

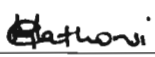
Stress, Coping, and Spiritual Wellbeing of a Sample of Nurses

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DECLARATION

I, **Clerah G. Mathonsi**, declare that this thesis is my own work and that sources of information have been acknowledged accordingly. I also declare that the thesis has not been submitted for candidature of any other degree in any other university.

Signature: 

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Abstract

This study investigates levels and sources of stress, coping, and spiritual wellbeing of a sample of nurses. It also examines the relationship between these variables. The sample is drawn from three public hospitals. The Nursing Stress Scale (NSS) measures the sources and levels of stress while the revised Ways of Coping Questionnaire (WCQ) measures coping. The Spiritual Wellbeing Scale (SWBS) measures the spirituality of the sample. The study found that nurses are moderately affected by all the stressors measured by the NSS. It also found that nurses use emotion as well as problem-focused coping. Spiritual wellbeing was found to be high and may explain why nurses experience moderate stress levels.

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Chapter One

1. Introduction

Recent research shows that nursing is a stressful field of work (Basson & Van der Merwe, 1994; Boeijs, Nievaard, & Casperie, 1997; Callaghan, Tak-Ying, & Wyatt, 2000; Elloker, 2003; Hall, 2004a, 2004b; Happell, Pinikahana, & Martin, 2003; Healy & McKay, 2000; Lee, 2003; McGrath, Reid, & Boore, 2003; Murphy, 2004; Levert, Lucas, & Ortlepp, 2000; McVicar, 2003; Payne, 2001; Stacciarini & Troccoli, 2004; Tully, 2004). In keeping with this growing interest in nurses' stress, international researchers have investigated the mechanisms through which nurses cope. However, in South Africa only a few studies (Basson & Van der Merwe, 1994; Elloker, 2003; Hall, 2004a, 2004b; Levert et al., 2000; Ngwezi, 1998) have investigated nursing stress and coping.

Another noticeable trend in nursing literature is the growing interest in issues of spirituality in health care (Baldacchino & Buhagiar, 2003; Baldacchino & Draper, 2001; Callister, Bond, Matsumura, & Mangum, 2004; Carroll, 2001; Gilliat-Ray, 2003; Kelly, 2004; MacLaren, 2003; Mahlangu & Uys, 2004; Sheldon, 2000; Sherman, 2000; Theis, Biordi, Coeling, Nalepka, & Miller, 2003; Wensley, 2000). However, these studies mainly focus on patients' spirituality. Recent literature suggests that spirituality is a valuable resource for both patients and nurses (Cavendish, Konecny, Luise, & Lanza, 2004; Elloker, 2003; Jackson, 2004; Mahlangu & Uys, 2004). Elloker (2003) and Cavendish et al. (2004) point out that nurses value their spirituality because it helps them to cope.

Given the shortage of South African literature on nursing stress, coping, and nurses' spiritual wellbeing the present study aims at examining these variables.

1.1 Definition of Terms

Stress. For the purposes of the present study, stress is defined as “a relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and as endangering wellbeing” (Folkman, Lazarus, Gruen, & DeLongis, 1986, p. 572). In the present study, stress will refer to the relationship or interaction between the nurse and the working environment. Cavendish et al. (2004) state that the ongoing nursing demands overstretch the limits of the resources available to support the nurses and leave them depleted.

Coping. Lazarus and Folkman (1984) define coping as the cognitive and behavioural attempts to manage specific internal as well as external demands that are appraised by the person as exceeding his or her resources. They distinguish between two kinds of coping, namely, emotion-focused and problem-focused coping. Emotion-focused coping involves the regulation of unpleasant or stressful emotions. Problem-focused coping refers to the behavioural acts that are aimed at changing the situation for the better. In the present study, coping will refer to both the cognitive and the behavioural activities that nurses engage in, in order to manage the internal and external demands of nursing.

Spiritual wellbeing. Ellison (1983) operationally defines spiritual wellbeing as “the affirmation of life in relationship to God, self, community, and environment that nurtures and celebrates wholeness” (p. 331). He points out that although the definition is not precise, it suggests that spiritual wellbeing “involves a religious component and a social-psychological component” (p. 331). Ellison’s definition will be adopted to refer to spiritual wellbeing in the current study.

1.2 Stress in Nursing

Various factors are cited as responsible for stress in nursing: For example, heavy workload, staff shortages, poor pay, poor working conditions, limited professional autonomy, and so forth. According to Jackson (2004) nurses experience stress partly because their roles “within the health care team have never been fully understood or valued” (p. 67). Gilliat-Ray (2003) and Levert et al. (2000) add to this by pointing out that the considerable contribution that nurses make to the health care system largely goes unacknowledged. This lack of recognition may also play a role in the nurses’ feelings of lack of personal accomplishment (Levert et al., 2000). According to Elloker (2003), Hall and Erasmus (2003), and Jackson (2004) the fact that nursing is a female dominated profession contributes to the nurses’ levels of stress. They attribute this to gender role socialization in which women are socialized to show emotional involvement with other people thereby putting them at risk for emotional exhaustion. According to Elloker (2003) nursing reflects the status of women in society where women are not expected to be leaders but followers. This leads nurses to take a dependent role by shying away from leadership roles. Jackson (2004) blames the media for portraying nursing as an intellectually undemanding job.

With so much stress in nursing as hinted by literature, it is of interest to investigate factors that help nurses to cope. Research points to various factors among them, spirituality. It also points to the significance of spirituality and spiritual wellbeing in health care (Baldacchino & Buhagiar, 2003; Baldacchino & Draper, 2001; Callister et al., 2004; Carroll, 2001; Elloker, 2003; Kelly, 2004; Mahlangu & Uys, 2004; Pulchaski, 2001; Sherman, 2000; Wensley, 2000). These studies propose that people often use their

spirituality as a coping mechanism when they experience distress even though they may not be religious in their every day life.

1.3 Spirituality in Nursing

Although spirituality in nursing has long been an area of investigation, most studies tend to focus on the spiritual care of patients especially palliative and terminally ill patients (Hubell, Woodard, Barksdale-Brown, & Parker, 2006; Johnson, Tilghman, Davis-Dick, & Hamilton-Faison, 2006; Kelly, 2004; Pulchaski, 2001; McClain, Rosenfeld, & Brietbart, 2003; Oldnall, 1996; Sulmasy, 2001, Strang- Strang, & Ternstedt, 2002; Yang & Mao, 2001; Wensley, 1995). Few studies (Cavendish et al., 2004; Jackson, 2004) examine nurses' spirituality and the impact this may have in the performance of their duties. Cavendish et al. (2004) state that in the midst of "soaring patient acuity levels, declining staff-patient ratios and ongoing demands to do more with less" (p. 27) nurses use prayer to strengthen their coping. This implies that spirituality is a useful resource for both nurses and patients.

1.4 Background to the Present Study

Research shows that South African nurses experience higher degrees of burnout than nurses in the Western world (Heyns, Venter, Esterhuyse, Bam, & Odendaal, 2003; Levert et al., 2000). Elloker (2003) and Heyns et al. (2003) point out that this is linked to the political changes that took place when South Africa became a democratic country. According to Heyns et al. (2003) since democracy, the maintenance of the public health care system is under heavy pressure. This is due to the increased access to health care that is now enjoyed by the majority of the people of South Africa which meant an increase in patient load and strain for the health personnel (Elloker, 2003; Hall, 2004b).

The South African public health system is not functioning at its optimal level due to problems encountered by health personnel (Heyns et al., 2003; Padarath et al., 2003; Sanders & Lloyd, 2005). Heyns et al. (2003) report unsatisfactory “working conditions in some state hospitals, where the majority of nursing professionals are employed” (p. 81). The conditions include: Staff shortages, heavy work load, under resourced working environments, poor salaries, low staff morale, emigration of skilled nurses, and the HIV/AIDS epidemic (Basson & Van der Merwe, 1995; Elloker, 2003; Hall, 2004a, 2004b; Hall & Erasmus, 2003; Levert et al., 2000; Sanders & Lloyd, 2005). The effects of some of the problems are discussed below.

Staff shortages. Currently, there are about 32 000 nursing positions reported to be vacant in the country’s public hospitals (Democratic Nursing Organization of South Africa [Denosa], n.d.; Hall & Erasmus, 2003). This is significant because according to a 2004 report from the United Nations’ Office for the Coordination of Humanitarian Affairs, some of South Africa’s busiest hospitals handle up to one-and-a-half million patient visits a year. The report also states that due to the shortage of nurses, operating theatres were closed for some time and operations like open-heart surgery were cancelled in one of the country’s academic hospitals. According to Hall (2004b) the situation is desperate and is likely to contribute to high levels of stress for the current workforce.

Various reasons are cited as the cause for nursing shortages. These include: Poor salaries, heavy workloads, poor working conditions, and the emigration of skilled nurses to richer countries in pursuit of better salaries and improved working conditions (Padarath et al., 2003; Sanders & Lloyd, 2005). According to the Hospital Association of South Africa (HASA, 2005) the general decrease in the number of nurses qualifying

between 1990 and 2000 is responsible for nursing staff shortages. HASA further states that the decline of new entrants into the profession is responsible for the shortage of nurses.

Official records by Statistics South Africa (Stats S.A.) show that in 2001 South Africa had 155 484 practicing nurses. This gives a nurse/population ratio of 343 per 100 000. This is a favourable ratio when compared to the minimum of 200 per 100 000 that is proposed by the World Health Organization (Hall, 2004b). However, Denosa (n.d.) is of the opinion that the situation is far worse than is suggested by the Stats S.A. report. The organization does not agree with the reported nurse-to-population ratio because it does not believe that the ratio is representative of true hospitals' circumstances. It points out that the actual number of nurses dealing with patients in hospitals is much lower than the official figure. This is especially so in largely rural provinces where there is a maldistribution of health personnel (Hall, 2004b; Hall & Erasmus, 2003). Denosa further states that the reason why the situation does not seem as hopeless as it is, is that nurses who work overseas on short-term contracts keep their licenses current in order to be employed when they return.

The impact of the HIV/AIDS epidemic. There is a high prevalence of HIV/AIDS infections in South Africa with an estimated 5 million people infected. This implies a heavier workload for health care workers especially the nurses (Hall, 2004a; Govender, Rochat, Richter, Rollins, & Hsiao, 2006; Sanders & Lloyd, 2005; Smit, 2005). According to Smit (2005) it is expected that HIV infections in South Africa may escalate to 7.5 million by the year 2010. The statistics provided above give a hint as to what nurses involved in the health care of HIV/AIDS patients deal with in their practice of nursing.

According to Hall (2004a) nursing has inherent job stresses and caring for HIV/AIDS patients increase nurses' stress by exposing them to increased patients' deaths. Hall (2004a) and Smit (2005) assert that the lack of an apparent cure for HIV/AIDS adds to the burden of caring for these patients. Smit (2005) states that caring for HIV patients involves providing intensive physical as well as emotional support and this puts nurses at an increased risk of developing burnout.

According to Hall (2004a), Sanders and Lloyd (2005), and Smit (2005) the risk of contracting HIV/AIDS may further escalate nurses' stress. This is because nurses are afraid that they may contract HIV from patients through exposure to bodily fluids and accidental occupational injury. This is especially so for nurses who work in trauma units. Another stressor associated with HIV/AIDS in nursing is that nurses sometimes feel inadequate in their knowledge and treatment of HIV/AIDS. The feelings of inadequacy leave the nurses feeling helpless (Sanders & Lloyd, 2005).

Hall (2004a) states that nurses themselves may be HIV infected and this can lead to additional difficulties in the work place. The challenge of having HIV positive colleagues places a burden on the non-positive nurses. This is because positive nurses may fall sick and require the healthy ones to cover for them while they recover from their illnesses (Hall, 2004a).

1.5 Work-Related Stress, Coping Strategies, and Spiritual Wellbeing in Nursing

Literature shows that nursing is a physically, emotionally, psychologically, and spiritually demanding job. According to Gillespie and Melby (2003) continuously working under excessive pressure is harmful because it threatens the nurse's wellbeing.

They further state that the chronic stress involved in nursing is emotionally draining and can cause burnout.

Literature further proposes that nurses often feel out of control in their jobs because most stressors are deemed not likely to change: For example, understaffing and work overload. This sounds like a risk factor for emotional burnout because nurses may heavily rely on emotion-focused coping (Boyle, Grap, Younger, & Thornby, 1991; Lee, 2003; Payne, 2001). Lee (2003) and Payne (2001) point out that there is link between emotional burnout and the way in which the individual copes with stress. They state that there are high levels of burnout in nurses who frequently use emotion-focused coping.

It is of interest to the present study to investigate factors that help nurses to cope with their work demands. Cavendish et al. (2004) assert that spiritual practices may be helping nurses to remain committed to their work. According to Elloker (2003) and Sherman (2000) nurses value their spirituality because it helps them to cope. It seems from the review of literature that spirituality plays a moderating role in the relationship between stress and coping (Laubmeier, Zakowski, & Bair, 2004). Folkman and Lazarus (1991) define moderating variables as “antecedent conditions such as personality traits that interact with other conditions in producing an outcome” (p. 213). This implies that spirituality or spiritual wellbeing as an antecedent variable would influence the person’s ability to cope with the situation by influencing the individual’s appraisal of the situation. Ellison (1983) asserts that spiritual wellbeing allows individuals to move beyond or transcend unpleasant situations. He also points out that spiritual wellbeing allows one to experience spiritual and emotional health. The key to being able to move beyond unpleasant situations seems to be, according to Ellison (1983), “holding on to one’s

deepest spiritual commitments and being able to interpret the suffering within the context of deeper positive meaning” (p. 332). McClain et al. (2003) assert that spiritual wellbeing helps to strengthen psychological adjustment and functioning.

1.6 Aims and Motivation for the Study

Currently, much of what is known about work-related stress, coping and spirituality in nursing is from international studies. This observation motivated the researcher to undertake the present study in order to address the problem from a South African perspective. Elloker (2003) points out that South African nurses experience problems that are unique to the South African context.

Through the review of literature, the researcher observed that although spirituality is suggested to play an important role in nursing, few South African nursing studies investigated spirituality. The researcher also observed that most studies on spirituality focus on patients’ needs, thus neglecting nurses. Of the few South African nursing studies, Mahlangu and Uys (2004) attempted to include nurses by investigating the meaning of spirituality from the patients’ and nurses’ perspectives. However, their study is limited because it does not address how spirituality helps nurses to cope with work demands.

Rule (2002) made an interesting observation that South Africans are generally a religious or spiritual people. It is also interesting to note that researchers report that more women than men are religious and spiritual (Cnaan & Heizer, 2004; Flannelly & Galek, 2006, Roth & Kroll, 2007). Given the situation that nursing is female dominated, that issues of spirituality are widespread in South Africa and greater amongst women, it is

expected that the nurses' spirituality will play a role in helping them to deal with work-related stress.

The present study therefore aims at describing stress, coping, and spiritual wellbeing of a sample of nurses. It also aims at investigating the relationship between these variables. The following chapter will present the theoretical framework and empirical information on nursing stress, coping, and spiritual wellbeing.

Chapter Two

2. Literature Review

This chapter presents theoretical and empirical information on stress, the strategies nurses use to cope, and spirituality in nursing. The researcher observed that there is a dearth of literature of studies that address all three variables in one study. While a few studies correlated stress with religiosity/spirituality or coping with spirituality/religiosity (Meisenhelder, 2002; Salsman & Carlson, 2005) only one examined the relationship between spirituality, nursing stress, and coping (Laubmeier et al., 2004).

2.1 Theoretical Framework

The study uses two theories to inform the understanding of concepts. Lazarus and Folkman's theory of stress and coping informs the researcher's understanding of nursing stress and the nurses' coping. The second theory is Frankl's theory of existentialism and it informs the understanding of spirituality or spiritual wellbeing. Existential theory is chosen because "spirituality has existential underpinnings that involve finding meaning and making sense of one's life and the world within the context of an intangible connectedness with something or someone greater than oneself" (Bauer-Wu & Farran, 2005, p. 175).

The theory of stress and coping. As mentioned earlier, the theory of stress and coping view stress as the relationship between the person and the environment that is appraised by the person as exceeding his or her resources: The person feels that his personal wellbeing is in jeopardy (Folkman, 1984; Lazarus, 1990).

Unlike other theories that emphasize either personality characteristics or environmental factors, this theory focuses on the transactions between the person and the

environment. It views both the person and the environment as equally important. This is because both the person and the environment constantly influence each other (Dewe & Trenberth, 2004; Folkman & Lazarus, 1985).

The theory identifies two processes as critical mediators of stressful person-environment encounters. These are:

- Cognitive appraisal, and
- Coping.

Cognitive appraisal is the process through which a person evaluates the relevance and/or significance of a certain environmental encounter to his or her wellbeing. Put differently, cognitive appraisal is the person's judgement over the environmental encounter (Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986). There are two types of cognitive appraisal, namely, primary and secondary appraisal. In primary appraisal the person evaluates the potential benefits or the threats involved in a certain encounter. The person also evaluates the manner in which s/he stands to benefit from that particular encounter. Secondary appraisal refers to the process whereby the person evaluates the available resources through which s/he can overcome, prevent harm or improve the benefits of the encounter. Simply put, secondary appraisal involves the evaluation of coping options whereby the person asks the question "what can I do to change the situation" (Folkman, Lazarus, Gruen, et al., 1986).

Lazarus, Folkman, and their associates view coping as the person's efforts (either cognitive or behavioural) to manage internal as well as external demands that the person appraises as exceeding his or her resources (Folkman & Lazarus, 1991; Folkman &

Moskowitz, 2000, 2004). There are two major and widely recognized functions of coping identified within this theory. These are:

- Regulating stressful emotions (emotion-focused coping), and
- Doing something in order to change the stressful situation for the better, otherwise known as problem-focused coping (Lazarus & Folkman, 1984).

According Lazarus and Folkman (1987) people use both forms of coping in almost all stressful encounters. They assert that problem-focused coping is mainly used in situations that are likely to change whereas emotion-focused coping is used in situations that the individual appraises as unchangeable. The present study aims at describing the strategies that nurses use to cope and will classify these according to the types of coping identified by Lazarus and Folkman.

The theory of existentialism. Frankl's (1984) theory of existentialism which is centred on the "meaning of human existence" (p. 121) states that the primary motivation of man is his/her search for meaning in life. By this, he means that man is motivated to continue living by searching for meaning and a purpose worth living for. He further mentions that it is the search for meaning and purpose that helps man to endure and overcome any stressful situation or suffering. Bauer-Wu and Farran (2005) add to Frankl's idea by stating that "personal meaning in life serves as a stress buffer" (p. 176) as it helps one to cope with suffering be it physical, emotional or psychological.

To enhance the understanding of spirituality, the present study adopted Paloutzian and Ellison's (1982) definition of the concept. They conceptually define spirituality as the "combination of religious wellbeing (harmony with God or a higher power) and existential wellbeing (nonreligious sense of meaning and purpose in life)" (p. 49). This

definition suggests that spirituality is a broad, multidimensional concept that embraces the needs of both believers and non-believers (Graham, Furr, Flowers, & Burke, 2001; Heintzman, 1999; Miller & Thoresen, 2003).

2.1.1 Religion and Spirituality

Some researchers tend to equate spirituality with religion (Wensley, 1995). While there is a strong link between spirituality and religion, religion is seen to be a narrow concept that is associated with organized beliefs about the meaning of life and the universe (Baldacchino & Draper, 2001; Miller & Thoresen, 2003; Tanyi, 2002). Meisenhelder (2002) distinguishes between religion and spirituality by stating that “religion is a shared system of organized beliefs involving a Higher Power” whereas “spirituality is a search or state of transcendence, peace, connectedness, hope, purpose, and meaning in life that is often obtained through religious beliefs” (p. 772). Wensley (1995) supports this idea by stating that spirituality is a “journey, discovery, a response to life, a search for ultimate meaning, an engagement in relationships, becoming whole in holiness, developing capacity in faith, hope and love” (p. 1).

2.1.2 Spiritual Wellbeing, Physical Health, and Mental Wellbeing

Ellison (1983) suggests that there is a connection between the physical, psychological and spiritual dimensions of being. According to him, the spiritual dimension of being does not exist in isolation from the physical and psychological dimensions, rather it is an integrative force and it motivates us to search for meaning and purpose in life. He further suggests that “spirituality affects and is affected by our physical state, feelings, thoughts, and relationships” (p. 332). He also mentions that we generally feel alive, purposeful, and

fulfilled when we are spiritually healthy. According to Mascaro and Rosen (2005) this is possible because spirituality provides us with a sense of direction and order.

While very little research has been conducted on spiritual wellbeing more has been done on religious coping. This (the study of religious coping) limited research only to believers and excluded non-believers (Baldachinno & Buhagiar, 2003). The present study examines spiritual wellbeing in relation to stress and coping.

2.2 Empirical Review

2.2.1 Sources of Stress in Nursing

There is a large body of nursing research that cover the levels and sources of stress in nursing. A review of some of this literature pointed to various factors as the cause of stress. These include:

- Heavy workloads and never-ending work,
- Staff shortages,
- Limited resources,
- Poor benefits,
- Death and dying,
- Relationships between staff,
- Personal interests and job responsibilities,
- The nursing educational system, and
- The nurses' rank/category.

These factors are discussed in detail below.

Heavy workloads and never-ending work. Literature suggests that heavy workloads and never-ending work are the most important sources of stress for nurses (Boeije et al., 1997; Callaghan et al., 2000; Lee, 2003; McGrath et al., 2003; McVicar, 2003; Payne, 2000; Stacciarini & Troccoli, 2003).

Staff shortages. The shortage of staff also seem to be an important stressor as this often results in an increased workload for nurses (Albaugh, 2003, 2005; Elloker; 2003; Hall, 2004a). Literature suggests that in South Africa, the problem of staff shortage is so severe that it caused serious problems like the closure of some wards in some hospitals. This has a potential negative effect on the patients' lives as it puts their lives at risk.

Limited resources. According to Boeije et al. (1997), Elloker (2003), and Lee (2003) limited resources and a lack of time to perform duties cause stress for nurses. Boeije et al. (1997) state that these conditions make it seem as though nurses are failing to provide all the help that is needed by their patients and make them seem inefficient. According to these authors, nurses often have to prioritize their work and this leads to the sacrificing of other types of work. They identify emotional labour (reassuring, comforting and talking to the patient) as the type of work that suffers as a result of prioritizing work.

Poor benefits. Callaghan et al. (2000) conducted a study on Hong Kong nurses and found that poor benefits, no opportunity for advancement, poor pay, and working with incompetent staff cause stress for nurses. Poor pay seems to be an international nursing problem as some South African studies (Basson & van der Merwe, 1994; Hall, 2004a, Padarath et al., 2003) cite this as a stressor. Unfortunately, this makes South African nurses leave the country in pursuit of better salaries and improved working conditions

(Padarath et al., 2003; Sanders & Llyod, 2005). In turn, this increases the workload for the remaining nurses. It is also likely to aggravate their stress levels.

Death and dying. Basson and van der Merwe (1994), Boeije et al. (1997), Elloker (2003), McGrath et al. (2003), McVicar (2002), Lee (2003), and Stacciarini and Troccoli (2000) cite death and dying as a source of stress for nurses.

Relationships between staff. According to McGrath et al. (2003) most stressors in nursing are concerned with inter-relationships between nurses, doctors, and other health care staff. They further assert that communication and relationships with patients and relatives add to the stress experienced by nurses.

Personal interest and job responsibilities. Another source of stress for nurses seems to be associated with establishing and maintaining a balance between job responsibilities and self-interest (Boeije et al., 1997; Schmidt, 2002). These authors point out that nursing is no longer seen as just a calling, dedication, commitment, giving, and self-sacrifice. According to Schmidt (2002) nurses are entitled to a fulfilling career and they have high expectations from their workplace.

The nursing educational system. Elloker (2003) conducted a study in Cape Town and found that the nursing educational system is to be blamed for some of the nursing problems. According to her, the system does not encourage nurses to develop critical thinking skills and this adds to the stress that nurses experience when they start practicing.

Nurses' rank/category. Another not so obvious stressor is the nurse's rank/category. Lees and Ellis (1990) and Rheaume (2003) report that senior nurses experience more stress than junior nurses because of the nature of their (senior nurses) responsibilities, for

example, dealing with porters and administrative staff, training and supervising junior nurses, co-ordinating ward activities, and juggling insufficient resources. In essence, besides providing nursing care, senior nurses take on managerial and administrative responsibilities.

2.2.2 Nurses' Coping Strategies

Literature shows that nurses use a number of coping strategies. These include:

- Problem solving and avoidance,
- Social support,
- Acceptance and dosage,
- Health Risking behaviours (alcohol consumption),
- Taking the risk of contracting diseases in their stride, and
- Communication and team work.

According to Payne (2000) some strategies are more effective in buffering stress and preventing burnout, while others are less effective because they may exacerbate the levels of stress. The above highlighted strategies are discussed below.

Problem solving and avoidance. According to Healy and McKay (2000) nurses frequently use planful problem-solving techniques (for example, prioritizing work) to cope with work demands. This finding is not consistent with the findings by McGrath et al. (2003) who found that nurses frequently use avoidance as a coping strategy.

According to Boeije et al. (1997) a nurse engages in avoidance behaviour by controlling the frequency of contacts between him/herself and the patient. They state that a nurse uses this strategy to avoid intensive communication and involvement with the patient. They also point out that a nurse does this to avoid "situations and activities which

demand empathy and identification which can ... cause feelings of fear and tension" (p. 362). Although avoidance may reduce stress for the nurse, it may be problematic because it can compromise the patient's care and needs. Another problem associated with the avoidance strategy is that it may jeopardize the nurse's chance of establishing a relationship with the patient.

Social support. Research suggests that the second most frequently used coping mechanism is social support (Boeije et al., 1997; Callaghan et al., 2000; Elloker, 2003; Healy & McKay, 2000; Hendel, Fish, & Aboudi, 2000; Hopkinson et al., 1998; McVicar, 2003). According to Hendel et al. (2000) and Hopkinson et al. (1998) social support is associated with psychological and physiological benefits. For example, social support can assist in reducing stress levels. They further assert that nurses often seek guidance from their seniors and this helps to alleviate feelings of uneasiness, helplessness, and insecurity. Boeije et al. (1997) refers to seeking social support as consultation, where nurses meet to establish priorities, divide tasks amongst themselves, and search for solutions to problematic situations. According to these authors, consultation helps to reduce the workload and thus prevents the nurse from being submerged by the workload. They further assert that consultation does not only offer a solution to problems associated with heavy workload, but it also helps in establishing a healthy balance between personal involvement and detachment.

Acceptance and dosage. Boeije et al. (1997) report that nurses use a coping mechanism referred to as acceptance and dosage. Acceptance is when the nurse accepts that the patients may have limitations because of their illnesses. It also involves adapting the provision of care to the patients' conditions. The possible benefit of this strategy is

that it focuses on the needs of the patient. It may also prevent the nurse from inducing undue stress upon him/herself. Dosage refers to establishing a balance between involving and distancing oneself in relationships with the patients. According to these authors dosage also involves making a distinction between work and private life. This will mean not allowing work to interfere with private life and vice versa.

Health risking behaviours. Lee (2003) reports that some nurses attempt to cope with work-related stress by over-working themselves. While doing more work may help reduce the workload, this does not seem like a very effective coping strategy. This is possibly because a few nurses cannot meet the demands of nursing care. Lee also mentions that some nurses engage in health risking behaviours like alcohol consumption, smoking, and altering their eating habits in an attempt to cope with work-related stress. The problems associated with such coping mechanisms are the implications these may have on the nurses' health.

Taking the risk of contracting diseases in their stride. Sherman (2000) studied nurses involved in caring for AIDS patients and found that nurses alleviated work stress, particularly that of contracting HIV by taking the risk in their stride, reframing, and protecting themselves. Taking the risk in their stride refers to "viewing the risk as a part of living, having been psychoimmunized to the risk or tolerating uncertainty" (p. 1504). According to this author reframing the risk refers to not blaming the patient for the nurses' exposure to the virus as nurses feel that it is their responsibility to protect themselves. However, the nurses felt that hospitals should provide sufficient protective measures.

Communication and team work. Elloker (2003) reports some interesting findings from her study. She found that South African nurses feel that good communication skills between nurses and their supervisors help them to cope with their work. She also reports that team work and group cohesion strengthens the nurses' coping skills and the development of such skills. Other factors that assist nurses to cope are:

- The quality of the service they provide to patients,
- Support programmes for staff,
- Taking mental health days off,
- Taking regular breaks,
- Exercising,
- Developing hobbies, and
- Further education and training.

Of particular interest to the present study is the finding that nurses acknowledge the role spirituality has in their professional lives. They report that a strong spiritual make-up helps them to cope.

According to Elloker (2003), Graham et al. (2001), Heintzman (1999), Laubmeier et al. (2004), Mahlungulu and Uys (2004) a person's spiritual wellbeing affects the manner in which the person responds to adversity. According to Folkman (1997) and Laubmeier et al. (2004) this is because the person's spirituality affects the person's appraisal of the situation.

2.3 Summary

This chapter presented the theories in which the study is based, namely, Lazarus and Folkman's theory of stress and coping and Frankl's theory of existentialism. It is also

presented empirical information on nursing stress, coping, and spirituality. With regards to nursing stress, the chapter stated various factors that are regarded as responsible for the stress in nursing, for example, heavy workloads and staff shortages. The chapter also mentioned the mechanisms nurses use to cope. These include: problem solving and seeking social support.

With regards to spiritual wellbeing, the chapter stated that spiritual wellbeing plays a role in a person's overall functioning as it affects both the person's physical and psychological wellbeing. It therefore should not be seen as a separate entity but should be seen as an integral part of a person's make-up.

The methods used in undertaking the study are presented in Chapter Three.

Chapter Three

3. Methodology

This chapter covers the design, methods, and procedures used in undertaking the study. As mentioned earlier, the study is primarily aimed at describing the levels and sources of stress, coping, and spiritual wellbeing of a sample of nurses. It also aimed at examining the relationship between these variables. The hypothesis was that nurses who report high levels of spiritual wellbeing will report low stress levels and better coping. The study had secondary aims which were to explore the relationship between the main variables and select demographic variables, namely, categories/job titles and years of experience.

3.1 Design

The study used a descriptive - correlational design. It described the levels and sources of stress of a sample of nurses, their coping strategies, as well as their spirituality. It also correlated these variables. Spiritual wellbeing was investigated to determine whether high levels of spirituality are associated with low stress levels and better coping. The study explored this by comparing high spiritual wellbeing scorers with low scorers to determine whether spiritual wellbeing plays a role in the capacity to cope with work-related stress.

3.2 Sample

The researcher initially approached a public hospital in the Durban area and requested permission to conduct the study using a sample of their nurses. The hospital advised the researcher to seek permission from the Provincial Department of Health. This advice was duly followed and the department granted permission. However, the hospital declined permission to conduct the study. After being denied access to the nurses by the targeted

hospital, the researcher approached three other government hospitals in KwaZulu-Natal. Permission was granted by all three hospitals (1 rural and 2 urban) and convenience sampling was used to draw the sample. Fifty six participants were accessed from the rural hospital and 85 were accessed from the urban hospitals. Although there are limitations with convenience sampling (Bless & Higson, 1995; Neuman, 1997), in this instance it allowed for the examination of the relationship among the variables.

Two-hundred-and-sixty-five questionnaires were distributed and a total of 141 nurses completed and returned the questionnaires, giving a 53% response rate. Three participants were excluded from the final analysis due to their failure to complete the questionnaire in full. A hundred-and-thirty-eight participants made the final sample.

Of the 138 participants, 80.9% ($n = 112$) were female and 19.1% ($n = 26$) were male. Their ages ranged from 20 to 58 years ($M = 32.89$, $SD = 10.26$). Enrolled nursing assistants (ENAs) were highly represented in the sample with a percentage of 30.5, followed by professional nurses (PNs) and student nurses at 24.1% per category. About 12.8% of the participants identified themselves as chief professional nurses (CPNs) and 8.5% did not specify their categories and they were classified as 'other'.

More than 20% of the participants did not specify the unit or ward they work in. The remaining percentage is distributed as follows:

- 12.8% general medical ward,
- 12.8% orthopaedic unit,
- 12.1% psychiatry,
- 9.9% clinic,
- 7.8% outpatient,

- 7.8% surgical ward,
- 3.5% intensive care,
- 3.5% theatre,
- 4.3% paediatric ward, and
- 2.8% were from the maternity ward.

The years of experience ranged from 1 to 31 years ($M = 9.43$, $SD = 8.83$) with 23.4% of the participants reporting that they have been nurses for at least a year.

3.3 Research Instruments

The study used self-administered questionnaires to collect data. Each questionnaire was accompanied by a consent form that explained the purpose of the study (see Appendix A). The consent form also assured the participants of anonymity and confidentiality. Each questionnaire comprised of four scales:

- Part one asked for the demographic details of the participants,
- Part two was the Nursing Stress Scale (NSS),
- Part three was the Ways of Coping Questionnaire (WCQ), and
- Part four was the Spiritual Wellbeing Scale (SWBS).

The psychometric properties of the respective scales (NSS, WCQ, and SWBS) are presented below.

The NSS. The scale assessed the sources and levels of stress. It was developed by Gray-Toft and Anderson (1981). It consisted of 34 items that:

“describe situations that have been identified as causing stress for the nurses in the performance of their duties. It provides a total stress score as well as scores on each of seven subscales that measure the frequency of stress experienced by nurses in the

hospital environment” (Gray-Toft & Anderson, 1981, p. 11).

The subscales include:

- Workload – which measures stressful situations that arise from the physical environment and its limitations, for example: Too much work, inadequate time to carry out tasks, and staffing and scheduling limitations,
- Death and dying – this focuses on the death, suffering, and distress of the patients,
- Inadequate preparation to deal with the emotional needs of patients and their families – this measures the stress that is associated with the nurses’ efforts to meet the patients’ and their families’ emotional needs,
- Lack of staff support – refers to the lack of opportunities for nurses to express unpleasant feelings, for example, anger and frustration towards patients,
- Uncertainty concerning treatment – measures stressful situations associated with the doctors’ shortcomings in providing adequate information regarding the patients’ conditions and management thereof,
- Conflict with physicians – deals with stressful situations that arise from the nurses’ interaction with doctors, and
- Conflict with other nurses – this refers to stressful situations that involve conflict with other nurses.

The NSS is a Likert-type scale with four response categories, namely: (0) = *never*, (1) = *occasionally*, (2) = *frequently*, and (3) = *very frequently*.

Participants were instructed to indicate by means of a tick (✓) how often they experienced the situations listed in the scale as stressful.

Gray-Toft and Anderson (1981) report good internal consistency of the scale. They report that the scale yielded a test-retest coefficient of .81 and its internal consistency was determined by four measures. All four measures yielded adequate internal consistencies with a Spearman-Brown coefficient of .79, a Guttman split-half coefficient of .79, a coefficient alpha of .89, and a standardized item alpha of .89. Four of the subscales yielded an above .70 test-retest coefficient and their internal consistency is reported to be sufficient (above .71).

Gray-Toft and Anderson (1981) determined the validity of the scale by correlating it to other stress measures (for example, trait anxiety, job satisfaction, and turnover) and it correlated positively with the scores of such measures.

An open-ended question examining additional stressors was added to the questionnaire. The aim was to identify sources of stress that may not be measured by the NSS and to ensure that the questionnaire is as inclusive as possible.

The WCQ. In order to assess coping, the revised version of the WCQ developed by Lazarus and Folkman (1984) was administered. It consisted of 66 items that describe a wide range of cognitive and behavioural strategies people use to manage stressful encounters (Folkman, Lazarus, Dunkel-Schetter, et al., 1986). The scale is a Likert-type with four response categories, namely: (0) = *not used*, (1) = *used somewhat*, (2) = *used quite a bit*, and (3) = *used a great deal*.

Participants were instructed to identify a recently experienced stressful encounter and to indicate by means of a tick whether they used each item in that encounter (Folkman & Lazarus, 1985). The WCQ yielded eight subscales (consisting 50 items in total) through factor analysis (Lazarus & Folkman, 1987). These eight subscale scores as well as the

total score on all sixty-six items were calculated. Folkman (n.d.) reports that the WCQ has two sets of subscales because factor analysis was performed using data from different populations (namely, middle-aged married couples and college students). She therefore recommends that when studying populations other than students, researchers must use the subscales from “the study of middle-aged married couples, because the factor analysis was based on a broader sampling of subjects and stressful encounters” (p. 2). The subscales include:

- Confrontive coping – this involves aggressive attempts to change the stressful situation,
- Distancing – involves attempts by the individual to detach from the stressful situation,
- Self-controlling – measures efforts by the individual to control or regulate one’s feelings,
- Seeking social support – refers to the individual’s efforts to reach out for support from others to assist in dealing with the situation,
- Accepting responsibility – refers to the individuals ability to acknowledge one’s own role in the situation,
- Escape-avoidance – this involve the individual’s attempts to avoid anything that relates to the stressful situation,
- Planful problem-solving – refers to the meaningful attempts to solve the problematic situation, and
- Positive appraisal – which involves viewing the situation in a positive light.

The present study used these subscales.

Folkman, Lazarus, Dunkel-Schetter, et al. (1986) report adequate internal consistency of the eight subscales. They report the alphas to be as follows: *.70 for confrontive coping, .61 for distancing, .70 for self-controlling, .76 for seeking social support, .66 for accepting responsibility, .72 for escape-avoidance, .68 for planful problem-solving, and .79 for positive appraisal.*

The SWBS. The concept of spiritual wellbeing was assessed by means of the SWBS developed by Paloutzian and Ellison (1982). It consisted of 20 items and has two subscales. One subscale measured religious wellbeing and the other measured existential wellbeing (Ellison, 1983). The SWBS is a Likert-type scale with five response categories ranging from “strongly agree” to “strongly disagree”. According to Gray (2006) and Puchalski (2004) the scale yields three scores, namely: *The total scale score, the religious wellbeing score, and the existential wellbeing score.*

Ellison (1983) and Puchalski (2004) report acceptably high internal consistency with Cronbach’s coefficients of .89 for the total score, .87 for religious wellbeing and .78 for existential wellbeing. According to them, the scale has adequate validity to be used as a quality of life indicator and its scores correlated positively with other scales (for example, the Purpose in Life Test).

3.4 Procedures and Ethical Considerations

The study was ethically cleared by the Higher Degrees Committee of the Faculty of Humanities, Social Sciences, and Development at the University of KwaZulu-Natal. The researcher obtained permission to undertake the study from the KwaZulu-Natal Department of Health as well as the authorities of the hospitals that participated in the study. After receiving permission from the hospital authorities, the researcher approached

the nurses in charge of the wards and explained the purpose of the study. Where possible nurses were addressed and handed the questionnaires in groups. In most cases, nurses were approached individually.

In order to maintain confidentiality, the participants were instructed not to write their names in the questionnaire. This was also verbally emphasized. This ensured that their responses remained anonymous.

The participants volunteered to take part in the study and they indicated this by signing the consent forms. However, some participants chose not to sign the consent forms. In order not to remove nurses from their duties and to minimize disturbance to work flow, participants were encouraged to fill in the questionnaire during their free time.

3.5 Analysis

Quantitative analysis of the data was performed using the Statistical Package for Social Sciences (SPSS) 13.0 for Windows. Descriptive and correlational methods were used to analyse and interpret the data. Descriptive statistics like the mean (M), the standard deviation (SD), frequencies (f), and percentages (%) were used to describe the sample. The reliability of the scales was tested by Cronbach's alpha. Correlational analysis using the participants's age, years of experience, and the total scores of the three scales (NSS, WCQ, and SWBS) was done in order to determine the relationship between the variables. Analysis of variance and t -tests were used to determine group difference in nursing categories and work site (independent variables) on spiritual wellbeing, stress, and coping (dependent variables). Qualitative analysis of the open-ended questions was conducted and themes that emerged from the responses are presented in descriptive form.

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

Chapter Four

4. Results

This chapter presents the findings of the study in relation to its aims and objectives. The primary aim was to describe the levels and sources of stress, coping, and spiritual wellbeing in a sample of nurses. The secondary aim was to examine the inter-relationships between these variables. In addition, the study aimed at exploring the relationships between the measured variables and selected demographic variables. The final aim was to conduct content analysis of the open-ended questions and present the emerging themes in descriptive form.

4.1 Descriptive Statistics: NSS, WCQ, and SWBS

In accordance with the primary aim, the study conducted descriptive analysis using means, standard deviations, and Cronbach's alphas on the total, as well as on the subscale scores. The total scores for the entire sample are presented in Table 1, while the subscales scores are presented in Tables 2 to 4 below.

Table 1

Descriptive statistics for NSS, WCQ, and SWBS (n = 138)

| Scale | <i>M</i> | <i>SD</i> | Cronbach's α |
|--|----------|-----------|------------------------------------|
| NSS | 41.28 | 14.28 | .90 |
| WCQ | 103.16 | 26.54 | .92 |
| SWBS | 77.92 | 9.88 | .80 |
| NSS = Nursing Stress Scale Wellbeing Scale | | | WCQ = Ways of Coping Questionnaire |
| | | | SWBS= Spiritual |

All the scales yielded high Cronbach's alphas suggesting adequate and satisfactory levels of internal consistency. The levels of stress, the nurses' coping capacities and their levels of spirituality are described in the following sections.

4.1.1 NSS

In relation to the highest possible score (81), the mean score obtained from the NSS ($M = 41.27$, $SD = 14.61$) suggests moderate levels of stress. The subscale results are as follows:

Table 2

Descriptive statistics for NSS

| Subscale | No. of items | HPS | $M (SD)$ | $M_i (SD_i)$ | α |
|----------------------------------|--------------|-----|-------------|--------------|----------|
| Death and dying | 7 | 21 | 9.26 (3.79) | 1.32 (.54) | .69 |
| Conflict with physicians | 5 | 15 | 4.82 (2.54) | .96 (.50) | .54 |
| Inadequate preparation | 3 | 9 | 3.41 (2.32) | 1.13 (.77) | .72 |
| Lack of support | 3 | 9 | 2.58 (1.72) | .86 (.57) | .58 |
| Conflict with other nurses | 5 | 15 | 4.49 (2.38) | .89 (.47) | .72 |
| Workload | 6 | 18 | 9.48 (3.75) | 1.58 (.62) | .75 |
| Uncertainty concerning treatment | 5 | 15 | 5.84 (2.93) | 1.16 (.58) | .67 |

NSS = Nursing Stress Scale No. = Number HPS = Highest possible score
 Mi = Subscale item mean SDi = Subscale item standard deviation

Two sets of means and standard deviations are included in the table: The *subscale means and standard deviations* (M , SD) and *subscale item means and standard deviations* (M_i , SD_i) for each subscale. As can be seen, the subscales do not have the same number of items and they vary with regard to degrees of internal consistency. Three of the subscales

yielded adequate consistencies (above .70) and two yielded low, but acceptable consistencies (above .60). The item mean scores of the subscales ranged from .86 ($SDi = .57$) to 1.58 ($SDi = .62$), with lack of support being the least frequently experienced, and workload being the most frequently experienced source of stress.

4.1.2 WCQ

The mean score ($M = 103.15$, $SD = 26.53$) obtained from the WCQ suggests adequate coping when compared to the highest possible score (198). The study measured the samples' ways of coping using Folkman, Lazarus, Dunkel-Schetter, et al. (1986) subscales. The results are presented in Table 3 below.

Table 3

Descriptive statistics for WCQ

| Subscale | No. of items | HPS | $M (SD)$ | $Mi (SDi)$ | α |
|--------------------------|--------------|-----|--------------|------------|----------|
| Confrontive coping | 6 | 18 | 8.01 (3.09) | 1.33 (.51) | .53 |
| Distancing | 6 | 18 | 8.29 (3.57) | 1.38 (.59) | .41 |
| Self-controlling | 7 | 21 | 10.30 (3.15) | 1.47 (.45) | .47 |
| Seeking social support | 6 | 18 | 11.17 (3.24) | 1.86 (.55) | .65 |
| Accepting responsibility | 4 | 12 | 6.13 (2.44) | 1.53 (.61) | .58 |
| Escape-avoidance | 8 | 24 | 10.09 (5.38) | 1.26 (.67) | .55 |
| Planful problem-solving | 6 | 18 | 10.59 (2.96) | 1.76 (.49) | .54 |
| Positive reappraisal | 7 | 21 | 12.13 (3.93) | 1.73 (.56) | .70 |

WCQ = Ways of Coping Questionnaire
Mi = Subscale item mean

No. = Number

SDi = Subscale item standard deviation

HPS = Highest possible score

The table reflects two sets of means and standard deviations: The *subscale means and standard deviations* (M , SD) and *subscale item means and standard deviations* (M_i , SD_i).

As with the stress subscales, the ways of coping subscales reflect varying degrees of internal consistency. Only one subscale yielded acceptable reliability (.70) while the others yielded low to acceptable coefficients (.41 to .65). The item mean scores of the subscales ranged from 1.26 ($SD_i = .55$) to 1.86 ($SD_i = .65$), with escape-avoidance being the least frequently reported and seeking social support being the most frequently reported coping strategy.

4.1.3 SWBS

In relation to the highest possible score (100), the mean score ($M = 77.92$, $SD = 9.88$) obtained from the SWBS suggests high spirituality. The study measured the different components of spiritual wellbeing using Paloutzian and Ellison (1982) subscales. The results are presented in Table 4 below.

Table 4

Descriptive statistics for SWBS subscales

| Subscale | No. of items | HPS | M | SD | α |
|----------------------------------|--------------|--------------|------------------------------|------|----------|
| Existential wellbeing | 10 | 50 | 38.80 | 5.01 | .52 |
| Religious wellbeing | 10 | 50 | 39.12 | 5.70 | .81 |
| SWBS = Spiritual Wellbeing Scale | | No. = Number | HPS = Highest possible score | | |

While religious wellbeing yielded adequate consistency (.81), existential wellbeing yielded low consistency (.52). There are no observable differences between the subscale

means. In relation to the highest possible scores, the means suggest high degrees of existential and religious wellbeing among the sample.

4.2 Tests of Relationship

4.2.1 NSS, WCQ, SWBS, Age, and Years of Experience

In accordance with the second aim, the study correlated stress, coping, and spiritual wellbeing to determine relationships. It also correlated stress, coping, and spiritual wellbeing with select demographic variables of the sample (namely, age and experience). Results are presented in Table 5 overleaf.

Table 5

Correlations of NSS, WCQ, SWBS, age, and experience scores (n = 138)

| | WCQ | SWBS | Experience | Age |
|---|-------|-------|------------|--------|
| NSS | -.001 | -.015 | .138 | -.056 |
| WCQ | | .076 | -.190* | -.095 |
| SWBS | | | .062 | -.028 |
| Experience | | | | .877** |
| SWB = Spiritual wellbeing * $p < 0.05$, ** $p < 0.01$ | | | | |

A significant negative relationship was found between coping and experience ($r = -.190$, $n = 138$, $p < 0.05$) suggesting that as the years of experience increase, levels of coping decrease. As to be expected, a significant positive relationship exists between age and experience ($r = .877$, $n = 138$, $p < 0.01$).

4.2.2 Inter-correlations among NSS, WCQ, and SWBS Subscales

In addition to exploring the relationships between stress, coping, spiritual wellbeing, and select demographic variables, the study explored relationships between stress, coping and spiritual wellbeing subscales. Results are presented in Table 6 overleaf.

Table 6

Correlations between NSS, WCQ, and SWBS subscales

| Subscales | CWP | IP | LS | CWN | W | UCT | CC | D | SC | SSS | AR | EA | PPP | PR | EWB | RWB |
|-------------|--------|--------|--------|--------|--------|--------|-------|--------|--------|--------|--------|--------|--------|---------|-------|--------|
| NSS | | | | | | | | | | | | | | | | |
| DD | .562** | .297** | .160 | .252** | .430** | .496** | .194* | .098 | .165 | .138 | .155 | .151 | .057 | .102 | .028 | .014 |
| CWP | | .420** | .335** | .353** | .471** | .573** | .154 | .006 | .069 | .124 | .045 | .036 | .106 | .006 | .024 | .007 |
| IP | | | .396* | .520** | .580** | .538** | .037 | -.001 | .074 | -.052 | -.158 | -.011 | -.045 | -.168* | .123 | -.028 |
| LS | | | | .334** | .359** | .322** | .100 | .128 | .075 | -.062 | .014 | .146 | .077 | -.082 | -.052 | -.033 |
| CWN | | | | | .571** | .430** | .116 | .020 | .111 | -.093 | .036 | .081 | -.036 | -.174* | -.071 | -.085 |
| W | | | | | | .637** | .084 | -.091 | .097 | -.082 | -.172* | .066 | -.046 | -.219** | .071 | -.094 |
| UCT | | | | | | | .055 | -.074 | -.030 | -.100 | -.105 | .114 | -.072 | -.139 | -.015 | -.099 |
| WCQ | | | | | | | | | | | | | | | | |
| CC | | | | | | | | .352** | .492** | .512** | .545** | .340** | .461** | .378** | .031 | .072 |
| D | | | | | | | | | .423** | .300** | .388** | .478** | .321** | .407** | .147 | .169* |
| SC | | | | | | | | | | .561** | .549** | .382** | .423** | .477** | .188* | .200** |
| SSS | | | | | | | | | | | .515** | .295** | .562** | .529** | .002 | .013 |
| AR | | | | | | | | | | | | .402** | .504** | .592** | -.059 | .067 |
| EA | | | | | | | | | | | | | .192* | .258* | .064 | -.051 |
| PPP | | | | | | | | | | | | | | .574** | -.049 | -.048 |
| PR | | | | | | | | | | | | | | | .045 | .127 |
| SWBS | | | | | | | | | | | | | | | | |
| EWB | | | | | | | | | | | | | | | | .700** |

NSS = Nursing Stress Scale

CWP = Conflict with physicians

W = Workload

SC = Self-controlling

PPP = Planful problem-solving

* $p < 0.05$, ** $p < 0.01$

WCQ = Ways of Coping Questionnaire

IP = Inadequate preparation

UCT = Uncertainty concerning treatment

SSS = Seeking social support

PR = Positive reappraisal

SWBS = Spiritual Wellbeing Scale

LS = Lack of support

CC = Confrontive coping

AR = Accepting responsibility

EWB = Existential wellbeing

DD = Death and dying

CWN = Conflict with other nurses

D = Distancing

EA = Escape-avoidance

RWB = Religious wellbeing

As would be expected, the NSS subscales (except for ‘death and dying’ and ‘lack of support’) correlated significantly with each other. The coping and spiritual wellbeing subscales also correlated significantly with each other.

Inter-correlations across NSS, WCQ, and SWBS Subscales

NSS and WCQ subscales. The study observed significant relationships between:

- Death and dying and confrontive coping – this means that as the stress of the patients’ ‘death and dying’ increases, confrontive coping increases.
- Conflict with other nurses and positive reappraisal – this means that as the stress from conflict between nurses increases, coping by means of positive reappraisal decreases.
- Inadequate preparation and positive reappraisal – this implies that, as inadequate preparation scores increase, positive reappraisal scores decrease.
- Workload and accepting responsibility – this suggests that as workload scores increase, ‘accepting responsibility’ scores decrease.
- Workload and positive reappraisal – this suggests that as workload scores increase, positive reappraisal scores decrease.

NSS and SWBS subscales. None of the stress subscales correlated significantly with the spiritual wellbeing subscales.

WCQ and SWBS subscales. Significant correlations were observed between:

- Self-controlling and existential wellbeing – suggesting that existential wellbeing may increase with the individual’s ability to control his/herself,
- Self-controlling and religious wellbeing – this suggests that religious wellbeing increases with the individual’s ability to control his/herself, and

- Distancing and religious wellbeing – this may imply that religious wellbeing increases with the ability to distance oneself from the situation occurring.

4.3 Tests of Difference

4.3.1 NSS, WCQ, and SWBS Total Scores by Category

The study explored differences in levels of stress, coping, and spiritual wellbeing of the different nurse categories using the One-Way Analysis of Variance (ANOVA).

Results are presented in Table 7 below.

Table 7

Descriptive statistics for NSS, WCQ, and SWBS scores by category

| Category | NSS Mean (SD) | WCQ Mean (SD) | SWBS Mean (SD) |
|---|------------------|---|-------------------|
| CPN ($n = 18$) | 44.66 (14.31) | 93.40 (19.88) | 82.05 (5.57) |
| PN ($n = 33$) | 47.03 (16.62) | 97.73 (19.73) | 78.08 (11.53) |
| ENA ($n = 43$) | 44.23 (12.07) | 96.13 (20.12) | 78.60 (7.88) |
| SN ($n = 32$) | 31.59 (11.54) | 115.45 (32.93) | 76.97 (10.34) |
| Other ($n = 12$) | 35.58 (12.13) | 111.08 (36.41) | 71.58 (12.75) |
| Total ($n = 138$) | 41.27 (14.61) | 101.81 (26.15) | 78.21 (10.53) |
| $F (df)$ | 6.95 (4, 133)*** | 3.98 (4, 133) ** | 2.07 (4, 136) |
| NSS = Nursing Stress Scale SWBS = Spiritual Wellbeing Scale PN = Professional Nurse SN = Student Nurse | | WCQ = Ways of Coping Questionnaire CPN = Chief Professional Nurse ENA = Enrolled Nursing Assistant ** $p < 0.01$, *** $p < 0.001$ | |

NSS by category. There are significant differences in how the different categories are affected by work-related stress ($F (4, 133) = 6.95, p < 0.001$). Since the analysis showed

significant differences, post hoc tests using the Scheffe test were performed to examine where the differences lay. The results showed significant mean differences between:

- The chief professional and student nurse categories ($p < 0.05$),
- The professional and student nurse categories ($p < 0.01$), and
- The enrolled nursing assistant and student nurse categories ($p < 0.01$).

As was to be expected, student nurses reported lower stress levels than all the other categories.

WCQ by category. The study found significant differences in the coping capacities of the different categories ($F(4, 133) = 3.981, p < 0.01$). Post hoc tests using the Scheffe test were performed to determine where the difference lay. It showed significant mean differences between:

- The enrolled nursing assistants and student nurses ($p < 0.05$).

Given the student nurses' low stress scores, it was expected that they would report higher coping scores than the other nursing groups. It should also be noted that there was a high degree of variability in the student nurses' scores on the WCQ, with more than two thirds of this group with scores over 100. This may explain the moderate stress levels and adequate coping for the whole sample. Student nurses made up more than a quarter of the sample.

SWBS by category. The study observed no significant differences in the spirituality of the different categories ($F(4, 136) = 2.067, p > 0.05$).

In addition to exploring differences in overall levels of stress, coping, and spiritual wellbeing by category, the study performed tests of difference to explore differences in NSS, WCQ, and SWBS subscales by category (F -test) and site (t -tests).

4.3.2 NSS Subscales

NSS subscales by category. Descriptive statistics of the NSS subscales by category are presented in Table 8 overleaf.

Table 8*Descriptive statistics for NSS subscales scores by category*

| Demographics | Subscales | | | | | | |
|------------------------|-----------------|------------------|------------------|-----------------|------------------|-------------------|------------------|
| | DD Mean (SD) | CWP Mean (SD) | IP Mean (SD) | LS Mean (SD) | CWN Mean (SD) | W Mean (SD) | UCT Mean (SD) |
| Category | | | | | | | |
| CPN (<i>n</i> = 18) | 9.77 (3.75) | 6.05 (1.98) | 3.94 (1.98) | 2.22 (1.51) | 3.88 (1.99) | 10.77 (3.15) | 6.50 (3.05) |
| PN (<i>n</i> = 34) | 9.84 (4.50) | 6.30 (2.67) | 4.12 (2.45) | 3.15 (2.07) | 4.54 (2.26) | 10.72 (3.48) | 7.09 (3.37) |
| ENA (<i>n</i> = 43) | 9.06 (4.06) | 4.39 (2.30) | 4.13 (2.47) | 2.62 (1.34) | 5.76 (2.18) | 10.69 (3.44) | 5.90 (2.32) |
| SN (<i>n</i> = 34) | 9.00 (3.06) | 3.56 (1.93) | 2.15 (1.60) | 2.21 (1.73) | 3.00 (2.25) | 6.53 (3.15) | 4.50 (2.83) |
| Other (<i>n</i> = 12) | 8.66 (3.11) | 4.08 (2.71) | 2.00 (1.20) | 2.50 (1.97) | 4.66 (2.10) | 7.66 (2.87) | 4.91 (2.06) |
| <i>F</i> (<i>df</i>) | .40 (4, 136) | 7.67 (4, 136)*** | 6.42 (4, 136)*** | 1.49 (4, 135) | 7.72 (4, 134)*** | 10.58 (4, 135)*** | 4.04 (4, 136)** |

CPN = Chief professional nurse

DD = Death and dying

CWN = Conflict with other nurses

p* < 0.01, *p* < 0.001

PN = Professional nurse

CWP = Conflict with physicians

LS = Lack of support

ENA = Enrolled nursing assistant

IP = Inadequate preparation

UCT = Uncertainty concerning treatment

SN = Student nurse

W = Workload

The table shows significant differences in:

- Conflict with physicians,
- Inadequate preparation,
- Conflict with other nurses,
- Workload, and
- Uncertainty concerning treatment

Post hoc tests using the Scheffe test were performed to determine where the differences lay. Results are presented below.

Conflict with physicians. With regards to this subscale, the study found differences between:

- The chief professional nurses and student nurses ($p < 0.01$),
- The professional nurses and enrolled nursing assistants ($p < 0.05$), and
- The professional nurses and students nurses ($p < 0.001$).

Student nurses seem to be less affected by conflict with physicians than the other nursing groups.

Inadequate preparation. The study observed that:

- Professional nurses and student nurses ($p < 0.01$), and
- Enrolled nursing assistants and student nurses ($p < 0.01$) differed significantly

with regards to inadequate preparation. Student nurses reported low scores on inadequate preparation, suggesting that they are less affected by this source of stress. Their low scores are in keeping with their overall stress scores and their scores on all the stress subscales.

Conflict with other nurses. The study found that *enrolled nursing assistants and student nurses* ($p < 0.001$) differed significantly in how they experienced conflict with other nurses. Again, the student nurses' low scores on this subscale are consistent with their overall levels of stress and their scores on all the stress subscales.

Workload. As can be expected, differences were observed between:

- The chief professional and student nurse categories ($p < 0.001$), and
- The professional and student nurse categories ($p < 0.001$).

This suggests that senior nurses experience higher degrees of workload than junior nurses. The finding that *enrolled nursing assistants and student nurses* ($p < 0.001$) differed significantly was not expected.

Uncertainty concerning treatment. The study found differences in the *professional nurse* and *student nurse* categories ($p < 0.01$) with student nurses reporting lower degrees of uncertainty concerning treatment than their senior counterparts.

NSS subscales by site. Descriptive statistics of the NSS subscales by site are presented in table 9 overleaf.

Table 9*Descriptive statistics for NSS subscales scores by site (rural n = 55, urban n = 85)*

| Subscale | Rural <i>M (SD)</i> | Urban <i>M (SD)</i> | (<i>df</i>) | <i>t</i> |
|----------------------------------|---------------------|---------------------|---------------|----------|
| Death and dying | 8.89 (3.06) | 9.54 (4.21) | 138 | -.99 |
| Conflict with physicians | 4.12 (2.44) | 5.25 (2.53) | 138 | 2.62** |
| Inadequate preparation | 1.94 (1.45) | 4.37 (2.29) | 138 | -6.98*** |
| Lack of support | 2.14 (1.66) | 2.81 (1.67) | 137 | -2.28* |
| Conflict with other nurses | 3.54 (2.30) | 5.10 (2.26) | 136 | -3.91*** |
| Workload | 6.98 (3.44) | 11.08 (3.03) | 137 | -7.36*** |
| Uncertainty concerning treatment | 4.47 (2.63) | 6.65 (2.75) | 138 | -4.66*** |
| Total | 33.03 (11.98) | 46.41 (13.78) | 136 | -5.82*** |

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, 2-tailed

There are observable differences in the significance of the stressors as experienced by rural and urban nurses. These are found in:

- Conflict with physicians,
- Inadequate preparation,
- Lack of support,
- Conflict with other nurses,
- Workload, and
- Uncertainty concerning treatment.

The urban sample reported higher degrees of the sources of stress as measured by the stress subscales than the rural sample. There are no significant differences on ‘death and dying’ by site.

4.3.3. *WCQ Subscales*

WCQ subscales by category. Descriptive statistics showing the means, standard deviations, *F*-value, degrees of freedom, and significance level of WCQ subscale scores by category are presented in Table 10 overleaf.

Table 10

Descriptive statistics for WCQ subscales scores by category

| Demographics | Subscale CC Mean (SD) | D Mean (SD) | SC Mean (SD) | SSS Mean (SD) | AR Mean (SD) | EA Mean (SD) | PPP Mean (SD) | PR Mean (SD) |
|------------------------|-----------------------------|----------------|-----------------|------------------|-----------------|-----------------|-------------------|-------------------|
| Category | | | | | | | | |
| CPN (<i>n</i> = 18) | 7.44 (2.38) | 7.66 (2.35) | 9.27 (2.65) | 10.61 (2.63) | 5.50 (2.33) | 8.33 (4.15) | 10.61 (2.35) | 11.77 (3.47) |
| PN (<i>n</i> = 34) | 8.67 (2.78) | 7.50 (2.56) | 10.00 (2.54) | 11.23 (3.25) | 5.50 (1.84) | 10.17 (4.61) | 10.20 (2.53) | 11.00 (3.72) |
| ENA (<i>n</i> = 43) | 7.30 (2.94) | 8.37 (2.99) | 10.65 (3.06) | 10.46 (3.00) | 5.90 (2.28) | 10.09 (3.85) | 9.46 (2.41) | 11.04 (3.45) |
| SN (<i>n</i> = 34) | 8.41 (3.32) | 9.70 (5.25) | 10.67 (3.65) | 12.51 (3.90) | 6.87 (2.71) | 10.35 (7.88) | 12.09 (3.47) | 14.90 (3.43) |
| Other (<i>n</i> = 12) | 8.91 (4.50) | 8.16 (3.85) | 10.58 (4.37) | 11.83 (3.51) | 7.91 (2.87) | 11.16 (6.27) | 12.00 (3.61) | 12.75 (4.73) |
| <i>F</i> (<i>df</i>) | 1.499 (4, 136) | 1.797 (4, 136) | .807 (4, 134) | 2.022(4, 136) | 3.522 (4, 135) | .606 (4, 135) | 4.831 (4, 134)*** | 6.392 (4, 136)*** |

CPN = Chief professional nurse

CC = Confrontive coping

AR= Accepting responsibility

****p* < 0.001

PN = Professional nurse

D = Distancing

EA = Escape-avoidance

ENA = Enrolled nursing assistant

SC = Self-controlling

PPP = Plan problem solving

SN = Student nurse

SSS = Seeking social support

PR = Positive reappraisal

The table shows significant differences in:

- Planful problem-solving, and
- Positive reappraisal.

Since the F -test showed significant differences, post hoc tests using the Scheffe test were performed to determine where the differences lay. With regards to planful problem-solving, the study found significant differences between:

- Enrolled nursing assistants and student nurses ($p < 0.01$), with student nurses reporting higher degrees of planful problem-solving than enrolled nursing assistants.

With regards to positive reappraisal the Scheffe test showed that:

- Professional nurses and student nurses ($p < 0.01$), and
- Enrolled nursing assistants and student nurses ($p < 0.01$) differ significantly in their use of positive reappraisal.

Student nurses reported higher degrees of positive reappraisal than all the nursing groups.

This may suggest that student nurses use more positive reappraisal, which is a form of emotion-focused coping when confronted with a stressful situation.

WCQ subscales by site. Descriptive statistics of WCQ subscales by site, namely rural and urban, are presented in Table 11 overleaf.

Table 11*Descriptive statistics for WCQ subscales scores by site (rural n = 55, urban n = 85)*

| Coping strategy | Rural <i>M</i> (<i>SD</i>) | Urban <i>M</i> (<i>SD</i>) (<i>df</i>) | <i>t</i> |
|--------------------------|------------------------------|--|----------|
| Confrontive coping | 8.28 (3.43) | 7.83 (2.85) 139 | .845 |
| Distancing | 8.80 (4.57) | 7.96 (2.70) 139 | 1.368 |
| Self-controlling | 10.75 (3.68) | 10.02 (2.75) 137 | 1.344 |
| Seeking social support | 12.16 (3.87) | 10.52 (2.78) 139 | 2.904*** |
| Accepting responsibility | 7.29 (2.73) | 5.38 (1.90) 138 | 4.856*** |
| Escape-avoidance | 10.65 (6.91) | 9.72 (4.11) 138 | .993 |
| Planful problem-solving | 11.77 (3.44) | 9.84 (2.34) 137 | 3.933*** |
| Positive appraisal | 14.39 (3.66) | 10.64 (3.36) 139 | 6.240*** |
| Total | 115.30 (32.66) | 95.58 (18.35) 136 | 4.016*** |

****p* < 0.001, 2-tailed

There are observable significant differences in the way that rural and urban nurses cope.

The differences lie in:

- Seeking social support,
- Accepting responsibility,
- Planful problem-solving, and
- Positive reappraisal.

4.3.4 SWBS Subscales

SWBS subscales by category. Descriptive statistics of SWBS subscales by category are presented in Table 12 overleaf.

Table 12*Descriptive statistics for SWBS subscales scores by category*

| Demographic | Subscale EWB Mean (SD) | RWB Mean (SD) |
|--|--|--|
| Category | | |
| CPN ($n = 18$) | 40.22 (3.26) | 41.83 (3.72) |
| PN ($n = 34$) | 38.97 (5.74) | 39.11 (6.20) |
| ENA ($n = 43$) | 39.72 (3.44) | 38.88 (5.25) |
| SN ($n = 34$) | 38.35 (5.23) | 38.61 (6.00) |
| Other | 34.25 (6.89) | 37.33 (6.85) |
| <i>F</i> (<i>df</i>) | 3.50 (4, 136)* | 1.41 (4, 136) |
| EWB = Existential wellbeing PN = Professional nurse * $p < 0.05$ | RWB = Religious wellbeing ENA= Enrolled nursing assistant | CPN = Chief professional nurse SN = Student nurse |

As can be seen, the table shows significant differences in existential wellbeing. The Scheffe test showed differences lay between:

- The chief professional nurse and ‘other’ categories ($p < 0.05$), and
- The enrolled nursing assistants and ‘other’ ($p < 0.05$).

These differences do not, however, seem to have any implications for the existing literature, because ‘other’ is not a specific nursing category.

SWBS subscales by site. Descriptive statistics of spiritual wellbeing subscales by site are presented in Table 13 overleaf.

Table 13

Descriptive statistics for SWBS subscales scores by site (rural n= 55, urban n = 85)

| Subscale | Rural <i>M (SD)</i> | Urban <i>M (SD) (df)</i> | <i>t</i> |
|-----------------------|---------------------|--------------------------|----------|
| Existential wellbeing | 37.37 (6.01) | 39.75 (4.0) 139 | -2.6** |
| Religious wellbeing | 38.43 (6.5) | 39.57 (5.10) 139 | -.1.177 |
| Total | 75.80 (11.73) | 79.80 (9.39) 139 | -.2.236* |

* $p < 0.05$, ** $p < 0.01$

The table shows significant differences in existential wellbeing by site, with the urban sample indicating higher levels than their rural counterparts.

4.4 Content Analysis

The study performed a thematic analysis of the qualitative questions that inquired about sources of stress as well as the nurses' methods of coping. Results are presented in descriptive form below.

4.4.1 Sources of Stress

Twenty-nine participants responded to the qualitative question which asked about sources of stress that may not be covered by the NSS. A number of themes emerged.

These include:

- Workload,
- Staff shortage,
- Relationships,
- Lack of development opportunities,
- Lack of support,

- Concerns over salaries,
- Fear of contracting diseases,
- Lack of resources or equipment,
- Inability to do certain kinds of work, and
- Aggressive and defaulting patients.

These are presented below:

Heavy workload. Ten of the participants who responded to this question identified work overload as a stressor. They reported that in some instances a nurse has to attend to too many tasks at a time. One participant stated that: *“the main cause of stress ... is having to do double tasks instead of sticking to one”*, while another stated that *“some of the work which is supposed to be done by other hospital staff is done by nurses”*.

Staff shortage. Fourteen participants identified staff shortages as a source of stress. One participant stated that *“stressful conditions in the workplace do occur due to ... shortages of nursing staff in the workforce...you find that there are 40 patients and the nursing staff is on 4 members per department”*. One participant reported that *“nurses are not sufficient, so we find that one person has to do the work of five people, so we are always tired”*. One participant emphasized the shortage of nurses by stating that *“we are very short staffed”*. One participant complained about the shortage of other personnel like medical doctors and social workers which seems to impact on the quality of service delivery.

Lack of resources or equipment. Thirteen participants identified the lack or shortage of resources and equipment as a stressor. One participant stated that *“in the hospital we*

find ... that there is not enough equipment to work with, we always improvise when are supposed to do work even it is an emergency”.

The participants mentioned specific things like:

- Insufficient time to complete their duties,
- Shortage of protective measures (masks, “protective vaccine”),
- Shortage of hospital linen,
- Shortage of oxygen therapy, and
- Shortage of working space as some of the resources which are undersupplied.

Fear of contracting diseases. Three participants voiced concerns about their own health. One participant stated: *“the conditions that the nurses work under are very dangerous. Since we work with sick people we can easily contract diseases, particularly communicable diseases”*. One participant cited *“dealing with meningitis patients without protective vaccines”* as a source of stress. The participants reported the non-isolation of patients suffering from meningitis and tuberculosis (TB) as a threat to their own health and to the health of other patients.

Relationships. Four participants reported relationships with colleagues, seniors, subordinates, and other personnel as sources of stress. Junior nurses feel misunderstood by their superiors and they perceive some of their colleagues as difficult. One participant reported that some nurses, especially senior nurses are not willing to perform certain duties. The participant stated that:

“It’s [sic] occasionally happens that you come into conflict with another nurse usually in the morning when we are starting to do baths, other nurses do not want to do certain duties e.g. bathing the patients. Usually seniors are the ones who do that. Since I arrived

in this hospital, I have seen few sisters doing baths in the morning, most of them will just tell you that they are sisters in charge, so you have to do what they say, and that is why nurses who are seniors do not do baths”.

A nursing manager reported being stressed by staff members who stay away from work without authorization. Nurses do not seem to be happy about the way doctors treat them. One participant reported that doctors shout at them when they (doctors) cannot find what they are looking for (for example, a doctor's chart). The participant also stated that *“for the uncertainty of the doctor the nurse suffers, because if anything goes wrong, the nurse is charged, especially the sister”.*

Lack of support. Nurses feel unsupported in the work that they do. One participant reported that: *“there is no emotional support for the staff consequently nurses are not able to provide good service to their patients”.* Another participant complained about the lack of a *“wellness programme”* for members of staff.

Lack of development opportunities. Nurses are concerned about the lack of development opportunities in nursing. One participant mentioned: *“We are not sent for special courses and workshops to update knowledge and skills, only selected staff are sent and we do not get full report. Officers who attended special courses are not given the chance to implement what they have learnt to improve patient care. Placement of staff according to abilities and competency is not considered, yet this would facilitate the recuperation of the patient. Changes that have recently occurred which would improve the patients' care are not accepted”.*

Salaries. Nurses do not seem to be satisfied with their salaries. Three nurses described their salaries as poor and one mentioned that she sometimes “moonlights” in private hospitals in order to earn more.

Uncooperative patients. Two participants reported that they find it stressful when patients fail to comply with their treatment programmes. One participant identified aggressive patients as a source of stress.

4.4.2 Coping Strategies

Only three participants responded to the open-ended question on the ways of coping. One participant reported that s/he copes by having a positive attitude towards life and by having a healthy lifestyle. Two participants expressed the notion that their spiritual lives help them to cope. This is what they reported: “*I ... demonstrated faith in all that I experienced in life*” The other participant stated this: “*in each and every problem that we encounter as nurses we believe in God as the server[sic] and Jesus Christ as the intermedialer [sic]*”.

4.5 Summary

The purpose of the study was to describe the levels and sources of stress, ways of coping, and spiritual wellbeing of a sample of nurses. Stress, coping, and spiritual wellbeing were correlated and no significant relationships were found. In addition, stress, coping, and spiritual wellbeing were correlated with the participants’ demographic variables (namely, age, experience, and category) and a significant negative relationship was found between coping and experience.

With regards to the levels of stress, the study found that the sample experience moderate levels of stress. It was observed that senior nurses experience more stress than

junior nurses. The study measured the sources of stress by means of the NSS subscales and found that the sample reported low scores on all the subscales except for workload. In addition to these stressors, open-ended questions resulted in *staff shortages, lack of resources and equipment, fear of contracting diseases, salaries, lack of development opportunities*, and *uncooperative patients* being identified as problems for nurses.

The study measured coping, and found that nurses seem to be coping adequately with their work demands. It was observed that nurses use both problem and emotion-focused coping as measured by the WCQ subscales.

The study found high levels of spirituality, however, only two participants commented on issues of spirituality in the open-ended question. These results are discussed in the next chapter.

Chapter Five

5. Discussion

Given the problems (for example, *heavy workload, poor salaries, under-resourced working environments, short staffing, poor social support*, and so forth) associated with nursing in South Africa, it was expected that the sample would report high levels of stress. It was also anticipated that there would be high levels of spirituality which would be in keeping with previous research which states that issues of spirituality are an integral part of nursing. Although the findings of the present study cannot be generalized to the entire South African nursing population, they have implications for nursing research.

5.1 Levels of Stress

The total NSS mean score ($M = 41.28$, $SD = 14.28$) obtained in the present study is higher than the scores reported by Escot, Artero, Gandubert, Boulenger, and Ritchie (2001) and Lee (2003) who report total mean scores of 39.8 ($SD = 8.87$) and 30.90 ($SD = 9.60$) respectively. They suggest that their samples experienced low to moderate work-related stress. The mean score obtained in the present study is consistent with the results obtained by Healy and McKay (2000) who also report moderate stress levels.

The finding that the sample experience moderate levels of stress was not anticipated. It does not appear to support the claim by Levert et al. (2000) that South African nurses experience higher degrees of burnout than their Western counterparts. It appears to suggest that this sample of nurses is not swamped by their work problems.

It is likely that the results of the present study are not reflective of the true levels of stress experienced by the sample due to the inclusion of student nurses in the sample. This inclusion may have lowered the entire sample's results relating to levels of stress.

Previous research (Lees & Ellis, 1990) and the present study show that student nurses experience lower stress levels than their senior counterparts. The sample's levels of stress excluding the student nurses were found to be higher ($M = 44.19$, $SD = 14.22$).

Although the sample reported moderate stress levels, the conditions nurses work under seem to be a cause of other work related problems in South Africa. According to Padarath et al. (2003), and Xaba and Phillips (2001), stressful conditions in nursing serve as 'push' factors. This suggests that the conditions 'push' nurses out of the nursing profession or out of the country in search for better opportunities.

In addition to measuring the total sample's levels of stress, the subscale scores were examined. In relation to each subscale's highest possible score (Table 2), the means obtained for this sample were low, indicating lower levels of stress than were expected. However, their responses to the open-ended question in relation to stress yielded some interesting findings. These will be incorporated in the discussion of the subscales.

5.1.1 Sources of Stress

Death and dying. This subscale is mainly concerned with the "death and suffering of patients" (Gray-Toft & Anderson, 1981, p. 15). The low scores on this subscale appear to suggest that death and dying is not a concern for this sample. This is not consistent with previous research which states that death and dying cause stress for nurses. Escot et al. (2001) studied oncology nurses and found that the exposure to a dying patient is a troubling experience for nurses and the distress usually persists for at least "one week after the death of a patient" (p. 277). They further state that some nurses are disgusted by having to prepare a body for the mortuary.

It is likely that the low scores on this subscale suggest that the subscale items do not adequately measure stress related to death and dying. For instance, none of the items measure the nurse's own fear of contracting diseases which is common among nurses (Escot et al., 2001). Through responses to the open-ended question, the present study observed a fear of contracting diseases. This fear was expressed by three participants, and is consistent with the findings by Hall (2004a), Ncama and Uys (2003), and Sherman (2000). Sherman (2000) studied nurses involved in caring for patients suffering from AIDS and found that nurses were afraid of contracting the disease through "occupational exposure to HIV" (p. 1503). Hall (2004a) conducted a study on the challenges HIV/AIDS pose to nurses. She found that the "enormous increase in the number of infections, together with the lack of enforced precautions by government continuously fuels the fear of infection among health workers, especially those operating in trauma units" (p. 6). She further asserts that the unavailability of a cure for the disease together with the nurses' lack of knowledge of the patient's HIV status increases the fear of infection.

Conflict with physicians. This subscale is concerned with "stressful situations that arise from the nurse's interactions with physicians" (Gray-Toft & Anderson, 1981, p. 17). As with death and dying, the scores on this subscale were low. Possible explanations for this include:

- The questionable adequacy of the subscale items to measure stress pertaining to conflict with physicians, and
- The inclusion of the student nurses in the sample.

Regarding the adequacy of the subscale items to measure conflict with physicians, some items do not appear to be measuring conflict with physicians. For example, "making a

decision concerning a patient when the physician is unavailable” and “fear of making a mistake in treating a patient” (Gray-Toft & Anderson, 1981, p. 13). These items seem to be tapping into the nurse’s feelings towards making decisions about patients in the absence of a doctor and uncertainty concerning the treatment of a patient.

The inclusion of student nurses may have confounded the results in the sense that their scores are relatively low when compared to the other nursing groups (see Table 8).

Previous research (Escot et al., 2001; McGrath et al., 2003; McVicar, 2002; Lee, 2003) suggest that conflict with doctors is a concern for nurses. Responses from the open-ended question indicate that relationships between doctors and nurses are sources of stress. The sample, especially the ‘sisters’ (either the chief or professional nurses) did not appear to be happy with the manner in which doctors treat them. They indicated that doctors blame nurses for their (doctors) shortcomings. Escot et al. (2001) and McGrath et al. (2004) assert that conflict between nurses and doctors centres around communication. They state that nurses are generally concerned that doctors fail to communicate information that relates to the patients’ clinical management.

With regards to the differences between the sites (rural and urban) the study found higher degrees of conflict with physicians in the urban sample than among their rural counterparts (see Table 9). A possible explanation could be that there is a general shortage of doctors in rural hospitals.

Previous research (De Villiers & De Villiers, 2004; Hall, 2004a) points out that there is a huge discrepancy between the supply of doctors in rural and urban hospitals. The shortage of doctors in rural hospitals may suggest that rural nurses deal with fewer doctors than urban nurses.

Inadequate preparation. According to Gray-Toft and Anderson (1981) inadequate preparation is largely concerned with the “nurses’ attempts to meet the emotional needs of patients and their families” (p. 16). The study observed low scores on this subscale. However, they (the low scores) should not be taken to mean that the sample is able to meet the patients’ and their families’ emotional needs. They may be due to the items’ inadequacy to measure stress related to inadequate preparation.

Responses from the open-ended question do not appear to support the idea that the sample is able to support their patients emotionally. Three respondents complained that they are not able to meet such needs due to lack of time and having too much work to do. Such conditions (lack of time and heavy workloads) may be compelling the sample to focus on the physical needs rather than offering emotional support to the patients.

Student nurses reported low scores on this subscale (see Table 8). This is in keeping with their general levels of stress and their scores in all the other subscales. However, the finding that student nurses are least affected by inadequate preparation is surprising given their limited experience and training. It was expected that they may feel overwhelmed by the patients’ needs, as they may not have acquired the skills to help with such needs. They may also have difficulties in answering questions that pertain to the patients’ illnesses and treatment. As a result of their lack of skill to help patients with emotional needs, student nurses may limit their interaction with patients so as to avoid answering questions.

It is not surprising that the urban sample reported higher degrees of inadequate preparation (Table 9) than the rural sample. This may be due to their heavier workloads

which may cause them to focus on the physical needs and appear to ‘neglect’ the emotional needs.

Lack of support. This subscale appears to measure the lack of opportunities for the nurse to express “negative feelings of anger and frustration” (Gray-Toft & Anderson, 1981, p. 16). The scores in this subscale were the lowest among the subscales (see Table 2). The very low scores seem to suggest that lack of support is not a source of stress. This is not consistent with previous studies that state that the lack of support cause stress for nurses (AbuAlRub, 2004; Cavendish et al., 2004; Elloker, 2003; Hall, 2004b, Hopkinson et al., 1998; Lee, 2003). They (the low scores) are also not consistent with results from the open-ended question of the present study. Several nurses reported feeling unsupported in the work that they do. They feel that their emotional needs are not met and this may translate to poor patient care.

Lack of social support seems to be slightly more of a problem for the urban sample than it is for the rural sample (see Table 9). Possible explanations for such a discrepancy are that:

- Urban hospitals are generally larger than rural hospitals, and
- The pace and demands of work are greater in urban hospitals than in rural hospitals.

The size of the hospital and the pace of the work suggest that there may be more people to deal with, and thus little opportunity to develop supportive relationships with colleagues in urban hospitals.

Conflict with other nurses. According to Gray-Toft and Anderson (1981) this subscale measures “conflictual situations that arise between nurses and supervisors” (p.

17). As with lack of support, the scores in this subscale are very low (see Table 2). This may suggest that conflict with other nurses is also less frequently experienced. This is not consistent with previous research which shows that nurses experience conflict with other nurses (Escot et al., 2001; McGrath et al., 2003; McVicar, 2002; Lee, 2003). They (the low scores) are also not consistent with results from the present study. Responses from the open-ended question suggest that the relationships between nurses are a problem. Some nurses see their colleagues as difficult, suggesting that some nurses are not pleasant to work with. Factors that seem to contribute to stressful relationships between colleagues are that some nurses, especially senior nurses are not willing to do certain kinds of work (for example, bathing patients). It seems that senior nurses abuse their seniority by taking advantage of junior nurses. Rowe and Sherlock (2005) conducted a study in America on the abuse of nurses by their colleagues. They found that nurses abuse each other and the most common form of abuse is verbal abuse. According to these authors the abuse of nurses has negative implications on the nursing profession.

Although there were observable differences in the experience of conflict with other nurses among the nursing groups (Table 8), the difference appears to be significant among the enrolled nursing assistants and student nurses. As would be expected, student nurses appear to experience less conflictual situations with other nurses than enrolled nursing assistants. Previous research supports the finding that there are higher degrees of conflict between enrolled nursing assistants and their senior counterparts. According to Castledine (2004) and Rheaume (2003), conflict between enrolled nursing assistants and senior nurses centres on roles and responsibilities. While senior nurses appear to be threatened by nursing assistants, nursing assistants tend to be confused about their

nursing roles. This situation (feelings of insecurity and confusion) normally leads to conflict between these groups.

With regards to the differences between the sites (rural and urban), the study found higher degrees of conflict between nurses among the urban sample (see Table 9). A factor that may possibly explain the higher degrees of conflict between nurses in urban hospitals could be that urban hospitals are generally larger than rural hospitals. This may imply that urban nurses deal with many colleagues and are therefore less likely to form friendly relationships.

Workload. This subscale measures “stressful situations that arise from the nurse’s workload, staffing and scheduling problems, and inadequate time to complete nursing tasks, and to support patients emotionally” (Gray-Toft & Anderson, 1981, p. 15). Of all the subscales, this is the only subscale that yielded high scores. These scores were expected, and they suggest that workload is a concern for this sample of nurses. This finding is consistent with results from previous studies which state that workload cause stress for nurses (Boeije et al., 1997; Callaghan et al., 2000; Elloker, 2003; Hall, 2004a, 2004b; Lee, 2003; McVicar, 2003; Murphy, 2004; Payne, 2003; Stacciarini & Troccoli, 2003). Responses from the open-ended question indicate that the nursing workload is so great that nurses have to do multiple tasks.

The study observed differences in the experience of workload among the nursing categories, with student nurses reporting lower degrees of workload (see Table 8). Research shows that senior nurses are overworked because, in addition to normal nursing tasks, they carry out managerial and administrative duties such as supervising junior members of staff (Lees & Ellis, 1990).

With regards to differences between the rural and urban hospitals, the study found that the urban sample reported higher degrees of workload than their rural counterparts. This could be linked to people's migration from rural areas to urban areas in pursuit of better opportunities (Stats S.A., 2006). In this way, urban hospitals could experience more patient visits than rural hospitals. Another possible explanation could be: Due to the pronounced lack of resources and equipment in rural hospitals (De Villiers & DeVilliers, 2004; Hall & Erasmus, 1994; Kotzee & Couper, 2006), patients may need to be referred to urban hospitals when they need specialized care, placing a further burden on urban hospitals.

Responses from the open-ended question appear to suggest that the problem of heavy workloads seems to be compounded by staff shortages. Previous research supports this (Albion, Fogarty, & Machin, 2005). Fourteen participants reported a shortage of health workers, especially nurses. Participants feel that the shortage of staff makes it difficult for nurses to render efficient service to their patients. There seems to be a link between staff shortages, work overload, and service delivery. Due to the shortage of staff, nurses find that they have to cope with a large amount of work which may compromise the quality of their service.

Uncertainty concerning treatment. According to Gray-Toft and Anderson (1981) "stressful situations arise when there is uncertainty concerning the treatments of patients. This may develop when the physician fails to adequately communicate to the nurse information concerning a patient's medical condition" (pp. 16-17). As with all the other subscales except for workload, the study observed low scores on this subscale. This may appear to suggest that this sample is least affected by uncertainty regarding the treatment

of patients. This finding is supported by Lee (2003) who found that his sample of nurses was least affected by this source of stress.

It is not surprising that student nurses feel uncertain regarding the treatment of patients (Table 8). This is linked to the fact that they are still in training and are not confident enough to deal with patients. Basson and Van der Merwe (1994) report that student nurses feel overwhelmed by the responsibility of caring for patients. These feelings are expected to be alleviated by continuing training.

Once again, urban nurses reported higher degrees of uncertainty concerning treatment than rural nurses (Table 9). This does not suggest that rural nurses always know what to do. It may be related to the fact that patients who require specialized treatment are normally referred to urban hospitals, where there is a better distribution of specialist medical personnel and equipment (Hall & Erasmus, 2003). This (the patients' referral to urban hospitals) may then expose urban nurses to rare conditions that need special treatment and care.

It is worth noting that while the NSS may be an adequate measure of nursing stress in developed countries, it does not appear to be an adequate measure of South African nursing stress. This may explain the low scores in the entire sample, as well as the subscale low scores. Responses from the open-ended question revealed some factors which are not covered by the NSS, another reason for the low scores. These factors are:

- The shortage of resources and equipment,
- The lack of development opportunities,
- Uncooperative patients, and
- Dissatisfaction with salaries.

Shortage of resources and equipment. Thirteen respondents identified the shortage of resources and equipment as a stressor for nurses. This finding supports results from previous studies (Govender et al., 2006; Heyns et al., 2003; Padarath et al., 2003; Sanders & Lloyd, 2005). These studies report that the lack of resources undermines the quality of care rendered by nurses. The sample reports that the lack of resources compels them to improvise even in the face of an emergency. They identified time and equipment to be amongst the resources that are under-supplied. They feel that the lack of time prevents them from undertaking certain types of work such as:

- Attending to the patients' emotional and/or psychological needs,
- Psycho-educating their patients about healthy lifestyles, and
- Embarking on community outreach programmes.

Lack of development opportunities. One participant expressed a concern over the limited professional and personal development opportunities in nursing. The participant felt that nurses are denied opportunities to improve and refresh their skills and knowledge. According to this participant, even nurses who received special training are not given opportunities to practice these skills. This finding supports the findings by Albion et al. (2005), Jackson (2004) and Levert et al. (2000). These authors found that there is little professional development and recognition in nursing. The benefits of continuing professional development cannot be emphasized enough and this is a requirement of most professional bodies in South Africa.

Uncooperative patients. Two participants reported that they were stressed by the lack of co-operation from their patients. Lack of co-operation can be in the form of aggression, where patients become aggressive towards the nurses and threaten their safety

(Edwards, Burnard, Coyle, Fothergill, & Hannigan, 2000). Catlette (2002), Edwards et al. (2000), and Zimmer and Cabelus (2003) report that there have been incidences of nurses being physically attacked especially those involved in forensic nursing and mental health care. Lack of cooperation can also be in the form of poor compliance with treatment. This may suggest poor recovery and heavy workloads for nurses.

Dissatisfaction with salaries. The finding that nurses are dissatisfied with their salaries is consistent with the findings by Heyns et al. (2003), Padarath et al. (2003), Sanders and Llyod (2005), and Xaba and Phillips (2001). Three participants reported their salaries as poor. One participant mentioned that she sometimes works in private hospitals to supplement her regular monthly income. As mentioned in Chapter One, poor salaries in nursing seem to be an international concern. Unfortunately, this drives South African nurses outside of the country for opportunities to earn higher salaries (Heyns et al., 2003; Padarath et al., 2003; Sanders & Lloyd, 2005).

5.2 Coping

The overall mean score ($M = 103.16$, $SD = 26.54$) obtained from the WCQ indicates that generally, nurses are coping with the working conditions. As with the levels of stress, the entire sample's reported coping levels are affected by the inclusion of student nurses. Their reported coping levels ($M = 115.45$, $SD = 32.93$) are better than that of the other nursing groups. Levels of coping without the students were found to be lower ($M = 99.28$, $SD = 22.93$). Their inclusion in the sample may therefore have affected the entire sample's coping.

5.2.1 Coping Strategies

The study examined coping as measured by the various WCQ subscales. These include:

- Confrontive coping – which involves aggressive attempts to change the stressful situation,
- Distancing – this involves the individual's attempts to detach from the stressful situation,
- Self-controlling – this method of coping involves the individual's efforts to regulate his/her feelings,
- Seeking social support – this involves the individual's efforts to draw support from others in order to regulate the unpleasant feelings of stress,
- Accepting responsibility – this refers to the individual's ability to accept his/her role in the stressful situation,
- Escape-avoidance – involves the individual's attempts to avoid anything that relates to the stressful situation,
- Planful problem-solving – this method refers to the efforts to solve the problem using an analytical approach, and
- Positive reappraisal – which involves efforts to derive positive meaning from the stressful situation.

The coping strategies are discussed in the order of their use (from the most frequently used to the least frequently used) by the sample.

Seeking social support. Of all the subscales, seeking social support yielded the highest scores (see Table 3) making it the most frequently used method of coping by this sample

of nurses. This finding is not consistent with previous research. Healy and McKay (2000) and Payne (2001) found that planful problem-solving was the most frequently used coping strategy. As mentioned, seeking social support involves the individual's attempts to draw support from others, or to seek advice on how to deal with the stressful situation. Seeking social support can serve as problem-focused, as well as emotion-focused coping (Folkman & Lazarus, 1985). It is emotion-focused when the nurse uses it to regulate the stressful emotions that accompany work-related problems, like having to deal with an abusive patient or an unsupportive supervisor. Seeking social support becomes problem-focused when the nurse consults with colleagues or a supervisor with the aim of obtaining information about dealing with a certain situation, for example, treatment of a patient (Boeijs et al., 1997; Hendel et al., 2000). The benefits of social support have already been mentioned in Chapter Two. It was stated that social support helps to reduce stress by alleviating feelings of uneasiness, helplessness, and insecurity. In response to the open-ended question on stressful situations, one participant specifically referred to the lack of a staff wellness programme. According to Elloker (2003), and Lees and Ellis (1990), nurses also draw support from friends and family. Elloker (2003) further mentions that sharing experiences with family and friends serves as catharsis.

With regards to the differences in the use of this strategy by the rural and urban samples (see Table 11), the study found that the rural sample reported higher degrees of seeking social support than the urban sample. This finding is consistent with previous research (Parkes, 1986). However, more recent research shows no differences in the use of social support by rural and urban nurses (LeSergent & Haney, 2005).

Planful problem-solving. The study found that planful problem-solving is the second most frequently used coping strategy (see Table 3). This finding is not consistent with the findings by Healy and McKay (2000) and Payne (2001) who found that planful problem-solving is the most frequently used coping strategy. According to Folkman, Lazarus, Dunkel-Schetter, et al. (1986) planful problem-solving involves “deliberate problem-focused efforts to alter the situation ... coupled with an analytic approach to solving the problem” (p. 995). Healy and McKay (2000) state that nurses try to cope with the problem of workload by prioritizing work. They further state that nurses consult with their supervisors when they are not confident about certain procedures. In the present study, problem-focused coping was found to exist in the form of improvisation. This was indicated by the responses from the open-ended question. The sample reported that they try to deal with the shortage of equipment by improvising in order to deal with the situation at hand, for example, an emergency.

The study observed differences in the use of this strategy by the different categories (see Table 10). It observed that student nurses use more problem-solving methods than enrolled nursing assistants. This may be related to the fact that enrolled nursing assistants receive basic and limited training (two years of training) which may inadequately prepare them for their nursing roles. Because they are less skilled, they may have limited resources to problem-solve. This situation could be altered by continuing professional development courses. Mahat (1998) states that *studying hard, analyzing the problem, and practicing skills in the laboratories* helps to enhance student nurses’ abilities to problem-solve.

It is however, surprising that student nurses reported higher degrees of problem-solving than their senior counterparts. This is not supported by literature as no study was found to support this finding. Research shows that senior nurses use more problem-focused coping, whereas student nurses tend to use emotion-focused coping. The use of problem-solving by student nurses may need to be explored by future research.

With regard to the differences in the use of this strategy by rural and urban nurses, the study observed higher degrees of planful problem-solving among the rural sample than the urban sample. This is not supported by literature.

Positive reappraisal. The study found that positive reappraisal is the third most frequently used method of coping. This is not supported by previous research. Payne (2001) found positive reappraisal to be the second most used coping strategy. Positive reappraisal involves attempts to “create positive meaning by focusing on personal growth” and “it also has a religious tone” (Folkman, Lazarus, Dunkel-Schetter, et al., 1986, p. 995). The advantage of positively appraising situations is that it allows the individual to maintain a positive attitude regardless of the circumstances (Frankl, 1984). Given the high levels of spiritual wellbeing, this finding is not surprising.

Results from the open-ended question on coping showed that the sample copes by having a positive attitude towards life and by having a healthy lifestyle. Two participants expressed that their spiritual lives help them to cope. The finding that spirituality helps some participants to cope highlights the need for nursing authorities to support nurses’ spirituality (Sims, 2000).

The finding that the student nurses use more positive appraisal than the other nursing groups (Table 10) is not supported by previous research. The study also observed that the rural sample reported higher degrees of this strategy than their urban counterparts.

Accepting responsibility. The study found that this method of coping is the fourth most frequently used coping strategy (see Table 3). Previous research does not report on the extent to which this strategy is used by nurses. According to Folkman, Lazarus, Dunkel-Schetter, et al. (1986) accepting responsibility means that a person “acknowledges one’s own role in the problem with the concomitant theme of trying to put things right” (p. 995). The finding that nurses use this method of coping may suggest that nurses may be open to constructive criticism and authorities may use this to build a strong nursing force.

With regards to the differences in the use of this strategy across the sites (Table 11), the study observed that the rural sample use this strategy more than their urban counterparts. However, literature has not investigated this.

Self-controlling. The scores for self-controlling are slightly higher than the distancing and confrontive coping scores (see Table 3). This appears to suggest that self-controlling is the fourth least-used method of coping in this sample of nurses. This finding (fourth least-used strategy) is not supported by previous research. Healy and McKay (2000) report that self-controlling was the third most frequently used coping strategy in their study. This method of coping “describes efforts to regulate one’s own feelings ... and actions” (Lazarus, Folkman, Dunkel-Schetter, et al., 1986, p. 999). The use of this strategy suggests that nurses regulate their own feelings in order to cope with the conditions at work. Folkman, Lazarus, Dunkel-Schetter, et al. (1986) report that the “use

of self-control in the work place may facilitate problem solving by allowing employees to concentrate on the task at hand” (p. 997). It therefore appears that self-controlling is a positive method of coping.

Distancing. The study observed slightly lower scores (see Table 3) on this subscale than self-controlling. However, the distancing scores are slightly higher than those of confrontive coping. This (slightly lower scores) makes distancing to be third least- used method of coping. Previous research does not report on the extent to which nurses use this method of coping strategy. According to Folkman, Lazarus, Dunkel-Schetter, et al. (1986) distancing involves “efforts to detach oneself” (p. 995) from the situation, for example, “I tried to forget the whole thing” (p. 995). Distancing appears to be a positive and negative coping strategy. As positive coping, distancing can help the nurse to maintain a healthy balance between work and personal life which can help to “preserve their own mental wellbeing” (Escot et al., 2001, p. 277). As negative coping, distancing can compromise the quality of service delivery, as nurses may avoid contact with their patients. By so doing, they may ‘neglect’ the patients’ needs.

Confrontive coping. Of the ways of coping subscales, confrontive coping produced the second lowest scores (see Table 3) indicating that this strategy is the second least used method of coping. Previous studies do not report on the extent to which this method of coping is used by nurses.

According to Folkman, Lazarus, Dunkel-Schetter, et al. (1986) confrontive coping “involves a degree of hostility” (p. 995). Although confrontive coping seems to be negative in the sense that it involves a degree of hostility, it can have benefits. An advantage of confrontive coping would be when a nurse tries to “get the person

responsible to change his or her mind” (p. 995) by negotiating, or discussing this with the particular person. The potential benefit of doing this would be that nurses may manage to resolve their differences. It may also help to create healthy working environments and may strengthen inter-staff relationships.

Escape-avoidance. The study observed very low scores on this subscale (see Table 3) making it the least-used coping strategy. The finding that escape-avoidance is the least used coping strategy is consistent with previous research (Healy & McKay, 2000; Payne, 2001). However, it is not consistent with the findings by McGrath et al. (2003) who report that avoidance is the second most frequently used coping strategy. As mentioned in Chapter Two, nurses use this strategy to avoid intensive communication with their patients (Boeije et al., 1997). Healy and McKay (2000) assert that the use of this strategy can result in “higher levels of mental distress or mood disturbance” (p. 686).

5.3 Spiritual Wellbeing

The study found a high degree of spiritual wellbeing among this sample of nurses. It observed similar means on the existential and religious dimensions of the scale. However, the inter-item consistency values indicated higher reliability for religious wellbeing than for existential wellbeing.

The study found higher degrees of existential wellbeing among the urban sample than their rural counterparts (see Table 13).

The finding that spirituality is high among the participants suggests that spirituality is an important aspect of the sample’s lives, and is likely to play a significant role. Responses from the open-ended question suggest that a few respondents value their spirituality. One participant reported that his/her spirituality helps him/her to maintain a

positive outlook in life. This finding is in line with Frankl's (1984) theory of existentialism. He states that once a person finds the meaning of his/her existence it becomes easier to live with the challenges life throws at him or her. Spirituality or existentialism involves finding the meaning of one's existence which helps the person to maintain a positive outlook on life. Another participant made reference to religiosity and how this belief makes coping with working conditions possible.

5.4 Relationships between Stress, Coping, Spiritual Wellbeing, and Work Experience

Stress, coping, and spiritual wellbeing. The study aimed at determining relationships between stress, coping, and spiritual wellbeing. It failed, however, to find significant relationships (see Table 5). The failure of the study to find significant relationships between the variables may be related to the homogenous set of scores on spiritual wellbeing. The restriction of the range of values on this variable could have resulted in a low correlation coefficient. The distribution of spiritual wellbeing scores was found to be negatively skewed.

Coping and experience. With regards to the correlations between coping and experience, the present study found a significant negative relationship (see Table 5). This means that, as the years of experience increase, coping tends to decrease. It could also mean that limited experience is associated with better coping. This may explain the higher levels of coping among student nurses and the lower degrees of coping among senior nurses.

5.4.1 Inter-relationships between the subscales of the different scales.

Stress subscales. The finding that the NSS subscales correlated with one another was expected. This supports the claims by Gray-Toft and Anderson (1981) that the scale is a

valid measure of nursing stress. However, the scale does not seem to be an appropriate measure for the South African context, given that it does not include measures that examine stress relating to factors like:

- The shortage of resources and equipment,
- The lack of development opportunities,
- Uncooperative patients, and
- The nurses' dissatisfaction with salaries.

Coping subscales. As with the stress subscales, it is also not surprising that the coping subscales correlated with one another. However, the shortcoming with this scale is that it measures situational coping (Payne, 2001). The study should, perhaps, have used it as a measure of dispositional coping styles.

Spiritual wellbeing subscales. Again, the finding that the subscales correlated with one another is not surprising. It suggests that the scale may be an appropriate measure of the sample's quality of life.

5.4.2 Relationships across the subscales of the different scales

Stress and coping subscales. Significant negative correlations were found between 'positive reappraisal' and 'inadequate preparation', 'conflict with other nurses', and 'workload' (see Table 6). This suggests that, as the frequency of these stressors increased, the sample's ability to derive positive meaning from the situation decreased. The correlation between 'workload' and 'accepting responsibility' was also negative – indicating that, as workload increased, it became difficult for participants to acknowledge their own roles in the situation. It is possible that they feel that, since these stressors are beyond their direct control, it is pointless attempting to find positive meaning in them.

Coping and spiritual wellbeing subscales. The positive correlations between both subscales of the Spiritual Wellbeing Scale and ‘self-control’ suggest that the higher the spiritual wellbeing, the better one is able to control and regulate one’s own feelings. The positive correlation between ‘distancing’ and ‘religious wellbeing’ suggests that the higher the religious wellbeing, the better one is able to transcend the situation. This is supported by Ellison (1983) who suggests that those with higher levels of religiosity and spirituality report better control of their lives.

5.5 Summary

The study observed moderate stress levels among this sample of nurses. It also observed relatively low scores on most of the NSS subscales with the exception of ‘workload’ which yielded slightly higher scores. The low scores on the NSS and most of its subscales could be linked to the inclusion of student nurses in the sample. Another reason for the moderate stress levels may be that the NSS is not, perhaps an adequate measure for South African nursing stress. For instance, the scale does not include measures that examine stress that relates to factors like:

- The shortage of resources and equipment,
- The lack of development opportunities,
- Uncooperative patients, and
- The nurses’ dissatisfaction with their salaries.

The study observed adequate levels of coping in the sample. The two mainly used methods of coping were found to be *social support* and *planful problem-solving*. The least frequently used coping strategy was found to be *confrontive coping*. The two frequently used coping strategies suggest that the sample use both *problem-focused* and

emotion-focused coping. This supports the claim by Lazarus, Folkman, and their associates that people use both forms of coping to deal with stressful situations.

It is interesting to observe that the sample reported high levels of spiritual wellbeing. This suggests that spirituality is a significant part of their lives. Although the study failed to statistically demonstrate the role of spiritual wellbeing in the relationship between stress and coping, the significance of spiritual wellbeing cannot be overlooked. Wider implications of the study are presented in the next chapter.

Chapter Six

6.1 Limitations of the Present Study

One of the major limitations of the study is the method used to draw the sample. Because the study used convenience sampling, the results cannot be generalized to other nurse populations. Although the sample was drawn from three different hospitals, the sample size was small suggesting that it may not be representative of the general nurse population. Another problem linked to the sample is that it was drawn from one rural and two urban hospitals, which resulted in the over-representation of urban nurses in the study. Their over-representation may have skewed the overall results. In addition to this, the geographical location of the hospitals raises problems like disparity. According to Hall and Erasmus (2003) the problem of staff shortages and lack of resources is greater in rural areas. It is therefore possible that the different locations of the hospitals may have confounded the results.

While the use of different nurse categories (CPNs, PNs, and ENAs) allowed a meaningful comparison of the stresses and coping for the different levels, the inclusion of a student sample impacted on the results. This is because this group does not experience stress similar to the other nurse categories on the specific dimensions of stress such as *death and dying, conflict with other nurses*, and so forth. Their inclusion may therefore have lowered the stress results. According to literature student nurses experience specific stressors that do not seem to affect the other nurse categories. These include: Academic workload, not feeling part of the ward team, anxieties about professional competence, evaluations of clinical experience and performance, frequent changing of wards, fear of

failure, and time pressure when carrying out tasks (Basson & Van der Merwe, 1994; Lo, 2002; Shipton, 2002; Tully, 2004).

Another limitation of the study is that the questionnaire was long. This may have discouraged potential participants from completing and returning it. The research instrument is a self-report measure, and may have increased response bias. The NSS does not seem to adequately measure South African levels and sources of stress. This is suggested by its failure to measure stresses that relate to nurses' own situations such as death and dying, lack of resources, lack of development opportunities, nurses' dissatisfaction with their salaries, and uncooperative patients. The WCQ also seems to be problematic in the sense that it measures situational coping. Perhaps the study should have used it as a measure of dispositional coping by changing the instruction (see Appendix B, Part Three) to read as follows: "Please try to think about some of the stressful situations you have experienced at work ... and answer the question as to how you generally deal/cope with such situations" (Payne, 2001, p. 399).

6.2 Conclusion

The study aimed at investigating levels and sources of stress, coping, and spiritual wellbeing of a sample of nurses. The open-ended question identified the *shortage of resources, the lack of development opportunities, the dissatisfaction of nurses with their salaries, and unco-operative patients* as causing stress for nurses. The levels of stress reported by the sample may not be a true reflection of the problem of stress that is experienced by South African nurses. Literature seems to suggest that South African nurses experience higher stress levels due to a vast number of problems such as *heavy workloads* and *severe staff shortages*.

Given that the sample experience moderate stress levels, it is not surprising that they reported adequate levels of coping. Research shows that stress is negatively associated with coping. The study found that nurses use both problem-focused and emotion-focused coping. Of particular interest, was the finding that spiritual wellbeing was high among the participants. This finding suggested that spiritual wellbeing may play an important role in the participants' lives.

6.3 Recommendations

Due to the small sample size, the present study finds it difficult to make recommendations. However, more research into spiritual wellbeing in relation to nursing stress and coping using a larger sample is needed. Future research needs to explore further the negative correlation between coping and work experience as it suggests that as work experience increases, coping decreases. This indicates that senior nurses experience more stress and struggle to cope. Nursing authorities may need to look at ways in which they can alleviate the stress that is experienced by senior nurses. These may include support for senior nurses. Future research may also need to focus on the development of research instruments that may adequately measure stress as experienced by South African nurses and their methods of coping.

Nursing authorities need to alleviate the problem of staff shortages by filling the currently vacant positions. This may have multiple benefits, as it will not only alleviate the problem of manpower, but will also alleviate the problem of heavy workloads. It can also improve the quality of nursing care.

Research suggests that nurses feel limited in what they can do to develop themselves professionally. They also feel that their workplaces do not provide opportunities to

practice acquired skills. This may add to their frustration, and may make them want to quit nursing for careers where they may be provided with opportunities to grow. It may benefit the profession if nursing authorities would provide opportunities for ongoing professional development, so as to keep nurses interested in nursing.

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Appendices

Appendix A

Consent Form

Dear participant.

This questionnaire is part of a study that we are conducting in order to understand how nurses deal with their working conditions. The study aims at describing whether your spirituality/spiritual well being plays a role in helping you to cope with work conditions. We request your participation which will remain voluntary throughout the study. You are free to withdraw from the study at any time should you wish to do so and please note that a decision not to participate will not disadvantage you in any way. The completion of the questionnaire should take about an hour. Please complete it in full so that we can make use of the information you provided us with. You are not required to give your name and your responses will be treated with the strictest confidentiality.

I (Clerah Mathonsi) am the main researcher and I am undertaking the study in partial fulfillment for the Master of Arts Degree (Clinical Psychology) at the University of KwaZulu-Natal. My supervisor is Mrs. C. Patel, who is a lecturer in the School of Psychology of the University of KwaZulu-Natal. Her contact number is (031) 260 7619.

In case you need more information about the study, please do not hesitate to direct all your queries to either the main researcher, Clerah Mathonsi at 082 598 7283 or the research supervisor, Mrs. C. Patel at (031) 260 7619.

Consent

I hereby agree to participate in the research regarding nursing working conditions and spiritual wellbeing. I understand that I am participating freely without being forced in any way to do so. I also understand that I can withdraw at any point should I not want to continue participating. I understand that a decision not to continue will not in any way affect me negatively.

I understand that this is a research project whose purpose is not necessarily to benefit me personally.

I have received the telephone number of a person to contact should I need any explanations regarding the research.

I understand that this consent form will not be linked to my responses, and that my answers will remain confidential.

.....

Signature

.....

Date

Appendix B

Questionnaire

Part One

This section requires you to tell us about yourself, remember you are not required to give your name.

Demographic details:

Age : _____

Gender : _____

Number of years of service : _____

Category : _____

Ward/Unit you work in : _____

Part two

Below is a list of situations that commonly occur in a hospital unit. For each item indicate by means of a check (✓) how *often* on your present unit you have found the situations to be stressful. Your responses are strictly confidential.

| | Never | Occasionally | Frequently | Very frequently |
|--|-------|--------------|------------|-----------------|
| 1. Breakdown of a computer. | | | | |
| 2. Criticism by a physician. | | | | |
| 3. Performing procedures that patients experience as painful. | | | | |
| 4. Feeling helpless in the case of a patient who fails to improve. | | | | |
| 5. Conflict with a supervisor. | | | | |
| 6. Listening or talking to a patient about his /her approaching death. | | | | |
| 7. Lack of an opportunity to talk openly with other unit personnel about problems on the unit. | | | | |
| 8. The death of a patient. | | | | |
| 9. Conflict with a physician. | | | | |
| 10. Fear of making a mistake in treating a patient. | | | | |
| 11. Lack of an opportunity to share experiences and feelings with other personnel on the unit. | | | | |
| 12. The death of a patient with whom you developed a close relationship. | | | | |
| 13. Physician not being present when a patient dies. | | | | |
| 14. Disagreement concerning the treatment of a patient. | | | | |
| 15. Feeling inadequately prepared to help with the emotional needs of a patient's family. | | | | |
| 16. Lack of an opportunity to express to other personnel on the unit my negative feelings toward patients. | | | | |
| 17. Inadequate information from a physician regarding the medical condition of a patient. | | | | |
| 18. Being asked a question by a patient for which I do not have a satisfactory answer. | | | | |
| 19. Making a decision concerning a patient when the physician is unavailable. | | | | |
| 20. Floating to other units that are short-staffed. | | | | |
| 21. Watching a patient suffer. | | | | |
| 22. Difficulty in working with a particular nurse (or nurses) outside the unit. | | | | |
| 23. Feeling inadequately prepared to help with the emotional needs of a patient. | | | | |

Part three

In this section you are required to imagine a recent situation that you experienced as stressful and indicate by means of a tick (✓) whether you used any of the statements listed below to deal with the situation.

| | Not used | Used somewhat | Used quite a bit | Used a great deal |
|--|----------|---------------|------------------|-------------------|
| 1. Just concentrated on what I had to do next - the next step. | | | | |
| 2. I tried to analyze the problem in order to understand it better. | | | | |
| 3. Turned to work or substitute activity to take my mind off things. | | | | |
| 4. I felt that time would make a difference - the only thing to do was to wait. | | | | |
| 5. Bargained or compromised to get something positive from the situation. | | | | |
| 6. I did something which I didn't think would work, but at least I was doing something. | | | | |
| 7. Tried to get the person responsible to change his or her mind. | | | | |
| 8. Talked to someone to find out more about the situation | | | | |
| 9. Criticized or lectured myself. | | | | |
| 10. Tried not to burn my bridges, but leave things open somewhat. | | | | |
| 11. Hoped a miracle would happen. | | | | |
| 12. Went along with fate; sometimes I just have bad luck. | | | | |
| 13. Went on as if nothing had happened. | | | | |
| 14. I tried to keep my feelings to myself. | | | | |
| 15. Looked for the silver lining, so to speak; tried to look on the bright side of things. | | | | |
| 16. Slept more than usual. | | | | |
| 17. I expressed anger to the person(s) who caused the problem. | | | | |
| 18. Accepted sympathy and understanding from someone. | | | | |
| 19. I told myself things that helped me to feel better. | | | | |
| 20. I was inspired to do something creative. | | | | |
| 21. Tried to forget the whole thing. | | | | |
| 22. I got professional help. | | | | |
| 23. Changed or grew as a person in a good way. | | | | |
| 24. I waited to see what would happen before doing anything. | | | | |

| | Not used | Used somewhat | Used quite a bit | Used a great deal |
|--|----------|---------------|------------------|-------------------|
| 25. I apologized or did something to make up. | | | | |
| 26. I made a plan of action and followed it. | | | | |
| 27. I accepted the next best thing to what I wanted. | | | | |
| 28. I let my feelings out somehow. | | | | |
| 29. Realized I brought the problem on myself. | | | | |
| 30. I came out of the experience better than when I went in. | | | | |
| 31. Talked to someone who could do something concrete about the problem. | | | | |
| 32. Got away from it for a while; tried to rest or take a vacation. | | | | |
| 33. Tried to make myself feel better by eating, drinking, smoking, using drugs or medication, etc. | | | | |
| 34. Took a big chance or did something very risky. | | | | |
| 35. I tried not to act too hastily or follow my first hunch. | | | | |
| 36. Found new faith. | | | | |
| 37. Maintained my pride and kept a stiff upper lip. | | | | |
| 38. Rediscovered what is important in life. | | | | |
| 39. Changed something so things would turn out right. | | | | |
| 40. Avoided being with people in general. | | | | |
| 41. Didn't let it get to me; refused to think too much about it. | | | | |
| 42. I asked a relative or friend I respected for advice. | | | | |
| 43. Kept others from knowing how bad things were. | | | | |
| 44. Made light of the situation; refused to get too serious about it. | | | | |
| 45. Talked to someone about how I was feeling. | | | | |
| 46. Stood my ground and fought for what I wanted. | | | | |
| 47. Took it out on other people. | | | | |
| 48. Drew on my past experiences; I was in a similar situation before. | | | | |
| 49. I knew what had to be done, so I doubled my efforts to make things work. | | | | |
| 50. Refused to believe that it had happened. | | | | |
| | | | | |

| | Not used | Used somewhat | Used quite a bit | Used a great deal |
|---|----------|---------------|------------------|-------------------|
| 51. I made a promise to myself that things would be different next time. | | | | |
| 52. Came up with a couple of different solutions to the problem. | | | | |
| 53. Accepted it, since nothing could be done. | | | | |
| 54. I tried to keep my feelings from interfering with other things too much. | | | | |
| 55. Wished that I could change what had happened or how I felt. | | | | |
| 56. I changed something about myself. | | | | |
| 57. I daydreamed or imagined a better time or place than the one I was in. | | | | |
| 58. Wished that the situation would go away or somehow be over with. | | | | |
| 59. Had fantasies or wishes about how things might turn out. | | | | |
| 60. I prayed | | | | |
| 61. I prepared myself for the worst. | | | | |
| 62. I went over in my mind what I would say or do. | | | | |
| 63. I thought about how a person I admire would handle this situation and used that as a model. | | | | |
| 64. I tried to see things from the other person's point of view. | | | | |
| 65. I reminded myself how much worse things could be. | | | | |
| 66. I jogged or exercised. | | | | |

If you tried something entirely different from any of the above, please describe what you did in the space below:

Part four

Below is a list of statements that tell us about your spiritual life, please indicate how much you agree or disagree with the statement by ticking in the appropriate box.

| | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|--|----------------|-------|---------|----------|-------------------|
| 1. I don't find much satisfaction in prayer or meditation. | | | | | |
| 2. I don't know who I am, where I came from, or where I am going. | | | | | |
| 3. My spiritual life makes me feel loved and connected. | | | | | |
| 4. I think that life is a positive experience. | | | | | |
| 5. I feel disconnected from God in my daily situations. | | | | | |
| 6. I feel unsettled about my future. | | | | | |
| 7. My spiritual life offers me personally meaningful relationships. | | | | | |
| 8. I feel very fulfilled and satisfied with life. | | | | | |
| 9. I don't get much personal strength and support from my spiritual practices. | | | | | |
| 10. I feel a sense of well-being about the direction my life is heading in. | | | | | |
| 11. I believe that my spiritual practices help me deal with my problems. | | | | | |
| 12. I don't enjoy much about life. | | | | | |
| 13. I don't have a personally satisfying spiritual relationship with God. | | | | | |
| 14. I feel good about my future. | | | | | |
| 15. My religious practices help me not to feel lonely. | | | | | |
| 16. I think that life is full of conflict and unhappiness. | | | | | |
| 17. I feel most fulfilled when I'm in close spiritual communion. | | | | | |
| 18. Life doesn't have much meaning. | | | | | |
| 19. My spiritual relationship with God contributes to my sense of well-being. | | | | | |
| 20. I believe there is some real purpose for my life. | | | | | |

Appendix C

Ethical Clearance Letter



RESEARCH OFFICE (GOVAN MBEKI CENTRE)
WESTVILLE CAMPUS
TELEPHONE NO.: 031 – 2603587
EMAIL : ximbap@ukzn.ac.za

17 OCTOBER 2006

MS. CG MATHONSI (204000167)
PSYCHOLOGY

Dear Ms. Mathonsi

ETHICAL CLEARANCE APPROVAL NUMBER: HSS/06572A

I wish to confirm that ethical clearance has been granted for the following project

"Stress, coping and spiritual wellbeing of a sample of nurses"

Yours faithfully


.....
MS. PHUMELELE XIMBA
RESEARCH OFFICE

cc. Faculty Officer (Post-Graduate Studies)
cc. Supervisor (Cynthia Patal)

Appendix D

Letter to the KwaZulu-Natal Department of Health

School of Psychology
University of KwaZulu-Natal
King George V Avenue,
Glenwood
Durban

The Manager: Communication
KwaZulu-Natal Department of Health
Private Bag X
Pietermaritzburg
4015

Dear Sir

Re: Request for permission to conduct a study in KwaZulu-Natal public hospitals

I Clerah Mathonsi, a student at the University of KwaZulu-Natal, department of psychology request your permission to conduct a study at King George V Hospital. I am undertaking the study in partial fulfillment of the Master of Arts degree in Clinical Psychology. The study is entitled: **STRESS, COPING AND SPIRITUAL WELLBEING OF A SAMPLE OF NURSES**.

The aim of the study is to investigate the sources and levels of stress in the nursing profession and the nurses coping strategies. The secondary aim is to investigate the relationship between these variables and to investigate whether the spirituality of nurses help in moderating the relationship between stress and coping. I have noticed through the review of literature that there is a dearth of South African research in this area, especially research that deals with spirituality. So far, I have not been able to identify a South African study that addressed spirituality and its role in coping with stress, and this motivated me to undertake this study.

I have attached a copy of my research proposal and the questionnaire that will be used as a data collection instrument. Please note that the study was approved by the ethics committee of the University of KwaZulu-Natal.

I trust that you will allow me to conduct the study using a sample of your nurses. In the event that you have questions about the study please do not hesitate to contact me (Clerah Mathonsi) at this number: (031) 242 5522 or 082 598 7283. Alternatively, you can

contact my research supervisor, Mrs. C. Patel who is a lecturer at the department of psychology, University of KwaZulu-Natal. Her contact number is: (031) 260 7619.

Yours Faithfully,

Clerah Mathonsi (Miss)

Appendix E

Letter to the Various Hospitals

School of Psychology
University of KwaZulu-Natal
King George V Avenue,
Glenwood
Durban

The Hospital Manager

Dear Sir/Madam

Re: Request for permission to conduct a study in your hospital

I Clerah Mathonsi, a student at the University of KwaZulu-Natal, department of psychology request your permission to conduct a study in your hospital. I am undertaking the study in partial fulfillment of the Master of Arts degree in Clinical Psychology. The study is entitled: **STRESS, COPING AND SPIRITUAL WELLBEING OF A SAMPLE OF NURSES.**

The aim of the study is to investigate the sources and levels of stress in the nursing profession and the nurses coping strategies. The secondary aim is to investigate the relationship between these variables and to investigate whether the spirituality of nurses help in moderating the relationship between stress and coping. I have noticed through the review of literature that there is a dearth of South African research in this area, especially research that deals with spirituality. So far, I have not been able to identify a South African study that addressed spirituality and its role in coping with stress, and this motivated me to undertake this study.

I have attached a copy of my research proposal and the questionnaire that will be used as a data collection instrument. I am at this stage ready to collect my data and would like to start doing in October. Please note that the study was approved by the ethics committee of the University of KwaZulu-Natal and the KwaZulu-Natal Department of Health.

I trust that you will allow me to conduct the study using a sample of your nurses. In so doing you will be helping me to meet all the requirements for the above mentioned degree and you will also enable me to meet my obligation of serving as a community service psychologist in the coming year (2007).

In the event that you have questions about the study please do not hesitate to contact me (Clerah Mathonsi) at this number: (031) 242 5522 or 082 598 7283. Alternatively, you

can contact my research supervisor, Mrs. C. Patel who is a lecturer at the department of psychology, University of KwaZulu-Natal. Her contact number is: **(031) 260 7619**.

Yours Faithfully,

Clerah Mathonsi (Miss)



HEALTH
KwaZulu-Natal

CORPORATE COMMUNICATION

Natalia, 330 Langalibalele Street, Pietermaritzburg, 3201
Private Bag X 9051, Pietermaritzburg, 3200
Tel.: 033 395 2276 Fax.: 033 342 0429
Email: leon.mbangwa@kznhealth.gov.za
www.kznhealth.co.za

APPENDIX F

LETTER FROM THE KWAZULU-NATAL DEPARTMENT OF HEALTH

Reference : L007/06

Enquiries : Mr L Mbangwa

Telephone : (033) 395 2276

14 September 2006

Ms Clerah Mathonsi
School of Psychology
University of Natal
King George V Avenue
Glenwood
Durban
4041

Dear Clerah

Be advised that you are hereby given permission to conduct a study at any Health Institution, provided you seek permission and you are granted by the Head of Institution in pursuance of your studies.

Your cooperation with the Hospital Management and adherence to set standards and regulations would be of great assistance to all parties.

Good Luck with your studies.

Yours faithfully,

MR L MBANGWA
GENERAL MANAGER:
CORPORATE COMMUNICATION
DEPARTMENT OF HEALTH: KWAZULU NATAL

APPENDIX G
LETTER FROM KING GEORGE V HOSPITAL



**DEPARTMENT OF HEALTH
PROVINCE OF KWAZULU-NATAL**

KING GEORGE V HOSPITAL

**PO DORMERTON, 4015
75 STANLEY COPLEY DRIVE, SYDENHAM, DURBAN**

| | | |
|----------------------------------|---|----------------------------|
| Enquiries : Dr S Maharaj | Telephone Number : (031) 2087121 Extension : 356 | Fax Number : (031) 2099586 |
| Email : h021299@dohho.kzn.gov.za | Your Reference : | Date : 06 November 2006 |

MISS CLERAH MATHONSI
SCHOOL OF PSYCHOLOGY
UKZN
Durban

Dear Miss C M athonsi

**REQUEST FOR PERMISSION - ACCESS TO STAFF & PATIENT INFORMATION
AT KING GEORGE V HOSPITAL**

1. Your letter dated 06 September 2006 refers.
2. Permission is granted for the above mentioned purpose. Please find attached copy of indemnity form for completion and submission by yourself prior to undertaking the study.
3. Your attention is once again drawn to the maintenance of confidentiality as discussed.
4. Arrangements should be made for you to work with staff in the Nursing Department.

S B Maharaj
**DR S B MAHARAJ
MEDICAL MANAGER**



HEALTH
KwaZulu-Natal

KING EDWARD VIII HOSPITAL
Private Bag X02, CONGELLA 4013
Corner of François & Sydney Road
Tel.: 031-3603853, Fax: 031-2061457
Email: khuzwayo@kzntl.gov.za
www.kznhealth.gov.za

APPENDIX H
LETTER FROM KING EDWARD VIII HOSPITAL

Enq.: Miss. R. Khuzwayo
Ref.: KE 2/7/1/ (24/2006)
Research Programming

1 November 2006

Miss. C. Mathonsi
School of Psychology
University of KwaZulu-Natal
KING GEORGE V AVENUE

Dear Miss. Mathonsi
Fax No. 3660865

Request to conduct research at King Edward VIII Hospital
Protocol : Stress Coping and Spiritual Wellbeing of a Sample of Nurses

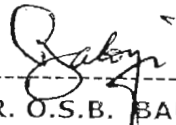
Your request to conduct research at King Edward VIII Hospital has been approved.

Please ensure the following:-

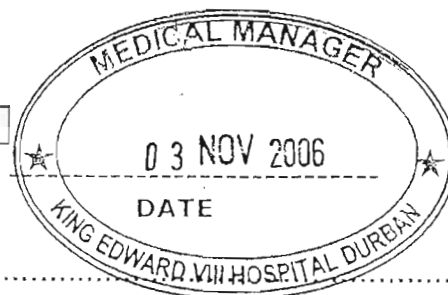
- That King Edward VIII Hospital receives full acknowledgment in the study on all publications and reports and also kindly present a copy of the publication or report on completion.
- Before commencement:
 - * Discuss your research project with our relevant Directorate Managers
 - * Sign an indemnity form at Room 8, CEO's Complex, Admin. Block.

The Management of King Edward VIII Hospital reserves the right to terminate the permission for the study should circumstances so dictate.

Yours faithfully


DR. O.S.B. BALOYI
MEDICAL MANAGER

SUPPORTED / NOT SUPPORTED




MR. M. BHEKISWAYO
CHIEF EXECUTIVE OFFICER

APPROVED / NOT APPROVED

7/11/06
DATE

cc: All Directorate Managers: A&E/Critical Care/General Surgery/Internal
Medicine/O&G/Orthopaedics/Paediatrics/Radiology/Specialty Services/Theatre

uMnyango Wezempilo . Departement van Gesondheid

Fighting Disease, Fighting Poverty, Giving Hope



HEALTH
KwaZulu-Natal

DEPARTMENT OF HEALTH

CEZA DISTRICT HOSPITAL

Private Bag X 200, CEZA, 3866
Tel.: 035 832 0056 Fax: 035 832 0057
Email: bonginkosi.dlamini@kzntl.gov.za

Enquiries: Mr B.B. Dlamini

Date : 12 July 2007

Ext : 235

Attention: Miss Clerah Gladys Mathonsi
University of Kwazulu Natal

Dear Madam

**RE- CONFIRMATION OF PERMISSION TO CONDUCT A STUDY AT CEZA IN
OCTOBER 2006.**

This letter serves to confirm that Miss Clerah Gladys Mathonsi as a student at University of KZN was granted permission to conduct at Ceza Hospital.

Hoping that this information will help you to submit your study for examination.

We therefore wish you Good luck towards your study

Regards and thanks

Mr B.B. Dlamini
HOSPITAL CEO