.3.2 Factors contributing to the development of stress**

Aspects discussed under this section included professional nurses' importance at the workplace, focus on negative experience, clarity on job function, pressure of work, view of their experience at work, view concerning changes at work and their characteristics.

#### **5.3.2.1 The respondents' self-worth at workplace**

The findings revealed that majority of the respondents 108 (90%) see themselves as worthwhile at their workplace, and only 12 (10%) do not see themselves as worthwhile.

This shows that majority of the professional nurses that responded to the questionnaires see themselves as worthwhile and needed at the workplace.

#### **5.3.2.2 Degree of focus on negative experience**

Although 60 (50%) of respondents focus moderately on negative experiences, 21 (17.5%) focus intensely on negative experiences. This concludes that there are some professional nurses who focus on negative experiences therefore they can develop stress easily.

#### **5.3.2.3 Job function and key responsibilities at workplace**

Figure 4.5 indicates that 87 (72.5%) respondents are clear about their job function, and only 6 (5%) are not clear about their job function. The findings showed that more than half of the respondents 87 (72.5%) know their job and key responsibilities at their workplace. It is important for professional nurses to be clear about their job function to perform their duties successfully.

#### **5.3.2.4 Pressure of work without rest**

The findings revealed that about half 54 (45%) of the respondents agreed that they experience pressure of work without rest. This shows that almost half (45%) of the respondents are at risk of developing stress. This means that of 120 professional nurses who responded to the questionnaires, 54 of them were experiencing pressure of work without rest. The professional nurses who experience this can get frustrated easily and as such can develop stress.

#### **5.3.2.5 View of experience at work**

According to study results, 42(35%) of the respondents' view work as difficult and 24(20%) respondents view work as boring. These findings reveal that most respondents are not happy at work and they are not comfortable while on duty, and that could result in job stress.

#### **5.3.2.6 Changes at work**

Out of 120 respondents, 90 (75%) of the respondents' view changes such as a new supervisor, revised work, and a skilled worker at work as challenging, and 27 (22.5%)

view changes at work as exciting, and the remaining 3(2.5%) responded to none of the above. This shows that more than half (90) of the professional nurses who responded to questionnaires, do not accept changes at work, they view them as challenges. The challenges at a workplace could become stressors to the professional nurses.

#### **5.3.2.7 The respondents' characteristics**

In this item, respondents' extreme characteristics like high competitive drive, very ambitious, and extreme level of job involvement were mentioned. 72 (60%) of the respondents agreed that they have two of the three listed characteristics, 6 (5%) have all three listed characteristics. This shows that most respondents have extreme characteristics and that they are high on Type A characteristics, and as such could easily develop stress at the workplace.

### **SECTION C**

#### **5.3.3 Effects of stressors**

Aspects discussed under this section included respondents' experience of difficulties in concentration, ability to solve problems, sleeping patterns, experience of psychosomatic conditions, accidents at work, mood problem, depression and suicidal thoughts.

##### **5.3.3.1 Experience of difficulties in concentration**

The findings revealed that 90 (75%) of the respondents sometimes experience difficulty in concentration, and 6 (5%) respondents experience difficulties in concentration most of the time. The results showed that majority of the respondents had difficulty in concentration and that could result in errors and accidents at the workplace.

##### **5.3.3.2 Ability to solve problems**

Figure 4.7 revealed that most respondents 72(60%) have the ability to solve problems, and 45 (37.5%) can sometimes solve problems. This indicates that a majority of the respondents (72) can solve problems at the workplace, thus they would not be easily frustrated by the problems while on duty and that could lead to good job performance.

#### **5.3.3.3 Sleeping pattern**

The findings show that 60 (50%) of respondents have sleep disturbances sometimes, and 9 (7.5%) have sleep disturbances most of the time. The results indicate that many respondents do not sleep well at night, thus their minds do not relax sufficiently. This could lead to general fatigue at work and strain in respondents' minds.

#### **5.3.3.4 Physical problems experienced**

There are certain physical problems that could be experienced by professional nurses like headache, general body pains, tiredness and palpitations. Out of 120 respondents who completed the questionnaire, 60 (50%) of the respondents' experience two and more of the above listed physical problems, and 42 (35%) experience one of the listed physical problems. This shows that majority of the respondents' experience stress-related physical problems.

#### **5.3.3.5 Experience of accidents happening at work**

Of the 120 professional nurses who responded to questionnaires, majority of them 69 (57.5%) sometimes experience accidents happening at work during their shifts, and 18 (15%) experience accidents at work most of the time. The findings reveal that most respondents experienced accidents happening at work during their shift, and that could be due to encounter with stressors.

#### **5.3.3.6 Mood of the respondents**

In respect of the level of the mood of the respondents, 78 (65%) experience moderate mood most of the time, 21 (17.5%) experience low mood, and 18 (15%) experience high mood. This reveals that majority of the respondents (78) experience moderate mood which is good mood, and only (21) respondents experience low mood most of the time. In the working situation, low mood and unhappiness could be due to stress.

#### **5.3.3.7 Involvement in the unit**

The highest frequency of the respondents 114 (95%) are involved as part of the team in the unit, and only 6 (5%) feel isolated in the unit. The findings show that most of the

respondents are part of the team in the units, and they are involved in daily activities of the unit, and as such they can cope well at work.

#### **5.3.3.8 The conditions the respondents suffered**

The findings reveal that 21 (17.5%) of the respondents have previously suffered anxiety, 18 (15.5%) have previously suffered depression, 3 (2.5%) have been treated for psychosomatic disorders. This concludes that there are some professional nurses who previously suffered from stress-related conditions. This means that they are not coping well with stressful situations.

#### **5.3.3.9 Suicidal thought**

Of the 120 respondents, 117 (97.5%) have no suicidal thoughts, but 3 (2.5%) respondents have suicidal thoughts. This indicates that few members of professional nurses would commit suicide as a result of stress-related problems.

### **SECTION D**

#### **5.3.4 Available support system to cope with stressful situations**

In this section, the researcher discussed the professional-nurses support at their workplace, their lifestyle and what the respondents did when they have problems. The following aspects were covered:

##### **5.3.4.1 Knowledge about employment assistant programme (EAP)**

The findings showed that there were 78 (66.7%) of the respondents who knew about EAP, whereas 39 (33.3%) did not know about EAP. This reveals that there are still some professional nurses who do not have knowledge about EAP, therefore they could delay in seeking counselling when the need arises while at the workplace. That could result in poor coping and development of stress.

##### **5.3.4.2 Facilitation of EAP at workplace**

The majority of the respondents 78 (65%) indicated that the EAP is not facilitated at their workplace, 42 (35%) indicated that EAP is facilitated at their workplace. The results reveal that there are still some challenges at our hospitals as most professional nurses

(78) stated that EAP is not facilitated at their workplace. This means that support system for professional nurses at the hospitals are not sufficient, therefore they would be unable to manage stress successfully.

#### **5.3.4.3 Advisory talk at workplace**

The findings reveal that 108 (92.3%) of the respondents indicated that they have attended advisory talks by a motivational speaker at the workplace, whereas 9 (7.7%) have never attended an advisory talk. This shows that advisory talks are facilitated well at hospitals, thus the professional nurses are given advice on how to cope at work.

#### **5.3.4.4 Involvement in decision making**

Of 120 respondents, 81 (69.5%) of the respondents are sometimes involved in decision making at the workplace, and 6 (5.1%) are not involved in decision making at all. The findings show that most professional nurses are not adequately equipped in decision making in the hospitals, and that could lead to low morale at work, and therefore development of stress.

#### **5.3.4.5 Attendance of in-service training and workshop**

Table 4.21 showed that 87 (74.4%) of the respondents have sometimes attended in-service training and workshop at the workplace, and 6 (5.1%) never attended. This indicates that attendance of in-service training and workshop by professional nurses is not sufficient at their workplace, and this could result in professional nurses being unable to perform certain duties satisfactorily.

#### **5.3.4.6 Participation in sport activities**

The findings reveal that 96 (80%) of respondents do not participate in sport activities, and 24 (20%) participate in sport activities. This shows that most respondents 96 do not take sport seriously as they did not participate at all. Physical exercise is said to have a good effect in lowering anxiety and depression.

#### **5.3.4.7 Type of sport**

Out of 120 respondents who completed the questionnaire, 18 (15%) of the respondents liked soccer, 3 (2.5%) liked netball, 3 (2.5%) liked volleyball, and 96 (80%) did not

participate in sports. The results reports that many respondents (96) are not involved in any sporting activities, thus stress-related conditions could develop easily.

#### **5.3.4.8 Exercise**

The findings reveal that half of the respondents 60 (50%) did not engage in exercise. This concludes that most professional nurses do not exercise, thus they could experience problems in coping with stressors the workplace.

#### **5.3.4.9 Type of food preferred**

The results report that majority of the respondents 105 (87.5%) preferred a well-balanced diet, 12 (10%) preferred junk food, and 3 (2.5%) did not have much appetite. Majority of the respondents (87.5%) ate well balanced food. This shows that a majority of professional nurses eat well and it leads to good health.

#### **5.3.4.10 Type of religion preferred**

102 (85%) of the respondents belong to Christianity, 9 (7.5%) belong to ancestral and 9 (7.5%) do not belong to any religion. This shows that a majority of professional nurses have religion as a support system.

#### **5.3.4.11 Sharing problems with friends and relatives**

The results show that more than half of the respondents 78 (65%) sometimes share problems with friends and relatives. Sharing problems with others has a benefit of relieving stress therefore professional nurses who are too secretive could develop stress easily.

#### **5.3.4.12 Counselling facilities at workplace**

The findings reveal that 75 (64.1%) preferred to use counselling facilities at their workplace, whereas 42 (35.9%) would not use facilities at their workplace. The results show that some professional nurses do not feel free to be counselled at work, they prefer to be counselled outside.

#### **5.3.4.13 Counselling facilities outside workplace**

The findings report that majority of the respondents 99(86.8%) preferred to be counselled outside the workplace. This shows that most professional nurses do not trust services at their workplace or they prefer privacy outside.

### **SECTION E**

#### **5.3.5 Strategies to be utilized in the management of stress**

This section discussed respondents' knowledge about management of stress, workshop or lecture attended, material read, and whether the respondents would like to have knowledge on management of stress.

##### **5.3.5.1 Knowledge about management of stress**

The findings reveal that 96 (82.1%) of the respondents indicated that they have knowledge about management of stress, whereas 21 (17.9%) indicated that they do not have any knowledge about management of stress. This concludes that even though majority of professional nurses are knowledgeable on management of stress, there are still some who do not know about stress management.

##### **5.3.5.2 Workshop or lecture on stress management**

The findings indicate that more than half of the respondents 69 (59%) have never attended workshop or lecture on management of stress. This shows that most professional nurses could have challenges in management of stress or that they never attended any such lecture and workshops.

##### **5.3.5.3 Reading of materials on stress management**

Out of 120 respondents who completed the questionnaire, 39 (33%) indicated that they have never read material on stress management. The findings show that some respondents do not have adequate information on stress management, thus they could fail to manage stress successfully.

#### **5.3.5.4 Knowledge on management of stress**

The findings reveal that most participants 114 (97.4%) indicated that they would like to have more knowledge on management of stress. The results therefore show that many professional nurses have interest in knowing more about stress management.

#### **5.4 LIMITATION OF THE STUDY**

During the course of the study, certain limitations were identified. The most significant were:

- The study was conducted in the four hospitals of Vhembe district in Limpopo province therefore the findings cannot easily be generalized to all hospitals in the province.
- Only professional nurses who happen to be at the right place at the right time were included in the sample, thus other important aspects that affect other professional nurses might be left out.
- The study was conducted in the four sampled hospitals of only one district of Limpopo province therefore the results obtained from the study cannot be generalized to other districts in the province.
- The study was conducted in one district of one province therefore the findings cannot be generalized to other provinces in South Africa.
- The data was collected by using self-administered questionnaires, although there was someone to answer the queries, it is possible that some professional nurses may have misinterpreted some questions and answered irrelevantly.
- The questionnaire has structured questions with designed responses therefore if the respondent had another different response, he/she was unable to indicate it.

#### **5.5 RECOMMENDATIONS**

##### **5.5.1 Recommendations based on findings**

Based on the findings, the researcher made the following recommendations:

- There should be proper scheduling of duty lists to ensure that professional nurses are not overworked without rest.
- There should be motivational talks for nurses to promote commitment and happiness at their workplace.

- There should be reassurance of staff members when new skilled workers or supervisors are employed.
- There should be proper orientation for all staff members on new equipment or any other complicated procedure.
- Workshops on stress management and problem solving should be conducted more often.
- Continuous education on healthy life style and importance of exercise should be done.
- Staff members should be involved in decision making, and sometimes be allowed to lead other programmes.
- Proper orientation of personnel on counselling facilities at the institution should be done, (EAP), and there should be policies on EAP that everybody read and sign.
- There should be monitored programme for in-service training and workshop and all staff members should alternate in attending.
- There should be a functional library at the hospital, with different materials that update personnel on important issues.
- There should be facilitation of different sports activities at the hospitals and employees should be motivated to attend.

#### **5.5.2 Recommendation for further research**

The researcher recommended that further research be conducted on the following topics:

- The effectiveness of EAP at the hospital.
- The level of involvement of professional nurses in decision making at the hospitals.
- Management of workload in the hospital units.
- Improvement of healthy life style for employees at the institution.
- The importance of exercise among nurses.
- The effect of spiritual team at the hospital.
- The level of stress among nurses the health institutions.

#### **5.6 CONCLUSION**

In this last chapter, the research findings, limitation and recommendations were identified and described. The purpose of this study was to identify and describe the management of stress by professional nurses in the hospitals of Vhembe district in Limpopo province, South Africa.

Aspects that contribute to the development of stress at the workplace were described. Most respondents agreed that they experience work overload at their workplace. Some professional nurses indicated that they are sometimes unhappy at work and that they view changes at work as challenging.

The researcher also discussed the effect of stressors to the professional nurses at work. The findings revealed that most respondents have poor concentration levels at work. Many of them agreed that they sometimes experience physical problems related to stress like headache, tiredness, palpitation and others. Most respondents said they are part of other teams at work. Some respondents agreed to have suffered anxiety and depression, and very few have suicidal thoughts.

The support systems that are available to cope with stressful situations were identified. EAP is still a challenge at the hospitals as some respondents said they do not know EAP and some said it is not facilitated at their institution. Most professional nurses indicated that they do not participate in any sports activity and general exercise. Majority of the respondents indicated that they need more material on stress management. Limitations of the research study were identified and described. Recommendations were described including recommendations based on findings and those for further research.

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#### **ANNEXURE A: Clearance certificate**

**ANNEXURE B: Request for provincial permission**

The Head of Department  
Department of Health Limpopo province  
Private Bag x9302  
POLOKWANE  
0700

PO Box 1534  
NZHELELE  
0993  
20.03.2013

## REQUEST FOR PERMISSION TO CONDUCT RESEARCH

I am currently registered in Magister Curationis (Nursing Masters Degree) programme at the University of Venda. The title of my dissertation is "Management of stress by professional nurses in the hospitals of Vhembe district in Limpopo province, South Africa".

I am requesting permission to conduct the research at the hospitals of Vhembe district in Limpopo province, South Africa. This will involve professional nurses working in the hospitals. The study aims at identifying and describing management of stress by professional nurses and based on the findings, to make recommendations in the prevention and management of stress by professional nurses.

I hope that the study will benefit all persons, particularly the professional nurses at hospitals in the Republic of South Africa.

Anonymity will be maintained throughout and participation is voluntarily. A questionnaire will be used to collect data.

Thank you

Yours faithfully

-----  
Ms. E.P. Ramabulana

### ANNEXURE C: Request for district permission

PO Box 1534  
NZHELELE  
0993  
20.03.2013

The Head of Department  
Department of Health Vhembe district  
Private Bag X5009  
THOHOYANDOU  
0950

## REQUEST FOR PERMISSION TO CONDUCT RESEARCH

I am currently registered in Magister Curationis (Nursing Masters Degree) programme at the University of Venda. The title of my dissertation is "Management of stress by professional nurses in the hospitals of Vhembe district in Limpopo province, South Africa".

I am requesting permission to conduct the research at the four hospitals of Vhembe district in Limpopo province, namely, Elim, Donald Frazer, Siloam and Hayani. This will involve professional nurses working in the hospitals. The study aims at identifying and describing management of stress by professional nurses and based on the findings, to make recommendations in the prevention and management of stress by professional nurses.

I hope that the study will benefit all persons, particularly the professional nurses at hospitals in the Republic of South Africa.

Anonymity will be maintained throughout and participation is voluntarily. A questionnaire will be used to collect data.

Thank you

Yours faithfully

-----  
Ms. E.P. Ramabulana

## ANNEXURE D: Request for hospitals permission

### Elim hospital:

The Chief Executive officer  
Elim hospital  
P O Box 12

PO Box 1534  
NZHELELE  
0993  
20.03.2013

ELIM  
0960

### **REQUEST FOR PERMISSION TO CONDUCT RESEARCH**

I am currently registered in Magister Curationis (Nursing Masters Degree) programme at the University of Venda. The title of my dissertation is "Management of stress by professional nurses in the hospitals of Vhembe district in Limpopo province, South Africa".

I request permission to conduct the research at Elim hospital of Vhembe district. This will involve professional nurses working in the hospital. The study aims at identifying and describing management of stress by professional nurses and based on the findings, to make recommendations in the prevention and management of stress by professional nurses.

I hope that the study will benefit all persons, particularly the professional nurses at hospitals in the Republic of South Africa.

Anonymity will be maintained throughout and participation is voluntarily. A questionnaire will be used to collect data.

Thank you  
Yours faithfully

-----  
Ms. E.P. Ramabulana

### **Hayani hospital:**

PO Box 1534  
NZHELELE  
0993  
20.03.2013

The Chief Executive Officer  
Hayani hospital  
Private Bag X2272  
SIBASA  
0970

## REQUEST FOR PERMISSION TO CONDUCT RESEARCH

I am currently registered in Magister Curationis (Nursing Masters Degree) programme at the University of Venda. The title of my dissertation is "Management of stress by professional nurses in the hospitals of Vhembe district in Limpopo province, South Africa".

I request permission to conduct the research at Hayani hospital of Vhembe district. This will involve professional nurses working in the hospital. The study aims at identifying and describing management of stress by professional nurses and based on the findings, to make recommendations in the prevention and management of stress by professional nurses.

I hope that the study will benefit all persons, particularly the professional nurses at hospitals in the Republic of South Africa.

Anonymity will be maintained throughout and participation is voluntarily. A questionnaire will be used to collect data.

Thank you

Yours faithfully

-----  
Ms. E.P. Ramabulana

**Siloam hospital:**

PO Box 1534  
NZHELELE  
0993  
20.03.2013

The Chief Executive Officer  
Siloam hospital  
Private Bag X2432  
MAKHADO  
0920

## REQUEST FOR PERMISSION TO CONDUCT RESEARCH

I am currently registered in Magister Curationis (Nursing Masters Degree) programme at the University of Venda. The title of my dissertation is "Management of stress by professional nurses in the hospitals of Vhembe district in Limpopo province, South Africa".

I request permission to conduct the research at Siloam hospital of Vhembe district. This will involve professional nurses working in the hospital. The study aims at identifying and describing management of stress by professional nurses and based on the findings, to make recommendations in the prevention and management of stress by professional nurses.

I hope that the study will benefit all persons, particularly the professional nurses at hospitals in the Republic of South Africa.

Anonymity will be maintained throughout and participation is voluntarily. A questionnaire will be used to collect data.

Thank you

Yours faithfully

-----  
Ms. E.P. Ramabulana

**Donald Frazer hospital:**

PO Box 1534  
NZHELELE  
0993  
20.03.2013

The Chief Executive Officer  
Private Bag 1172  
VHUFULI  
0971

## **REQUEST FOR PERMISSION TO CONDUCT RESEARCH**

I am currently registered in Magister Curationis (Nursing Masters Degree) programme at the University of Venda. The title of my dissertation is "Management of stress by professional nurses in the hospitals of Vhembe district in Limpopo province, South Africa".

I am requesting permission to conduct the research at Donald Frazer hospital of Vhembe district. This will involve professional nurses working in the hospital. The study aims at identifying and describing management of stress by professional nurses and based on the findings, to make recommendations in the prevention and management of stress by professional nurses.

I hope that the study will benefit all persons, particularly the professional nurses at hospitals in the Republic of South Africa.

Anonymity will be maintained throughout and participation is voluntarily. A questionnaire will be used to collect data.

Thank you

Yours faithfully

.....  
Ms. E.P. Ramabulana

## **ANNEXURE E: Confirmation letter**

## **ANNEXURE F: Letter of informed consent**

### **Statement by Researcher:**

Professional nurses are exposed to many stressors at workplace, and they should render quality care to patients at all times.

The purpose of this research is to identify and describe the management of stress by professional nurses in the hospitals of Vhembe district in Limpopo province, South

Africa, and to develop guidelines to assist professional nurses in the implementation of stress management, and for the researcher to obtain a Magister Curationis Degree.

Participation in this study is voluntarily and participants can withdraw from it without providing any reason at any period of the study.

**Consent by the participants:**

I understand the proposed study. I was given adequate information about participating and had opportunity to ask questions. I understand that participation in this study is completely voluntary and that I may withdraw from participation at any time without providing any reasons. I have been assured that my privacy and anonymity are guaranteed.

I hereby give consent to participate in this study.

Signature of participant .....

Date .....

**ANNEXURE G: Questionnaire**

**Answer each of the questions by making a tick in the appropriate box or write down the response in the space provided.**

**QUESTIONNAIRE FOR PROFESSIONAL NURSES**

**SECTION A**

**OFFICE USE**

1
2

**DEMOGRAPHIC DETAIL OF THE PROFESSIONAL NURSE**

1. Your age at your last birthday  25-34   
 35-44  
 45-54  
 55 and above
2. State your gender  Male   
 Female
3. How long have you been employed as a Professional nurse?  5 and below   
 6-10 years  
 11-20 years  
 21 and above
4. Marital status  Single   
 Married  
 Divorced  
 Widow/Widower

**SECTION B**

**NATURE OF STRESS**

5. Do you see yourself as important and worthwhile person

**OFFICE USE**

5

6

at your workplace?

- Yes
- No

6. To what degree do you focus on negative experiences like

your failures, weakness, and shortcomings?

- Mild
- Moderate
- Extreme
- None of above

7. Are you clear about your job functions and your key responsibilities at your workplace?

- Slightly clear
- Very clear
- Not clear
- Uncertain

8. Do you have pressure of work without any appropriate rest?

- Yes
- No

9. How do you view your experience at work?

- Difficult
- Boring
- Enjoyable
- None of above

OFFICE USE

 9

10. What is your view concerning changes at

146

10

11

work like new supervisors, revised work and skilled workers?

- Exciting
- Challenging
- Threat
- None of above

11. Indicate in the block if you have the following characteristics:

High competitive drive, very ambitious and always show extreme level of job involvement

- Have one of the above
- Have two of the above
- Have all of the above
- None of above

**SECTION C**

**EFFECTS OF STRESSORS**

12. Do you experience difficulties in concentration?

- Sometimes
- Most of the time

147

OFFICE USE

12

13

14

Not at all

13. Do you have the ability to solve problems?

- Sometimes   
 Most of the time  
 Not at all

14. How is your sleeping pattern?

- Sleep well  
 Sleep disturbance sometimes   
 Sleep disturbance most of the time

15. Do you usually experience the following problems:

headache, general body pains, tiredness and palpitations

- One of the above   
 Two and more  
 None of above

16. How often do you experience accidents happening at work during your shift?

- Sometimes   
 Most of the time  
 Not at all

17. How is your mood most of the time?

- Low  
 Moderate  
 High  
 None of above

18. Indicate the extent of your involvement in your

148

OFFICE USE

17

18

19

unit by making a tick on the provided items

- Part of the team
- Isolated
- None of above

19. Have you ever been treated for the following conditions?

- Anxiety
- Depression
- Psychosomatic disorder
- None

20. Do you sometimes have suicidal thoughts?

- Yes
- No

**SECTION D**

**AVAILABLE SUPPORT SYSTEM**

**OFFICE USE**

21. Do you have any knowledge about Employee Assistant Programme (EAP)?

21

22

23

— Yes  
No

22. Is the EAP facilitated at your workplace?

Yes  
 No

23. Have you ever attended advisory talk by a motivational speaker at your workplace?

Yes  
 No

24. Does the management involve you in decision making at the workplace?

Sometimes  
 Most of the time  
 Not at all

25. Do you attend in-service training or workshop at the workplace?

Sometimes  
 Regularly  
 Never attended

26. Do you participate in sport activities?

Yes  
 No

27. If number 26 is yes, name the type of sport you like most

150

OFFICE USE

26

27

28

29

-----

28. Do you engage in exercises?

- Yes
- No

29. What type of food do you prefer?

- Junk
- Well balanced diet
- No appetite

30. Indicate the type of religion that you belong to

- Christianity
- Ancestral
- Moslem/Islam/Hinduism
- None of the above

31. Do you share your problems with close friends/relatives?

- Sometimes
- Most of the time
- Not at all

32. If there is a need for counselling, will you use counselling facilities at your workplace?

- Yes
- No

OFFICE USE
<input type="checkbox"/>
32
33

33. If there is a need for counselling will you use the facilities outside your workplace?

- Yes
- No

**SECTION E**

**STRATEGIES TO BE UTILIZED**

152

**OFFICE USE**

34

35

36

34. Do you have knowledge about stress management?

Yes   
No

35. Have you ever attended a workshop or lecture on stress management?

Yes   
No   
—

36. Have you ever read any material on stress management?

Yes   
No

37. Would you like to have some knowledge on stress management?

Yes   
No