

The relationship between non-nursing tasks, nursing tasks left undone and job satisfaction among professional nurses in South African hospitals

MC Bekker
20710798

Dissertation submitted in fulfillment of the requirements for the degree *Magister Curationis in Nursing Science* at the Potchefstroom Campus of the North-West University

Supervisor: Dr SK Coetzee
Co-supervisor: Prof HC Klopper
November 2013



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Co-supervisor: Dr. S. Ellis

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ABSTRACT

Background: Research on nursing practice has highlighted a relationship between non-nursing tasks (NNTs), nursing tasks left undone (NTLU), and internationally it was found that these factors have an effect on job satisfaction. Since the last study done on NNTs and NTLU in 1988, much has changed in South Africa's health system. Current South African studies have revealed that decreased numbers of PNs in South Africa experience satisfaction. Therefore, this study explores the relationship between NNTs, NTLU and job satisfaction on both individual PN level and unit level in South Africa, and contributes to the international debate.

Aim: To investigate the relationship between NNTs, NTLU and job satisfaction among professional nurses (PNs) in medical and surgical units in private and public hospitals in South Africa.

Method: A cross-sectional survey design was used including 1166 PNs in 60 medical and surgical units in 55 private hospitals and seven national referral hospitals in South Africa who completed the survey.

Measures: Relationships between NNTs, NTLU, job satisfaction and aspects of job satisfaction.

Results: The three main NNTs performed were filling-in for non-nursing services ($d=0.47$), cleaning patient's rooms and equipment ($d=0.48$) and obtaining supplies and equipment ($d=0.64$). Nationally more than 50% of PNs reported the following

NTLU – comfort/talk with patients (62.2%), educating patients and family (57.9%) and develop or update nursing care plans/pathways (51.6%). PNs in private hospitals are more satisfied with their jobs than PNs in public hospitals. PNs were most dissatisfied with the opportunities for advancement (M = 2.60) and educational opportunities (M=2.64) aspects of job satisfaction. At unit level, NTLU positively correlated with three NNTs, and job satisfaction correlated mostly and negatively with NTLU.

Conclusion: South African PNs perform many NNTs. However, the performance of NNTs does not influence their job satisfaction to the extent the NTLU does. Although PNs in this study indicated that NNTs do not have a significant influence on NTLU, it may reveal a greater issue, in that PNs have grown accustomed to performing NNTs as part of their workload. Clarifying professional nurses' scope of practice and increased use of support services may provide PNs with more time to conduct nursing tasks which should improve job satisfaction. Recommendations for practice, education, policy/orientation programmes and research are made from the findings of this study.

Keywords: non-nursing task, nursing tasks left undone, job satisfaction, professional nurse, South Africa

OPSOMMING

Agtergrond: Navorsing oor die verpleegpraktyk lê klem op die verhouding wat bestaan tussen nie-verplegings take (NVT) en verplegingstake wat ongedaan bly (VTO). Op internasionale vlak was bevind dat hierdie faktore 'n direkte impak op werk satisfaksie het. Baie dinge het in Suid Afrika se gesondheidsstelsel verander sedert die aanvang van die laaste studie oor NVT en VTO in 1988. Huidige studies in Suid-Afrika het bevind dat 'n verlaagde hoeveelheid professionele verpleegkundiges (PVs) satisfaksie in hul werk ondervind. Om hierdie rede ondersoek dié studie die verhouding tussen NVT, VTO en werk satisfaksie onder individuele PNs, asook op eenheid vlak in Suid-Afrika en dra sodoende by tot die internasionale debat.

Doelwit: Om die verhouding tussen NVT, VTO en werk satisfaksie te ondersoek onder PNs in mediese en chirurgiese eenhede in privaat en publieke hospitale in Suid-Afrika.

Metode: 'n Deursnittoersig-vraelysontwerp is gebruik en het 1166 PVs ingesluit wat die vraelys voltooi het. Dit is in 60 mediese en chirurgiese sale in 55 private hospitale en 7 nasionale verwysingshospitale in Suid-Afrika ondersoek.

Metings: Verhouding tussen NVTs, VTO, werk satisfaksie en aspekte van werk satisfaksie.

Resultate: Die drie hoof-NVT wat uitgevoer was, is instaan vir nie-verplegings-dienste ($d = 0.47$), skoonmaak van pasiënt se kamer en toerusting ($d = 0.48$) en verkryging van voorrade en toerusting ($d = 0.64$). Nasionaal het meer as 50 % van PVs die volgende VTO gerapporteer – gerusstelling van pasiënte (62.2%), voorligting aan pasiënte en familie (57.9%) en beplanning en opdatering van verpleegsorgplanne (51.6%). PVs in private hospitale is meer tevrede met hul werk as PVs in publieke hospitale. PVs was meestal ontevrede met die volgende aspekte van werkbevrediging - beroepsbevorderings geleentheid ($M = 2.60$) en opvoedkundige geleentheid ($M = 2.64$). Op eenheidsvlak het VTO positief gekorreleer met drie NVT, terwyl werkbevrediging die meeste en in 'n negatiewe manier gekorreleer het met VTO.

Gevolgtrekkings: Suid-Afrikaanse PVs verrig baie NVT. Die uitvoer van NVT beïnvloed nie hul werkbevrediging tot die mate wat VTO dit beïnvloed nie. Alhoewel PVs in die studie getoon het dat NVT nie 'n noemenswaardige impak op VTO het nie, word daar dalk 'n groter probleem ontbloot, naamlik dat PVs gewoonlik geraak het om NVTs uit te voer as deel van hul werkslading. Deur middel van korrekte uiteensetting van die PV se bestek van praktyk en 'n toenemende gebruik van hulpdienste, kan die PV meer tyd op hande hê om verpleegtake uit te voer en sodoende werk satisfaksie verbeter. Aanbevelings vir die praktyk, opleiding, maatreëls/oriëntasie programme en navorsing is gedoen op grond van die bevindinge van die studie.

Sleutelwoorde: Nie-verplegingstake, verplegingstake wat ongedaan bly, werkbevrediging, professionele verpleegkundige, Suid-Afrika.

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LIST OF ACRONYMS

AONE:	The American Organization of Nurse Executives & ARAMARK Healthcare
CEOs:	Chief Executive Officers
DHS:	District Health System
DOH:	Department of Health
ICN:	International Council of Nurses
NNTs:	Non-nursing tasks
NTLU:	Nursing tasks left undone
NWU:	North-West University
PHC:	Primary health care
PN:	Professional nurse
RN4CAST:	Registered Nurse Forecasting in Europe
SA:	South Africa
SANC:	South African Nursing Council
USA:	United States of America
WHO:	World Health Organization

CHAPTER 1 – OVERVIEW OF THE STUDY

1.1 INTRODUCTION

Research on nursing practice highlights a relationship between non-nursing tasks (NNTs) and nursing tasks left undone (NTLU) by professional nurses (PNs) (Aiken, Clark, Sloane, Sochalski, Busse, Clarke, Giovannetti, Hunt, Rafferty & Shamian, 2001:49; Al-Kandari & Thomas, 2008:588-589; Chen, Shiu, Simoni, Fredriksen-Goldsen, Zhang & Zhao, 2009:264; Furaker, 2009:272-274; Fitzgerald, Pearson, Walsh, Long & Heinrich, 2003:331; Van Tonder, 1988:8). International studies have also highlighted the significant impact which the last mentioned factors have on job satisfaction (American Organization of Nurse Executives & ARAMARK Healthcare [AONE], 2008; Kalisch, 2011:126; Jordan, 1991:85; Teo, Yeung and Chang, 2012). The last study done on NNTs and NTLU amongst PNs in South Africa dates back to 1988 (Van Tonder, 1988). Many things have changed in South Africa since then – democracy, the introduction to the primary health care (PHC) approach and the district health system (Van der Merwe, 2010:6). So also, globally, health systems are vastly changing due to emerging challenges such as transitions in epidemiology and demography, innovation in technology, growing population demands and professional differentiation (Frenk & Chen, 2010:7). Therefore the aim of this research is to determine the relationship between NNTs, NTLU and job satisfaction among PNs in medical and surgical units in private and public hospitals in South Africa.

This research project forms part of an international collaborative research programme called Registered Nurse Forecasting in Europe (RN4CAST). This

programme aims to expand typical forecasting models with reference to the features of work environments, nurse staffing, qualifications of the nurse workforce and the impact of these on nurse retention, nurse outcomes and patient outcomes. RN4CAST is a consortium of fifteen partners in eleven European countries: Belgium, Finland, Germany, Greece, Ireland, Poland, Spain, Sweden, Switzerland, the Netherlands, the United Kingdom (UK); and three partners outside Europe: Botswana, China and South Africa (Bruyneel, Van den Heede, Diya, Aiken & Sermeus, 2009:203).

1.2 BACKGROUND

All tasks not related to direct patient care or requiring professional nursing skills during one nursing shift are referred to as NNTs (Al-Kandari & Thomas, 2008:583). When examining the term “non-nursing tasks”, they can roughly be divided into the following categories: Deliver and retrieve food trays; housekeeping duties; transport patients; ordering supplies; obtaining equipment; discharge referral arrangements; routine phlebotomies; substituting for off-hours non-nursing services; clerical duties (Aiken *et al.*, 2001:49; Desjardins, Cardinal, Belzile & McCusker, 2008:29; Hendrich, Chow, Skierczynski & Lu, 2008:27; Jordan, 1991:12; Sermeus, Aiken, Van den Heede, Rafferty, Griffiths, Moreno-Casbas, Busse, Lindqvist, Scott, Bruyneel, Brzostek, Kinnunen, Schubert, Schoonhoven, Zikos & RN4CAST Consortium, 2011; Van Tonder, 1988:7).

Gran-Moravec and Hughes (2004:130;132) did a study in a community medical centre in the United States of America (USA) and found that of the tasks PNs perform, only 39% are tasks that can only be performed by PNs, 12% of their tasks

can be performed by enrolled nurses independently, and 49% of these tasks can be shared with enrolled nurses. Identifying role overlapping and making roles clear between nurses and enrolled nurses will minimize the unnecessary performance of NNTs (Fitzgerald *et al.*, 2003:332; Gran-Moravec & Hughes, 2004:132).

A 1988 South African study identified and divided NNTs into categories (Van Tonder, 1988:7), and although it was done some time ago, it included the majority of NNTs recently studied in research. These NNT categories were clerical tasks, catering tasks, housekeeping tasks, porter tasks and diverse tasks. Whereas *clerical tasks* (30 in total) ranged from answering telephones to microfilming of patients records; *catering tasks* (20 in total) ranged from completing the diet book to washing baby bottles; *housekeeping tasks* (37 in total) ranged from handing out wash basins to washing the examining and treatment trolleys; *porter tasks* (seven in total) ranged from transferring patients to other beds to taking the reports to the matron, and *diverse tasks* (four in total), which ranged from controlling visitors to substituting for other members of the hospital staff e.g. pharmacists, porters and housekeepers.

In the study done by Van Tonder (1988), two actions were performed to explore NNTs performed by PNs: Interviews and observation time frames accompanied by task control lists). According to the interviews the average time that was spent on NNTs was 12% diverse tasks, 13.3% porter tasks, 13.5% housekeeping tasks, 16.8 % catering tasks and 45.2% clerical tasks (Van Tonder, 1988:8). From these percentages it was evident that PNs felt that the majority of their time was spent on clerical tasks. But when looking at the total time that was spent on NNTs (measured weekly using observation time frames accompanied by task control lists and

including average potential nursing time) a more accurate picture emerged with PNs spending 53.7% on average potential nursing time, 34.2% on clerical tasks, 5.5% on housekeeping tasks, 3.3% on catering tasks, 1.8% on porter tasks, and 1.5% on diverse tasks (Van Tonder, 1988:8). Even though the clerical tasks showed a lower percentage than what was verbalised by PNs, it still ranked far higher than the rest of the NNTs and NNTs in total leaving just over half of the PNs time to perform nursing tasks for which the PN was trained. Although the percentages from the interviews and the task control lists didn't show exactly the same percentages, it is interesting to note that the range of order was more or less the same. Thus the task control lists supported the perception of PNs regarding NNTs, and could provide evidence that only approximately 53.7% of PNs' time was used for real nursing. The outcome of Van Tonder's study proved that there were a lot of NNTs performed by PNs. This was due to a lack of "support services" or where "support services" were available they were not properly used or the "support services" didn't do their work effectively (Van Tonder, 1988:10-11).

South African PNs are hardworking and can fulfil the role of almost any of the multidisciplinary team members (Van der Merwe, 2010:18-19). This shifting of workloads, staff shortages, unclear roles or scopes of practice, and insufficient or improper use of support services all contribute to the performance of increased NNTs (Van der Merwe, 2010:2). This increase of NNTs causes PNs to work harder, leaving limited time for relevant nursing tasks or some nursing tasks to be left undone (Van der Merwe, 2010:2).

Nursing tasks left undone refers to any nursing tasks required for patient care, but which the PN was unable to fully perform during her shift (Al-Kandari & Thomas, 2009:3432). According to the questionnaire compiled by Sermeus *et al.* (2011) and supported by AONE (2008:1), nursing tasks most commonly left undone are the surveillance of patients, performing skin care, performing oral hygiene, managing pain, talking to and comforting patients, educating patients and families, performing procedures and treatments, on time medication administration, discharge preparation for patients and families, documenting nursing care adequately, nursing care plan update and development, care in planning and changing patient positions frequently.

In a qualitative study done in China, PNs complained that they didn't have any time to carry out the work they were trained for, such as health, education and lending psychosocial support to patients. The main reason for this was a high administrative workload. Frustration regarding the performance of NNTs was articulated through a comment from one of the participants "We are not the nurses we trained to be..." (Chen *et al.*, 2009:264)

Furthermore Fitzgerald *et al.* (2003:331) did a study in which only 33% of nurses' time was spent on direct patient care, and only a small proportion of this 33% was spent on health education or health talks with patients. This was the result after staff reported on certain amounts of their time spent on activities such as documentation, indirect care and other tasks (Fitzgerald *et al.*, 2003:331; 326). Other research confirms this. Internationally Bruyneel, Li, Aiken, Lesaffre, Van den Heede and Sermeus (2012:6) added that a greater percentage (62%) of nurses' working days

are spent on NNTs and according to Furaker (2009:276a) a lesser percentage of time (38%) is spent on performing nursing tasks. According to the last study done in South Africa by Van Tonder (1988:7), it was found that 46.3% of nurses' time on average in a nine hour shift, was spent on performing non-nursing tasks, leaving only 53.7% of time for actual nursing tasks.

When considering tasks that were left undone due to NNTs, Aiken *et al.* (2001:49) reported on a study that was done in five different countries. One- to two-thirds of nurses in the USA, Canada and Germany felt that they left care activities undone. These activities required their professional skill, but they had to spend time on unnecessary tasks, including NNTs, that did not require their professional skills. The nursing tasks that were mostly reported left undone by PNs were "comforting/talking to patients" and "developing or updating care plans" (Aiken *et al.*, 2001:49).

From the discussion above it is clear that the performance of NNTs takes up precious time in PNs' days and are a big cause of some nursing tasks being left undone (Aiken *et al.*, 2001:49; Al-Kandari & Thomas, 2008:588-589; AONE, 2008:1; Chen *et al.*, 2009:264; Furaker, 2009:272-274; Fitzgerald *et al.*, 2003:331; Van Tonder, 1988:8). A White Paper issued by AONE (2008) identified that NNTs, among others, form part of the actions and behaviours that have a negative impact on PNs' job satisfaction. Furthermore, Kalisch (2011:126) found that nursing staff reported greater job satisfaction where there were less nursing tasks left undone.

According to Mini Oxford School Thesaurus (MOST,1991:398, 612) the term "job satisfaction" refers to a sense of achievement, finding joy, contentment, fulfilment,

pleasure and pride in your calling, career, employment, occupation, position, work or profession.

Jordan (1991:85) did a study on the time spent by certified nephrology nurses on performing NNTs and their job satisfaction. The PNs in this study spent 55% of their workday on performing NNTs and other PNs in haemodialysis and peritoneal dialysis units spent 55% and 42% of their day respectively on performing NNTs. The average job satisfaction of nephrology PNs was 66%, indicating that PNs were moderately satisfied with their jobs (Jordan, 1991:82; 88; 89). The conclusions of the study indicated that the PNs who spent more time performing NNTs were less satisfied with their jobs (Jordan, 1991:91).

The results of NNTs, such as administrative stressors, have a negative impact on psychological well-being, job satisfaction and PNs' commitment to their organisation (Teo *et al.*, 2012:1450). Recent studies show that when PNs are in good psychological health, they have a greater level of job satisfaction (Gabriel, Diefendorff & Erikson, 2011:1100; Teo, *et al.*, 2012:1448-1449). Also, when there is a good social working environment with a strong PN-physician relationship, the negative effects from task incompleteness are buffered, making PNs less dissatisfied with their job (Gabriel *et al.*, 2011:1100; Teo *et al.*, 2012:1449). The AONE (2008:2) has identified ways to impact nursing job satisfaction by establishing collaborative work with support services. When doing so, PNs will be relieved of tasks that can be done by support services, and focus on their nursing tasks. Thus, maintaining good psychological health, establishing good social working environments and

establishing good functioning support services can increase or maintain job satisfaction among PNs.

High levels of job satisfaction indicate higher levels of organisational commitment. Thus, the more satisfied PNs are with their jobs, the more likely they will be to put extra effort into their work in order for the hospital to be successful (Teo *et al.*, 2012:1448). By focusing on higher levels of job satisfaction in institutions, more staff will be retained.

A recent publication of RN4CAST data in South Africa shows that almost a third of South African nurses were dissatisfied with their jobs and more than half said they wanted to leave their jobs within the next year (Coetzee, Klopper, Ellis & Aiken, 2013:169). In view of drastic numbers of PNs' job dissatisfaction in South Africa and comparing the significant relationships internationally identified between NNTs and NTLU, it is crucial to determine whether these two actions also have such a great impact on nurses' job satisfaction in South Africa.

1.3 STATEMENT OF THE PROBLEM

In nursing practice, research highlights a relationship between NNTs and NTLU among PNs. Furthermore, internationally it has become evident that both have an effect on the level of job satisfaction amongst PNs. Although a study was done in South Africa regarding the relationship between NNTs and NTLU by PNs, this research was conducted in 1988 and many changes have taken place in the South African health system since then. With NNTs and NTLU already identified as a problem in 1988, and current studies being published on the decreased level of job satisfaction experienced among PNs in South Africa, this study will explore the

relationship between all three factors: NNTs, NTLU and job satisfaction in South Africa, and further contribute to the international debate.

1.4 RESEARCH QUESTIONS

The following research questions arise from the statement of the problem:

- How frequently are non-nursing tasks performed, how many nursing tasks are left undone and what are the levels of job satisfaction among PNs in medical and surgical units in private and public hospitals in South Africa?
- What relationship exists between non-nursing tasks and nursing tasks left undone amongst PNs on their most recent shifts in medical and surgical units in private and public hospitals in South Africa?
- What relationship exists between non-nursing tasks and the level of job satisfaction amongst PNs in medical and surgical units in private and public hospitals in South Africa?
- What relationship exists between nursing tasks left undone and the level of job satisfaction amongst PNs in medical and surgical units in private and public hospitals in South Africa?

1.5 AIM AND OBJECTIVES

The aim of this study is to investigate the relationship between non-nursing tasks, nursing tasks left undone and job satisfaction among PNs in medical and surgical units in private and public hospitals in South Africa. In order to achieve this aim a number of objectives were identified:

- To establish the frequency that non-nursing tasks are performed, the number of nursing tasks left undone and the level of job satisfaction among PNs in medical and surgical units in private and public hospitals in South Africa.
- To explore the relationship between non-nursing tasks and nursing tasks left undone among PNs on their most recent shifts in medical and surgical units in private and public hospitals in South Africa.
- To explore the relationship between non-nursing tasks and the level of job satisfaction among PNs in medical and surgical units in private and public hospitals in South Africa.
- To explore the relationship between nursing tasks left undone and the level of job satisfaction among PNs in medical and surgical units in private and public hospitals in South Africa.

1.6 HYPOTHESES

(Ho1): There is no significant relationship between non-nursing tasks performed, the number of nursing tasks left undone and job satisfaction among PNs in medical and surgical units in South Africa.

(Ha1): There is a significant relationship between non-nursing tasks performed, the number of nursing tasks left undone and job satisfaction of PNs on their most recent shift in medical and surgical units in private and public hospitals in South Africa.

(Ha2): There is a significant relationship between non-nursing tasks performed and nursing tasks left undone among PNs in medical and surgical units in private and public hospitals in South Africa.

(Ha3): There is a significant relationship between non-nursing tasks and the level of job satisfaction among PNs in medical and surgical units in private and public hospitals in South Africa.

(Ha4): There is a significant relationship between nursing tasks left undone and the level of job satisfaction among PNs in medical and surgical units in private and public hospitals in South Africa.

1.7 RESEARCHER'S ASSUMPTIONS

According to Burns and Grove (2009:688), an assumption is a statement that has not been scientifically tested but is considered true. Therefore the researcher will state those assumptions in the following section as a foundation from which the researcher views and interpret this study.

1.7.1 Meta-theoretical assumptions

1.7.1.1 The world (or society)

The researcher views the world as a place created by and for God. It is a place where man temporarily lives and God has ordained man to subdue and have dominion over the earth (Bible, 1982). Therefore the researcher believes that by caring for what and who God created, one honours Him. The world in this study represents also all medical and surgical units in public and private hospitals in South Africa, as explained in population and sampling (1.9.1).

When there are many NNTs that have to be completed in medical and surgical units, it leaves less time for performing nursing tasks. As a result, PNs cannot care for patients as required, due to NNTs taking up time for real nursing tasks.

1.7.1.2 Man (individual/ human being/ professional nurse)

Man is seen as created from the dust of the earth, and has life because God breathed it into man as mentioned in Genesis 2:7 (Bible, 1982). The day when God's breath is exhaled from man's body, will be the end of that particular man's physical existence on earth (death). Man reflects the image of God according to His likeness, Genesis 1:26-27 (Bible, 1982). Man consists of body, soul and spirit. The researcher believes man is immortal in spirit, thus will inherit everlasting life. Man in this study refers to the PN reflecting God's image when doing what she was created to do (nursing) through body, soul and spirit. Because God is in us, the researcher believes that when touching others' lives, through nursing tasks, it is as if God is touching them Himself. This is done when the PN performs nursing tasks with authority and by being able to control or guide certain nursing actions.

In conclusion, it can be said that when the PN is performing NNTs and leaving nursing tasks undone, she is not fulfilling her proper role as PN due to not being able to exercise authority and control over what she was trained for.

1.7.1.3 Health

The author agrees with the World Health Organisation's (WHO) view of health. It explains that a state of health refers to a state of complete physical, mental and social welfare. It occurs not only when disease or infirmity is absent (WHO, 1948). The researcher believes God is the ultimate Healer/Completer and knows everyone by heart, as He has formed our innermost parts. Furthermore the researcher believes that God also knows why people are "sick" or not functioning optimally and

therefore views nursing as a guided action by the Holy Spirit by being God's hands and feet. In conclusion, when referring to the context of this study, when a PN is socially or mentally downcast due to the performance of NNTs or NTLU, and not being entirely satisfied with her job, she might be considered to be not in an optimal state of health.

1.7.1.4 Nursing

According to the International council of nurses (ICN, 2010), nursing is to care for individuals in an autonomous and collaborative manner whether sick or well. It is to promote health, prevent illness, to care for the ill, the disabled and the dying. Nursing includes being an advocate, to promote safe environments, to do research, to help with health policy shaping and management and lastly to educate (ICN, 2010). The researcher agrees with this definition and also with the greatest command in the Bible which is to love God and also to love your neighbour as yourself as it is said in Leviticus 19:18 (Bible, 1982). By saying this, the researcher believes that when helping others, one should help or nurse others in such a manner as if it were oneself being nursed.

In conclusion, when the PN is performing NNTs or performing nursing that can be done by lower categories of nurses, she is not fulfilling her role as PN. This may result in her being unable to perform nursing toward her neighbour with nursing tasks left undone.

1.7.2 Theoretical assumptions

1.7.2.1 Non-nursing tasks (NNTs)

According to Al-Kandari and Thomas (2008:583) NNTs refer to any tasks (deliver and retrieve food trays; housekeeping duties; transport patients; ordering supplies; obtaining equipment; discharge referral arrangements; routine phlebotomies; substituting for off-hours non-nursing services; clerical duties) not related to direct patient care or requiring professional nursing skills during one nursing shift. Thus it is also true that NNTs include tasks being performed by the PN that are below her scope of practice (Bruyneel *et al.*, 2012:207).

1.7.2.2 Nursing tasks left undone (NTLU)

NTLU refers to any nursing tasks (the surveillance of patients, performing skin care, performing oral hygiene, managing pain, talking to and comforting patients, educating patients and families, performing procedures and treatments, on timeous medication administration, discharge preparation for patients and families, documenting nursing care adequately, nursing care plan update and development, care planning and changing patient positions frequently) required for patient care, but were unable to be fully performed by a PN during her shift (Al-Kandari & Thomas, 2008:583 and Al-Kandari & Thomas, 2009:3432).

1.7.2.3 Job satisfaction

According to MOST (1991:398, 612) the term “job satisfaction” refers among others to a sense of achievement, finding joy, contentment, fulfilment, pleasure and pride in for instance your calling, career, employment, occupation, position, work or profession. Herzberg (1968) refers to job satisfaction as being motivated by factors

namely growth, work itself, responsibility, achievement, advancement and recognition.

1.7.2.4 Professional nurse (PN)

Any nurse who is registered with the South African Nursing Council (SANC) under Section 31 of the Nursing Act of 2005 and who has completed a four-year degree or diploma in nursing. A PN is also qualified and competent to practice comprehensive nursing independently in a manner and at a level prescribed to him/her and who is capable of assuming the responsibility and accountability of nursing (SANC, 2005).

1.7.2.5 Herzberg`s motivational hygiene theory

In this study, Herzberg`s motivational-hygiene theory (Herzberg, 1968), will be used to explain possible relational links between NNTs, NTLU and job satisfaction. According to Burns and Grove (2009:725) a theory refers to viewing a phenomenon through a set of defined concepts, relational statements and reality statements which describe, explain, predict or control phenomena.

This theory views two phenomena (job satisfaction and job dissatisfaction) through two abstract words (motivational and hygiene respectively) as two defined concepts in order to describe, explain, predict or control the phenomena (NNTs, NTLU and job satisfaction).

Table 1.1: Herzberg`s Motivational-Hygiene Theory (Herzberg, 1968:72-74; 77; 95; 193-198)

Abstract words	MOTIVATIONAL (Motivators)	HYGIENE (Maintenance)
Phenomena and meaning	Job satisfaction (satisfiers)	Job dissatisfaction (preventative and environment)
Feelings represented	<p style="text-align: center;"><u>High Feelings (6)</u></p> <ol style="list-style-type: none"> 1. Achievement 2. Recognition 3. Work itself 4. Responsibility 5. Advancement 6. Possibility of growth 	<p style="text-align: center;"><u>Low Feelings (10)</u></p> <ol style="list-style-type: none"> 1. Supervision 2. Company administration and policy 3. Working conditions 4. Status 5. Job security 6. Salary 7. Personal life 8-10. Interpersonal relations with superiors, peers and subordinates

<p>Definitions</p>	<p>1. Achievement</p> <ul style="list-style-type: none"> – Personal satisfaction in job completion, problem solving, seeing evidence of one`s work. <p>2. Recognition</p> <ul style="list-style-type: none"> – Recognition given by others for work well done. <p>3. Work itself</p> <ul style="list-style-type: none"> – Job content and positive or negative effect on employee; whether the job is interesting or boring, routine or varied, creative or uninspired, overly difficult or overly easy, challenging or trouble-free. <p>4. Responsibility</p> <ul style="list-style-type: none"> – Authority and responsibility-related factors. <p>When a person derives satisfaction from being responsible for their own job, the jobs of others or when given new responsibilities.</p>	<p>1. Supervision</p> <ul style="list-style-type: none"> – Supervisor`s competency or ability to perform job, to be fair or unfair, willingness or unwillingness to delegate tasks, to teach and have the job knowledge. <p>2. Company administration and policy</p> <ul style="list-style-type: none"> – Management and organisation adequacy or inadequacy including poor communication, lack of delegated authority, rules, procedures and policies. -Company policies` (primarily related to personnel) benefits or destructiveness. <p>3. Working conditions</p> <ul style="list-style-type: none"> – Physical environment of job including ventilation, tools, light, space. <p>4. Status</p> <ul style="list-style-type: none"> – Indications including: private office, important title, secretary, company car.
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	<p>Gaps between responsibility and authority are divided into “company administration and policies”.</p> <p>5. Advancement</p> <ul style="list-style-type: none"> – Upward status or position change within a company. Does not include situations when responsibility increased, but where there was no change in status. <p>6. Possibility of growth</p> <ul style="list-style-type: none"> – Advancement within the organisation, profession or personal growth. Learning new skills, obtaining a new professional outlook. 	<p>5. Job security</p> <ul style="list-style-type: none"> -Outwards signs of job security including company stability or instability. Does not include feelings of security. <p>6. Salary</p> <ul style="list-style-type: none"> -All forms of compensation while focussing on salary and wages increases and also unfulfilled hope of increases. <p>7. Personal life</p> <p>When company or job has an effect on personal life interfering with persons feelings related to their job or family needs for salary.</p> <p>8-10. Interpersonal relations with superiors, peers and subordinates</p> <ul style="list-style-type: none"> -Social and job related interactions within relationships between superiors, subordinates and peers.
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This theory emphasises that job satisfaction is strongly related to the motivation to work. The theory consists of two aspects: the motivational factors and the hygiene factors. The motivational factors refer to factors that deal with the content of a certain job and these factors tend to lead to job satisfaction and are described by the following words: growth, work, responsibility, achievement, advancement and recognition. The hygiene factors refer to the context of a job and tend to lead to job dissatisfaction, and are described by the following words: administration and policies of a company, supervision, interpersonal relations, status, working conditions, security and salary (Herzberg, 1968:72-74).

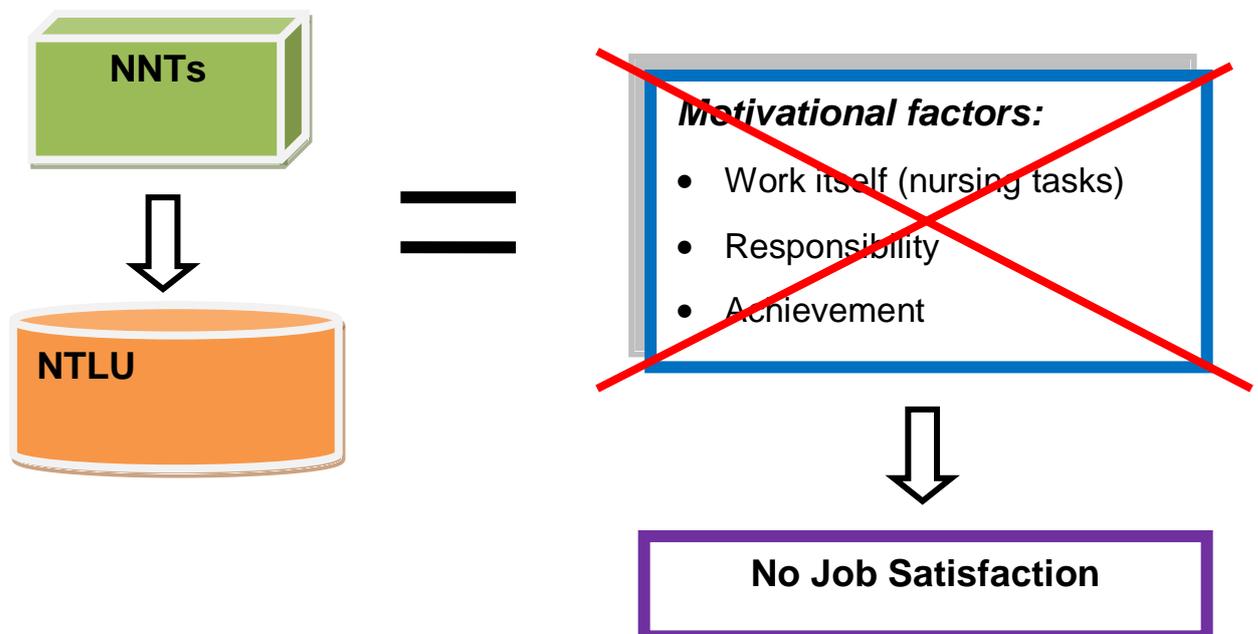


Figure 1.1: Illustration of NNTs and NTLU influencing motivational factors

When taking NNTs and NTLU into consideration, it can be asserted that some motivational factors, such as the work itself (the performance of NNTs instead of performing nursing tasks or leaving nursing tasks undone), sense of responsibility (not having control over the NNTs that interrupt the PNs goal to complete nursing tasks) and achievement (not being able to complete nursing tasks) are motivational

factors not fully experienced by PNs. Thus, a lack of fulfilment of certain motivational factors can lead to an area of no job satisfaction as illustrated in Figure 1.1.

1.7.3 Methodological assumptions

Methodological assumptions refer to methodological statements which are considered true, although they have not been scientifically tested (Burns & Grove, 2009:688).

Botes Model

The Botes model (Botes, 1992) which was specifically designed for research in nursing, was applied to this study. This model consists of three orders of nursing activities: firstly – nursing practice, secondly – theory of nursing and thirdly – the paradigmatic perception. Although these orders are individually described, they are interrelated within the research process.

The first order explains nursing practice as an empirical reality where nursing actions take place. This is the order where an investigation of the problem takes place in order to understand and to find a solution to the problem(s) (Botes, 1992:39). In the context of this study, research has shown that in some instances more than half of the PN's time is spent on NNTs, leaving nursing tasks undone. The result is a negative impact on their job satisfaction.

The second order represents activities present in nursing science and includes research and the development of theories. Problems are explored, described and/or explained as they occur in the nursing practice in order to find solutions (Botes,

1991:39-40). For the purpose of this study, the relationship between NNTs, NTLU and job satisfaction will be described and explained in accordance with data collected through surveys. The strategy is also contextual (including medical and surgical units in private and public hospitals in South Africa) due to the fact that the last study done in South Africa was in 1988 and many things have changed in South Africa since then.

The third order represents a paradigmatic perception of nursing and is seen as a meta-theoretical activity. This involves concepts, assumptions, viewpoints and methods (discussed in first and second orders) to be analysed, organised and evaluated (Botes, 1991:36; 38; 40) through the researcher's view of the world, man (individual/ PN), health and nursing (see 1.7.1). Below is an illustration (Figure 1.2) of the Botes Model for research in nursing:

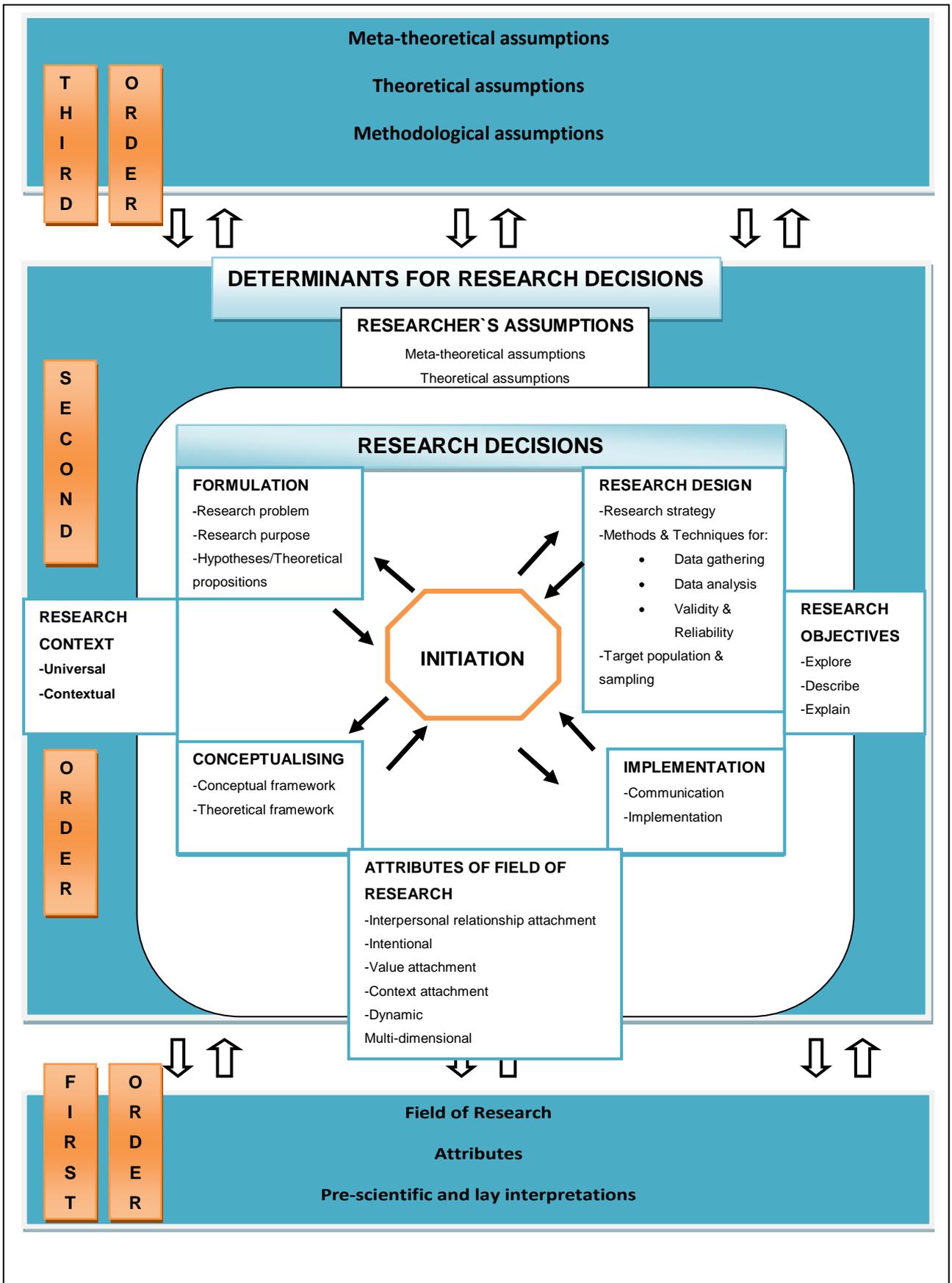


Figure 1.2: A model for nursing research (Botes, 1992:38)

1.8 RESEARCH DESIGN

The research approach of this study is quantitative with a cross-sectional survey design and descriptive, explanatory and contextual research strategies.

A quantitative approach was chosen because it focuses on a relatively small number of concepts (non-nursing tasks, tasks left undone and job satisfaction), formal instruments are used for collecting information (pre-collected data from questionnaires). Furthermore, statistical procedures were used for analyses of numeric information (SPSS) (Brink, Van der Walt & Van Rensburg, 2006:10).

The reason for using a cross-sectional design was that data involving various PNs was collected at the same time (Brink *et al.*, 2006:105), the PNs being in various stages of development (for instance age and job experience), and exhibiting certain trends, patterns and changes simultaneously over time (Burns & Grove, 2009:241; 695). Included with the cross-sectional design is a survey design, because it is non-experimental. Therefore, there was no intervention or treatment present and the different variables (NNTs, NTLU and job satisfaction) could be described while also being able to examine the relationships which exist between NNTs and NTLU, and NNTs and job satisfaction and between NTLU by the PN and their level of job satisfaction (Burns & Grove, 2009:696). Therefore, hypotheses were formulated in order to identify the variables and understand them more clearly and also to examine the relationships among them (see Section 1.6) (Burns & Grove, 2009:12; 246; 703).

The study has a descriptive research strategy because phenomena of interest were identified (NNTs, NTLU and job satisfaction) and described. In addition conceptual

definitions (providing the variables with connotative meaning) and operational definitions (how the variables will be measured) were developed and described in the study situation. Characteristics of PNs in their real life situations, the frequency that NNTs are performed, the number of NTLU, the level of job satisfaction are portrayed in order to discover new meaning and describe the current relationship between variables (Burns & Grove, 2009:693,696,712).

The explanatory research strategy was also used in order to clarify relationships among the various phenomena (NNTs, NTLU and job satisfaction) and identify why certain events occur (Burns & Grove, 2009:700). It provided certain types of evidence which is essential for practice: determination of the assessment of subjective and objective data (whether PNs perform NNTs or have NTLU or whether they are dissatisfied or satisfied), linking of assessment data to determine what the diagnosis is, linking of risk factors causing illness (why NNTs need to be performed, why are NTLU and why are PNs satisfied or dissatisfied) and determining relationships between the phenomena (Burns & Grove, 2009:13).

The contextual research strategy was implemented in the context of medical and surgical units in private and public hospitals in South Africa. Both private and public hospitals were included in order to obtain a clear and correct understanding of the incidence and the relationship between NNTs, NTLU and job satisfaction in SA. A detailed discussion of the population follows in 1.9.1.

1.9 RESEARCH METHOD

In the following section, the setting and sample, instrument, data collection and data analysis plan will be discussed as a background to where, when and how this study took place.

1.9.1 Population and sampling

The population included all PNs who worked in medical and surgical units in public and private hospitals in South Africa. The sample included 1166 PNs from 62 hospitals in six provinces of South Africa. Sampling was conducted as follows: Six provinces were purposively selected, namely Gauteng, North-West, Free State, Eastern Cape, Western Cape and KwaZulu-Natal. These provinces were selected as most hospitals in the private sector and all national referral hospitals in the public sector are allocated in these provinces. Three of the largest groups of private hospitals in South Africa were invited to participate in the study, of which only two groups gave permission to participate. The public health sector consists of a district, provincial and a national level. In this study only national level hospitals were included because here all the super specialist services are performed. In the private sector there are no levels and all hospitals provide the services of a national level hospital (Van Rensburg & Pelsler, 2004).

The sample of private hospitals included in the study were n=55 (N=83) private hospitals (only those located in urban areas having a bed capacity of 100 beds or more). The sample of public hospitals included in the study were n=7 (N=8). Although there are eight national referral hospitals in the public sector, two were excluded due to prolonged ethical clearance which lasted more than 18 months.

However, a provincial hospital in the North-West province was included due to a lack of national referral hospitals in this province and because the researchers wanted to have both private and public hospitals represented in the sample of the six provinces. Within all the identified private and public hospitals, surveys were distributed in the medical, surgical and critical care units (for the purpose of this study, only medical and surgical units were included). In total, 5004 questionnaires were distributed in the selected hospitals and 2122 were completed by nurses which provided a response rate of 42.4%. From the total of 2122 questionnaires completed, 1166 (N=1166) were from the medical and surgical units. In the private sector 1376 out of 3604 questionnaires were completed with a response rate of 38.2% and in the public sector 746 out of 1400 surveys were completed with a response rate of 53.3%. A higher percentage response rate in the public sector might be due to the fact that the research team distributed the questionnaires themselves in the public sector (Coetzee *et al.*, 2013:165).

1.9.2 Measures

The RN4CAST (Nurse Forecasting in Europe) survey, was used to collect data for this study. The survey contains 118 questions and is categorised into four sections: Section A (about your job), Section B (quality and safety), Section C (about your most recent shift at work in this hospital) and Section D (about you) (Sermeus *et al.*, 2011). These sections enquire about: nursing practice environment, burnout, job satisfaction, quality of care and patient safety as perceived by nurses, nurse staffing levels (number and education), information about the most recent shift and demographics (Sermeus *et al.*, 2011:4).

Sections in the survey that are applicable to this study include job satisfaction and aspects of job satisfaction (from Section A), NNTs and NTLU (from Section C) and demographics (from Section D). The job satisfaction section (see Annexure I) consists of a single question “How satisfied are you with your current job in this hospital?” and answers range from 1 (very dissatisfied) to 4 (very satisfied). The PNs were also asked about their satisfaction with nine aspects of their jobs, namely work schedule flexibility, opportunities for advancement, independence at work, professional status, wages, educational opportunities, annual leave, sick leave and study leave that must be rated on a scale from 1 (very dissatisfied) to 4 (very satisfied) (Sermeus *et al.*, 2011).

In Section C NNTs (see Annexure I) are determined by the question “On your most recent shift, how often did you perform the following tasks?” and it consists of nine NNTs that must be rated on a three-point Likert scale ranging from zero (never) to 2 (often). These NNTs are listed as: “Delivering and retrieving food trays”, “performing non-nursing care”, “arranging discharge referrals and transportation (including long-term care)”, “routine phlebotomy/blood drawing for tests”, “transporting of patients within hospital”, “cleaning patients’ rooms and equipment”, “filling in for non-nursing services not available on off-hours” and “answering phones, clerical duties”.

NTLU (see Annexure I) are determined by the question “On your most recent shift, which of the following activities were necessary but left undone because you lacked the time to complete them?” and it consists of a list of thirteen nursing tasks which are commonly left undone with “Yes or No” tick boxes. These tasks include: “Adequate patient surveillance”, “Skin care”, “Oral hygiene”, “Pain management”,

“Comfort/talk with patients”, “Educating patients and family”, “Treatments and procedures”, “Administer medications on time”, “Prepare patients and families for discharge”, “Adequately document nursing care”, “Develop or update nursing care plans/care pathways”, “Planning care” and “Frequent changing of patient position”.

In Section D (see Annexure I) four questions were included for demographic data purposes. “What is your gender?” was answered by ticking a “Female” or “Male” box. “What is your age?” was answered by physically writing out the age in two boxes provided. “Do you have a baccalaureate degree in nursing?” was answered by ticking the “Yes” or “No” box and “Are you working in this hospital full time?” was answered by ticking the “Yes” or “No” box.

1.9.3 Data collection

Appointments were made by the RN4CAST project manager with the Chief Executive Officers (CEOs) and nursing managers of the selected public and private hospitals and the RN4CAST programme and procedures were explained. The strategies used to collect data in the private hospitals differed from the ones used in the public hospitals due to lack of available human resources in public hospitals. In the private sector the management of the hospital allocated an employee (nurse) who managed the data collection under the project manager’s supervision. The fieldworker (nurse employee) was orientated and trained by the project manager about the RN4CAST programme and how to distribute and collect the surveys. The surveys were delivered to appointed wards and were collected by the fieldworker within one week.

In the public hospitals the RN4CAST project manager met with the CEO and nursing managers of each hospital to discuss a data collection plan that would best suit the hospital and selected wards. On the agreed upon date and time, the RN4CAST project team (including the project manager and fieldworkers from the NWU, of which the researcher was one) delivered the surveys to the PNs in the selected wards, and collected the completed surveys more or less six hours later. Each survey included an information leaflet which explained the purpose of the study, the voluntary nature of participation, the benefit of the study to the hospital and country, and measures in place to ensure anonymity and confidentiality of the individual nurse, wards and hospitals. No incentives were offered for participation, only an RN4CAST badge was awarded to each participant in order to create awareness about the RN4CAST programme in the hospital (Coetzee *et al.*, 2013:167).

The researcher participated as a fieldworker in the data collection process, only in the public hospitals in the following provinces: North-West Province and Gauteng. Upon arrival at each hospital, the researcher accompanied the project team to the manager's office to confirm their presence and the starting of data collection. The researcher together with the other fieldworkers then visited the selected wards with surveys, explained the research project to either the unit manager of the ward (to inform the other staff) or directly to all the staff on duty and made them aware of the contents of the information leaflet. A few hours later, the researcher and the fieldworkers collected the surveys and gave RN4CAST badges to those who filled in the survey. In some instances where staff could not get to complete the surveys, extra time was given in order for them to do so. The surveys were numbered with

codes in order to ensure confidentiality of the information provided by participants. Completion of the survey implied participant consent (see Annexure III).

1.9.4 Data analysis

The computer programme EPIDATA 3.1 (Lauritsen, 2008) was used to capture the data using double entry verification in order to ensure accuracy and it was analysed by using SPSS 21.0 and the SAS programme. Surveys that had sections missing were excluded from the study, but in instances where only a few questions were missing the data was left blank in SPSS.

In this study, descriptive statistics (including means, percentages, and standard deviations) was used to organise data in a meaningful and insightful manner in order to examine the phenomena from a variety of angles (Burns & Grove, 2009:470;696). Numerical statistics was used to display relationships between and among NNTs, NTLU and job satisfaction in a meaningful manner by using a Spearman rank-order correlation coefficient (r). Means are generally obtained when a total of all the scores are summed and then divided by the total number of scores being summed (Burns & Grove, 2009:708). Percentages represent the degree of reliability and are explained through linear relationships (Burns & Grove, 2009:713). Standard deviations (SD) are a measure of dispersion and were calculated by taking the square root of the variance (Burns & Grove, 2009:723).

In the survey, ordinal data was collected through Likert scale-type questions and dichotomous data (yes/no). Because of the dependency of answers of nurses in the same unit, hierarchical linear modelling was used or alternatively the answers of

nurses in a unit were pooled. Statistical significance (p) indicates that certain results are unlikely to be due to chance (Burns & Grove, 2009:559). Practical significance (d), on the other hand, indicates whether results are important in practice (Burns & Grove, 2009:559). Effect size is a measure of practical significance and is independent from the sample size. The effect size for the difference in means is described by Cohen's d -values as measure of the standardised difference between means. Guidelines for interpretation of Cohen's d are 0.2 for small; 0.5 for medium and 0.8 for large effect (Ellis & Steyn, 2003:52-53). Cramer's V is used as an effect size to indicate the strength of the association in cross-tabulations, while the correlation coefficient itself gives the strength of the association. Guidelines for interpretation of Cramer's V are 0.1 for small; 0.3 for medium and 0.5 for large associations (Ellis & Steyn, 2003:52-53). Correlations between and among NNTs, NTLU and job satisfaction are described using a Spearman rank-order correlation coefficient (r) where data for PNs per unit were pooled to account for interdependence of data per unit. Associations in two-way frequency tables where the dependence of nurses in each unit was taken into account with PROC SURVEYFREQ of SAS, were also used to examine these relationships through the Chi-square test of independence and an effect size was calculated from it (w) (Burns & Grove, 2009). The formula used for the effect size of the Chi-square test of independence is $w = \sqrt{\frac{x^2}{N}}$ - where x^2 is the Chi-square statistic for the two-way frequency tables used in the results and N stands for the number of participants (Steyn, 2002:11). The guidelines for interpretation of Spearman rank-order correlation coefficient and w are 0.1 for small; 0.3 for medium and 0.5 for strong correlations. Results were only reported when statistically and practically significant.

1.10 RIGOUR

Burns and Grove (2009:34) describe rigour as a striving for research excellence and it involves discipline, great adherence to detail and firm accuracy. It involves critical examinations of the research process steps in order to lift out any errors or weaknesses in terms of for instance the design, implementation, measurement, sampling and statistical analysis. Precision is also of great importance and is evident when variables are measured objectively. Rigour in quantitative research is described in terms of validity and reliability.

1.10.1 Validity

Validity involves accuracy and truthfulness of scientific findings and can be divided into internal and external validity (Brink *et al.*, 2006:118-119). Internal validity involves credibility (is the information trustworthy to the people that were studied as well as to the readers?) and authenticity (is the outcome of what was measured in the study and the information expressed in the study the same?) (Brink *et al.*, 2006:118). Credibility was ensured because the participants completed a questionnaire anonymously, thus providing the participants with a platform to be completely honest. Furthermore, hospital-level data of facility characteristics and patient outcome data was also obtained by the team leaders to strengthen credibility. Authenticity was ensured when questionnaires were translated into a computed form by statistical consultation services that read the data into the computer twice and verified the results.

1.10.2 Reliability

Reliability is associated with consistency, stability and repeatability of the accounts of the informants and the ability of the researcher to collect and record information accurately (Brink *et al.*, 2006:118). The reliability in the RN4CAST study was confirmed when an already reliable and valid instrument was utilised which was also used by other RN4CAST studies (Bruyneel *et al.*, 2009; Scott, Matthews, Kirwan, Lehwaldt, Morris & Staines, 2012:2). Furthermore, the compilation of the RN4CAST instrument as a whole was done by a panel of researchers who are experts in the field.

1.11 ETHICAL CONSIDERATIONS

Ethical approval was granted for the RN4CAST programme in South Africa by the North-West University (NWU) on certificate number NWU-0015-08-S1. Ethical clearance was received at national, provincial and district level for the hospitals in the public sector while approval was granted by ethical committees of the two private hospital groups (Coetzee *et al.*, 2013:165). The ethical clearance certificates of the role players are not enclosed in this dissertation, due to anonymity request by role players with the Principle investigator (PI) and Co-principle investigators (CoPI) of the RN4CAST South African study.

It is crucial to ensure that ethical principles are adhered to, since the researcher did not take part in all the aspects of the data collection process. After review of ethical principles, the following fundamental ethical principles were adhered to (Brink *et al.*, 2006:31-33, 45; Coetzee, 2010:124-127):

- **The principle of beneficence** – the participants were informed of the nature and purpose of the study confirmed by an information leaflet accompanying the survey. The participants were also informed that the study was voluntary in nature and as the questionnaires were anonymously completed, information could not be held against any participant. This research study has the potential to add to the body of knowledge about the current status of the performance of NNTs, nursing tasks left undone as well as the job satisfaction levels of PNs in medical and surgical units. There was no foreseeable disadvantage to any participant, except the time that they had to take to complete the survey. Beneficence was assured by reporting the results of the data back to the hospitals and thereafter informing the participants through dissemination meetings
- **The principle of respect for persons** – full disclosure of the purpose of the study, voluntary participation and the right to withdraw at any time of the study were given through the attached information leaflet. The information leaflet also stated that when a participant completes a questionnaire, that in itself will be proof of their consent for the information to be used (see Annexure III).
- **The principle of justice** – the right to fair treatment was ensured when participants were selected randomly as they could voluntarily complete a questionnaire. Certain units (medical, surgical and ICU) were decided on prior to the conduction of the study. Major private hospital groups were invited to participate in the study, but only two accepted participation. Mostly national public hospitals were included except for two who had prolonged ethical clearance. As the questionnaires were coded by a unique coding system, no names were used; personal privacy as well as identity of the

hospitals were protected as the questionnaires cannot be traced back to a certain participant or hospital. Data was kept in a safe place not available to those not involved in the research study, which assures confidentiality.

1.12 CLASSIFICATION OF CHAPTERS

This study will be presented in article format. This will mean that there will be some repetition within the dissertation. The article (Chapter 3) will be a free-standing entity. The chapters are:

Chapter 1: Overview of the study

Chapter 2: Literature review

Chapter 3: Research article: The relationship between non-nursing tasks, nursing tasks left undone and job satisfaction among professional nurses in South African hospitals

Chapter 4: Evaluation of the study, limitations and recommendations for practice, education, research and policy

1.13 SUMMARY

Background detail on international literature in terms of NNTs and nursing tasks left undone and their negative effect on their relationship with job satisfaction was given. The last study conducted on NNTs and nursing tasks left undone in South Africa (in 1988) was explored and compared to current international literature and the most recent literature on job satisfaction in South Africa was highlighted.

The aim and objectives were discussed, hypotheses stated, assumptions of the researcher were mentioned and a discussion followed the research design and research method. Rigour was examined, ethical considerations were discussed and an outline of chapters of the proposed research was set out.

In the next chapter, a literature study will be conducted in order to enlighten elements of the study. These elements include NNTs, NTLU (including a relation to the South African scope of nursing practice), job satisfaction, links between NNTs, NTLU and job satisfaction and an expression of the context of South Africa.

ANNEXURE I:

RN4CAST questionnaire – sections relevant to this study

1. Please indicate the extent to which you agree that each of the following features is present in your current job.

	Strongly Disagree 1 <input type="checkbox"/>	Somewhat Disagree 2 <input type="checkbox"/>	Somewhat Agree 3 <input type="checkbox"/>	Strongly Agree 4 <input type="checkbox"/>
27. A preceptor program for newly hired nurses.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. Nursing care is based on a nursing rather than a medical model.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29. Registered nurses have the opportunity to serve on hospital and nursing committees.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. Physicians hold nurses in high esteem.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31. Written, up-to-date care plans for all patients.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32. Patient care assignments that foster continuity of care (i.e., the same nurse cares for the patient from one day to the next).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. How satisfied are you with your current job in this hospital?

- 1 Very dissatisfied 2 A little dissatisfied 3 Moderately satisfied 4 Very satisfied

3. How would you rate the work environment at your job in this hospital (such as adequacy of resources, relations with coworkers, support from supervisors)?

- 1 Poor 2 Fair 3 Good 4 Excellent

4. How satisfied are you with the following aspects of your job?

	Very Dissatisfied	A Little dissatisfied	Moderately Satisfied	Very Satisfied
1. Work schedule flexibility	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
2. Opportunities for advancement	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
3. Independence at work	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
4. Professional status	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
5. Wages	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
6. Educational opportunities	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
7. Annual leave	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
8. Sick leave	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
9. Study leave	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>

5 a). If possible, would you leave your current hospital within the next year as a result of job dissatisfaction?

- 1 Yes 2 No

b). If yes, what type of work would you seek?

- 1 Nursing in another hospital 2 Nursing, but not in a hospital 3 Non-nursing

6. If you were looking for another job, how easy do you think it would be for you to find an acceptable job in nursing?

- 1 Very difficult 2 Fairly difficult 3 Fairly easy 4 Very easy

7. Would you recommend your hospital to a nurse colleague as a good place to work?

- 1 Definitely no 2 Probably no 3 Probably yes 4 Definitely yes

8. Would you recommend your hospital to your friends and family if they needed hospital care?

- 1 Definitely no 2 Probably no 3 Probably yes 4 Definitely yes

11. On your most recent shift, how often did you perform the following tasks?

	Never	Sometimes	Often
1. Delivering and retrieving food trays	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>
2. Performing non-nursing care	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>
3. Arranging discharge referrals and transportation (including to long term care)	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>
4. Routine phlebotomy/blood draw for tests	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>
5. Transporting of patients within hospital	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>
6. Cleaning patient rooms and equipment	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>
7. Filling in for non-nursing services not available on off-hours	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>
8. Obtaining supplies or equipment	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>
9. Answering phones, clerical duties	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>

12. On your most recent shift, which of the following activities were necessary but left undone because you lacked the time to complete them? Mark all that apply.

1. Adequate patient surveillance	<input type="checkbox"/>
2. Skin care	<input type="checkbox"/>
3. Oral hygiene	<input type="checkbox"/>
4. Pain management	<input type="checkbox"/>
5. Comfort/talk with patients	<input type="checkbox"/>
6. Educating patients and family	<input type="checkbox"/>
7. Treatments and procedures	<input type="checkbox"/>
8. Administer medications on time	<input type="checkbox"/>
9. Prepare patients and families for discharge	<input type="checkbox"/>
10. Adequately document nursing care	<input type="checkbox"/>
11. Develop or update nursing care plans/care pathways	<input type="checkbox"/>
12. Planning care	<input type="checkbox"/>
13. Frequent changing of patient position	<input type="checkbox"/>

D. ABOUT YOU

1. What is your gender?

- ¹ Female ² Male

2. What is your age? Years:

3a. Did you receive your basic nursing education in the country where you currently work as a professional nurse?

- ¹ Yes ² No

b. If no, in what country did you receive your basic nursing education? Country:

4. Not including the country where you currently work, list the last three countries, if any, (and years) where you have worked as a professional nurse.

Country/Years: Country/Years: Country/Years:

5. What was your age when you first became a professional nurse (completed your training)? Years:

6. Do you have a baccalaureate degree in nursing?

- ¹ Yes ² No

7. How satisfied are you with your choice of nursing as a career?

- ¹ Very dissatisfied ² A little dissatisfied ³ Moderately satisfied ⁴ Very satisfied

8. Are you working in this hospital full time?

- ¹ Yes ² No

9. How many years have you worked as a registered nurse ...

a. in your career Years:

b. in this hospital Years:

10. Please write the name/number of the ward/unit that you work in (e.g Ward 1A or Ward C): _____

11. Do you have an additional qualification in critical care nursing? If yes, please indicate the type.

- ¹ Masters degree ² Diploma

Thank you for taking the time to complete and return this survey.

ANNEXURE II:

Ethical approval certificate – North-West University



NORTH-WEST UNIVERSITY
YUNIBESITHI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT

Private Bag X6001, Potchefstroom
South Africa 2520

Tel: (018) 299-4900
Faks: (018) 299-4910
Web: <http://www.nwu.ac.za>

Ethics Committee

Tel +27 18 299 4850
Fax +27 18 293 5329
Email Ethics@nwu.ac.za

Prof H Klopper

11 July 2008

Dear Prof Klopper

ETHICS APPROVAL OF PROJECT

The North-West University Ethics Committee (NWU-EC) hereby approves your project as indicated below. This implies that the NWU-EC grants its permission that, provided the special conditions specified below are met and pending any other authorisation that may be necessary, the project may be initiated, using the ethics number below.

Project title: Leadership and policy development improving the quality of nursing in South Africa through nursing staffing and patient safety																
Ethics number:			N	W	U	-	0	0	1	5	-	0	8	-	S	1
			Institution			Project Number			Year			Status				
Status: S = Submission, R = Re-Submission, P = Provisional Authorisation, A = Authorisation																
Approval date: 11 July 2008									Expiry date: 10 July 2013							

Special conditions of the approval (if any): None

- General conditions:**
While this ethics approval is subject to all declarations, undertakings and agreements incorporated and signed in the application form, please note the following:
- The project leader (principle investigator) must report in the prescribed format to the NWU-EC:
 - annually (or as otherwise requested) on the progress of the project,
 - without any delay in case of any adverse event (or any matter that interrupts sound ethical principles) during the course of the project.
 - The approval applies strictly to the protocol as stipulated in the application form. Would any changes to the protocol be deemed necessary during the course of the project, the project leader must apply for approval of these changes at the NWU-EC. Would there be deviated from the project protocol without the necessary approval of such changes, the ethics approval is immediately and automatically forfeited.
 - The date of approval indicates the first date that the project may be started. Would the project have to continue after the expiry date, a new application must be made to the NWU-EC and new approval received before or on the expiry date.
 - In the interest of ethical responsibility the NWU-EC retains the right to:
 - request access to any information or data at any time during the course or after completion of the project;
 - withdraw or postpone approval if:
 - any unethical principles or practices of the project are revealed or suspected,
 - it becomes apparent that any relevant information was withheld from the NWU-EC or that information has been false or misrepresented,
 - the required annual report and reporting of adverse events was not done timely and accurately,
 - new institutional rules, national legislation or international conventions deem it necessary.

The Ethics Committee would like to remain at your service as scientist and researcher, and wishes you well with your project. Please do not hesitate to contact the Ethics Committee for any further enquiries or requests for assistance.

Yours sincerely

Prof MMJ Lowes
(chair NWU Ethics Committee)

ANNEXURE III:

RN4CAST South Africa informed consent



Dear Nurse Colleague,

Please complete this survey ONLY if you are a nurse providing direct patient care in an adult medical ward, adult surgical ward or adult critical care unit.

The School of Nursing Science at the North-West University (Potchefstroom Campus) is currently involved in an international project aiming to develop forecasting models for human resources in nursing in South Africa. As part of the process we will be conducting a National Nurses Survey in order to collect baseline data on the status of nursing in South Africa. You have an opportunity to influence national and international policy about nursing and health care by participating in a multi-country study to obtain information to help improve the conditions of nursing practice, make health care safer for patients, and inform public policy decisions about the nurse workforce. This study is supported by the European Union and includes nurses in 14 countries. Please show your support for improving health care by completing this questionnaire. The person distributing the questionnaires has agreed to assist the project team as fieldworker and will provide you with the dates for the return of the questionnaire.

Please read through the following information section carefully in order to decide if you want to participate in the research project. Should you agree to participate you will be requested to complete the following questionnaire. Ronel Pretorius and Petra Bester has been assigned as project managers for the study and any questions regarding the study or the instrument can be directed to them.

1. BACKGROUND INFORMATION ON PROJECT

There is currently NO baseline data in South Africa with regard to the present state of nursing human resources and how it impacts on patient safety. To that end the focus of this research project will be to conduct a National Nurses Survey to establish baseline data for South Africa that will support the better organisation of health systems in South Africa.

2. EXPLANATION OF PROCEDURE

You will be requested to complete a questionnaire developed by an international team of experts. The completion of the questionnaire should not take more than 20 minutes of your time.

3. RISKS AND DISCOMFORT INVOLVED

There are no risks or discomforts involved.

4. POSSIBLE BENEFITS OF THE RESEARCH STUDY

Although you might not benefit directly from the study, the findings of the study will prove beneficial to nursing practice in future in South Africa.

5. YOUR RIGHTS AS PARTICIPANT

Your participation in the research study is entirely voluntary. You can refuse to participate or stop at any time during the study without giving any reason. Your decision to participate or not will not affect your employment status in any way. The questionnaire is anonymous; your name is not requested. **PLEASE DO NOT WRITE YOUR NAME ON THE QUESTIONNAIRE.** The information you provide will go directly to researchers and will not be made available to your employer.

1

Project managers:

Dr Ronel Pretorius * ronel.pretorius@nwu.ac.za * 018-299 1853 *

Dr Petra Bester *petra.bester@nwu.ac.za *018-299 1729

6. ETHICAL APPROVAL

The research study has received written approval from the Research Ethics Committee of the North-West University (Potchefstroom Campus) and from your hospitals' Ethics Committee. Copies of the approval letters are available at the Nursing Service Manager of your hospital.

7. INFORMATION AND CONTACT PERSON

The contact person for the study is Ronel Pretorius. If you have any questions about the study, please contact her at 018 299 1853. Alternatively you can contact Petra Bester at 018 299 1729.

8. COMPENSATION

Your participation in the research study is voluntary. No compensation will be given for your participation in the study.

9. CONFIDENTIALITY

All the information that you give will be kept strictly confidential. Once the data have been analysed no one will be able to identify you. Research reports and articles in scientific journals will not include any information that may identify you or your company of employment.

Please note: By completing and submitting the survey, you are giving your consent to participate. Due to the anonymity of the questionnaire we will not be able to trace your questionnaire once you have submitted it.

CONTACT DETAIL:

Dr. Ronel Pretorius

E-Mail: Ronel.Pretorius@nwu.ac.za

Tel: 082 823 5596

Dr. Petra Bester

E-Mail: Petra.Bester@nwu.ac.za

Tel: 018 299 1729

INSTRUCTIONS TO COMPLETE QUESTIONNAIRE:

1. Please complete all the sections of the questionnaire,
2. Use a black pen to indicate your response;
3. Please mark an "x" in the box corresponding to your answer in each question, or supply the requested information.
4. Return the completed questionnaire to the fieldworker.
5. Please ensure that you return all the pages in the completed questionnaire.

Thank you for your time.

CHAPTER 2 – LITERATURE REVIEW

2.1 INTRODUCTION

A literature review is a presentation written in an organized manner about what has been published on a topic by scholars. It also includes a presentation of research that has been conducted in the selected field of study. Therefore it is an analysis and synthesis of research already conducted on a certain research problem or particular situation in order to establish what is known and unknown (Burns & Grove, 2009:92720).

This study forms part of the RN4CAST (Nurse Forecasting in Europe), which is an international collaborative research programme (see Chapter 1). In this study, the relationship between non-nursing tasks (NNTs), nursing tasks left undone (NTLU) and job satisfaction is examined. International findings show that there exists a significant relationship between NNTs, NTLU and job satisfaction respectively. However, the last study done on NNTs in South Africa was in 1988.

For this reason, it is important to establish the current relationship between NNTs, NTLU and the possible impact it might have on job satisfaction amongst professional nurses (PNs) in medical and surgical units in private and public hospitals in South Africa.

2.2 SEARCH STRATEGY

Literature was searched by means of the following search engines: EbscoHost, Google Scholar, NCBI (PubMed), Nexus, ProQuest, SAePublications (Sabinet Online Ltd, ISAP at the National Library of South Africa), Science Direct and SUNScholar.

Librarian support was consulted for the following search words used in this study: “non-nursing task,” “nursing tasks below skill level”, “nursing tasks left undone”, “job satisfaction” and “professional nurse”, “registered nurse” or “nurse”.

2.3 NON-NURSING TASKS (NNTs)

NNTs include tasks performed by the PN that are below her scope of practice (Bruyneel *et al*, 2012:207) and are also associated with tasks not related to direct patient care or tasks not requiring professional nursing skills during one nursing shift (Al-Kandari & Thomas, 2008:583). According to various sources, NNTs can roughly be divided into nine categories: Deliver and retrieve food trays; housekeeping duties; transporting patients; ordering supplies; obtaining equipment; discharge referral arrangements; routine phlebotomies; substituting (filling in) for off-hours non-nursing services; clerical duties (Aiken *et al.*, 2001:49; Bruyneel *et al.*, 2012:206; Desjardins *et al.*, 2008:29; Hendrich *et al.*, 2008:27; Jordan, 1991:12; Sermeus *et al.*, 2011; Van Tonder, 1988:7).

Below is a closer examination of each NNT category. Delivering and retrieving food trays takes place after patients have finished their breakfast, lunch, dinner or snacks and may also include distributing water to patients. Housekeeping duties may

include distributing and collecting washbasins, cleaning procedural trolleys, washing mattresses, making up empty beds and tidying over bed tables in rooms. Transport of patients may include taking and fetching patients from theatre, X-rays and the intensive care unit, transferring a patient to a different ward (Furaker, 2009:274), accompaniment to the mortuary and collecting patients' discharge medication. Ordering supplies includes ordering necessary items needed for use in the ward such as bandages, gloves and liquids. Obtaining equipment is to find certain equipment either inside the ward or from a different area which is needed to perform certain nursing tasks e.g. infusion drip stands, catheter stands, blood pressure machine and wheelchairs. Discharge referral arrangements may include documentation, faxing and telephone communication with the referral destination and other members of the multidisciplinary team (Furaker, 2009:273). Routine phlebotomies may include filling out laboratory forms, drawing of patients' blood and sometimes taking blood to the laboratory. Diverse tasks or substituting (filling in) for off-hours non-nursing services is when PNs substitute (stand in) for support services after hours or over weekends when support services aren't available and may include controlling visitors, moving patient beds, helping with porter services and housekeeping. Clerical duties include answering phones, filling out X-ray forms and updating ward bed lists. From these nine categories, clerical duties were reported to consume most of PNs time on their last shift (Aiken *et al.*, 2001:49; Al Kandari & Thomas, 2008:585; Bruyneel, *et al.*, 2012:207; Furaker, 2009:272-274; Hendrich *et al.*, 2008:31; Jordan 1991:73; Teo *et al.*, 2012:1443; Van Tonder, 1988:8).

Bruyneel *et al.*, (2012:204-206) did a study in which they compared PNs performing NNTs during their last shift in twelve countries, namely Belgium, England, Finland,

Germany, Greece, Ireland, the Netherlands, Norway, Poland, Spain, Sweden and Switzerland. The lowest and highest percentages of performing NNTs were reported as: delivering and retrieving food trays (Greece, 37.7%; Belgium, 83.8%); cleaning patients' rooms and equipment (Spain, 16.8%; England, 90%); transporting patients within the hospital (Finland, 31.7%; Poland, 90.4%); obtaining supplies or equipment (Finland, 38.6%; Greece, 86.2%); arranging discharge referrals (Finland, 41.6%; England, 83.1%); routine phlebotomies (Finland, 12.8%; Poland, 97.7%); substituting (filling in) for non-nursing services not available during off hours (Spain, 22.5%; Ireland, 69.2%); performing non-nursing care (Norway, 71.5%; Germany, 98%) and the highest percentages of all – clerical duties (Sweden, 94.6%; England, 99.7%). From these results, the NNTs most commonly conducted were (from high to low): clerical duties, performing non-nursing care, routine phlebotomies, transport of patients within the hospital and cleaning patients' rooms and equipment. The countries which scored the highest percentages in NNTs conducted were (from most to least): England, Greece, Poland. Ten out of twelve countries included both domestically and foreign trained nurses. Interestingly, the study highlighted that foreign trained nurses from developing countries were among those who were more likely to perform NNTs. Furthermore, many studies report on the overall time PNs spent performing NNTs: Jordan (1991:88) reported 34% in the United States of America; Fitzgerald *et al.* (2003:331; 326) reported 35% in Australia and Bruyneel, *et al.* (2012:207) reported an even greater 62% in twelve European countries.

There is very little literature available on the performance of NNTs in the South African context. The last research conducted in South Africa was done by Van Tonder in 1988. In that time, Van Tonder identified that expanding technology

caused an increased workload in the medical field which paved the way to specialisation. This identification made her aware of the task shifting that was taking place between the different nursing categories. Focusing on the increased task shifting, Van Tonder's study aimed to identify NNTs done by nurses; what each NNT entailed; time spent on each NNT; the contribution of "support personnel" to NNTs and the measure by which the "support services" released the nurse from NNTs. In the study the aims were measured through interviews and observation time frames or a "task control list". This "list" entailed a set of tasks that needed to be performed by "support personnel" and "support services". By means of the "task control list" the NNTs were identified and helped to measure the percentages of time that was spent on each category of NNTs (Van Tonder, 1988:6-8): 30 clerical tasks were identified (ranging from answering telephones to microfilming of patients records) and these amounted to 34.2% of PNs time; 20 catering tasks (ranging from completing the diet book to washing baby bottles) were identified and they amounted to 3.3% of PNs time; 37 housekeeping tasks (ranging from handing out wash basins to washing of the examining and treatment trolleys) were identified which amounted to 5.5% of PNs time; 7 porter tasks (ranged from transferring patients to other beds to taking the reports to the matron) were identified and these amounted to 1.8% of PNs' time and 4 diverse tasks (ranging from controlling visitors, to relief services of other members of the hospital staff e.g. Pharmacist, porters and housekeeper) were identified and these occupied 1.5% of PNs' time. In summary, Van Tonder (1988:7) reported that 46.3% of a PN's time was spent on NNTs in a nine hour shift. Furthermore, it was found that although there was a clerk available in the ward, that clerical duties were the NNTs most performed by the PNs (Van Tonder, 1988:8). This showed that the clerk's presence and help didn't contribute as much relief of the

nurse's workload as expected (Van Tonder, 1988:8). The outcomes of the study done by Van Tonder revealed that PNs perform many NNTs either due to a lack of "support services", "support services" not doing their work effectively or the improper use of "support services" by PNs. A lot of money was wasted on "support services" because PNs were the ones performing NNTs (Van Tonder, 1988:10-11).

2.4 NURSING TASKS LEFT UNDONE (NTLU)

Nursing tasks left undone (NTLU) refers to any nursing tasks e.g. assessment of patients, care plan development and provision of nursing care required for patient care that was not fully performed by a PN during her last shift (Al-Kandari & Thomas, 2008:583 and Al-Kandari & Thomas, 2009:3432).

Sermeus *et al.* (2011) and AONE (2008:1) have identified thirteen nursing tasks most commonly left undone. These include: 1) "patient surveillance", 2) "skin care", 3) "oral hygiene", 4) "pain management", 5) "comfort/talk with patients", 6) "educating patients and family", 7) "treatments and procedures", 8) "administer medications on time", 9) "prepare patients and families for discharge", 10) "adequately document nursing care", 11) "develop or update nursing care plans/care pathways", 12) "planning care" and 13) "frequent changing of patient position".

Currently in South Africa, the Scope of Practice has twenty acts and procedures which clarify what is expected from the PN. These acts and procedures can be performed through science-based physical, chemical, psychological, social, educational and technological ways appropriate to health care practice (South African Nursing Council (SANC) (1991). In Table 2.1, the South African Nursing

Council's (SANC) Scope of Practice for PNs are stated and aligned with the abovementioned NTLU. This is done in view of evaluating how many nursing tasks that are left undone, are required of PNs in South Africa.

Table 2.1: Tasks according to the SANC (1991) Scope of Practice and NTLU (Sermeus *et al.*, 2011 & AONE, 2008:1)

<p align="center">South African Scope of Practice for PNs</p>	<p align="center">Nursing tasks left undone (NTLU) (numbers refer to nursing tasks left undone, see page 6)</p>
<p>(a) Diagnosing a health need and prescribing, provision and execution of a nursing regimen to meet the need of a patient or group of patients or, where necessary, by referral to a registered person</p>	<ul style="list-style-type: none"> • Adequate patient surveillance (1) • Skin care (2) • Oral hygiene (3) • Pain management (4) • Comfort/ talk with patients (5) • Educating patients and family (6) • Treatments and procedures (7) • Administer medications on time (8) • Prepare patients and families for discharge (9) • Adequately document nursing care (10) • Develop or update nursing care plans or care pathways (11) • Planning care (12) • Frequent changing of patient position

	(13)
(b) the execution of a programme of treatment or medication prescribed by a registered person for a patient	<ul style="list-style-type: none"> • Adequate patient surveillance (1) • Skin care (2) • Oral hygiene (3) • Pain management (4) • Educating patients and family (6) • Treatments and procedures (7) • Administer medications on time (8) • Adequately document nursing care (10) • Frequent changing of patient position (13)
(c) treatment and care of and administration of medicine to a patient, including monitoring of the patient's vital signs and of his reaction to disease conditions, trauma, stress, anxiety, medication and treatment	<ul style="list-style-type: none"> • Adequate patient surveillance (1) • Pain management (4) • Comfort/talk to patient (5) • Treatments and procedures (7) • Administer medications on time (8) • Adequately document nursing care (10)
(d) the prevention of disease and promotion of health and family planning by teaching and counselling with individuals and groups of persons	<ul style="list-style-type: none"> • Adequate patient surveillance (1) • Educating patients and family (6)
(e) prescribing, promotion or maintenance of hygiene, physical comfort and reassurance of the patient	<ul style="list-style-type: none"> • Adequate patient surveillance (1) • Skin care (2) • Oral hygiene (3)

	<ul style="list-style-type: none"> • Pain management (4) • Comfort/talk to patient (5) • Educating patients and family (6) • Prepare patients and families for discharge (9) • Frequent changing of position (13)
(f) promoting exercise, rest and sleep with a view to healing and rehabilitation of a patient	<ul style="list-style-type: none"> • Adequate patient surveillance (1) • Educating patients and family (6) • Prepare patients and families for discharge (9) • Planning care (12)
(g) facilitating body mechanics and preventing bodily deformities in a patient in the execution of the nursing regimen	<ul style="list-style-type: none"> • Adequate patient surveillance (1) • Educating patients and family (6) • Planning care (12) • Frequent changing of position (13)
(h) supervision of and maintenance of a supply of oxygen to a patient	<ul style="list-style-type: none"> • Adequate patient surveillance (1) • Treatments and procedures (7) • Develop or update nursing care plans or care pathways (11) • Planning care (12)
(i) supervision of and maintenance of fluid, electrolyte and acid base balance of a patient	<ul style="list-style-type: none"> • Adequate patient surveillance (1) • Treatments and procedures (7) • Adequately document nursing care (10) • Develop or update nursing care plans or care pathways (11)

	<ul style="list-style-type: none"> • Planning care (12)
(j) facilitating the healing of wounds and fractures, protecting the skin and maintaining sensory functions in a patient	<ul style="list-style-type: none"> • Adequate patient surveillance (1) • Educating patients and family (6) • Treatments and procedures (7) • Frequent changing of position (13)
(k) facilitating the maintenance of bodily regulatory mechanisms and functions in a patient	<ul style="list-style-type: none"> • Adequate patient surveillance (1) • Educating patients and family (6) • Adequately document nursing care (10)
(l) facilitating the maintenance of nutrition of a patient	<ul style="list-style-type: none"> • Adequate patient surveillance (1) • Educating patients and family (6) • Treatments and procedures (7) • Adequately document nursing care (10)
(m) supervising of and maintenance of elimination by a patient	<ul style="list-style-type: none"> • Adequate patient surveillance (1) • Educating patients and family (6) • Adequately document nursing care (10)
(n) facilitating communication by and with a patient in the execution of the nursing regimen	<ul style="list-style-type: none"> • Adequate patient surveillance (1) • Comfort/talk with patients (5) • Educating patients and family (6)
(o) facilitating the attainment of optimum health for the individual, the family, groups and the community in the execution of the nursing regimen	<ul style="list-style-type: none"> • Adequate patient surveillance (1) • Educating patients and family (6) • Prepare patients and families for discharge (9)
(p) establishing and maintaining, in the	<ul style="list-style-type: none"> • Adequate patient surveillance (1)

execution of the nursing regimen, of an environment in which the physical and mental health of a patient is promoted	<ul style="list-style-type: none"> • Comfort/talk with patients (5) • Educating patients and family (6) • Treatments and procedures (7)
(q) preparing for and assistance with operative, diagnostic and therapeutic acts for the patient	<ul style="list-style-type: none"> • Adequate patient surveillance (1) • Comfort/talk with patients (5) • Educating patients and family (6) • Treatments and procedures (7)
(r) co-ordinating the health care regimens provided for the patient by other categories of health personnel	<ul style="list-style-type: none"> • Adequate patient surveillance (1) • Planning care (12)
(s) providing effective patient advocacy to enable the patient to obtain the health care he needs	<ul style="list-style-type: none"> • Adequate patient surveillance (1)
(t) care of the dying patient and care of a recently deceased patient within the execution of the nursing regimen	<ul style="list-style-type: none"> • Adequate patient surveillance (1) • Comfort/talk with patients (5) • Treatments and procedures (7) • Adequately document nursing care (10)

In the comparison in Table 2.1 it is clear that NTLU are shown to be an expectation of PNs in South Africa according to SANC's Scope of Practice.

Internationally, Duffield, Gardner and Catling-Paull (2008:3271-3272) have identified that NNTs distract PNs, which results in the performance of many tasks below their skill level, while nursing tasks which require their high skill levels and expertise are

left undone. Although this is true, other international studies show that both NNTs and the number of nursing tasks (workload) have an impact on the number of NTLU (Al-Kandari & Thomas, 2009; Hendrich *et al.*, 2008; Desjardins *et al.*, 2008).

Al-Kandari and Thomas (2009:3435-3438) undertook a study in general hospitals in Kuwait's medical and surgical wards. Findings showed that less than half of the PNs (44.8%) could complete all the procedures required during their shift, thus leaving more than half of the PNs with NTLU. The three most common NTLUs by PNs were: 1) "comfort talk with patient and family" (26.8%), 2) adequate nursing care documentation (23.3%) and 3) "oral hygiene" (17.7%). Factors which influenced and increased the number of NTLU were wards with a bed capacity of 25 or more, an increased number of patient transfers, an increased number of patient discharges and the number of intravenous and intramuscular medication administered within a shift. Significantly, this study showed that both NNTs (20% of a PNs total workload) and the number of nursing tasks (workload) contributed to NTLU.

Hendrich *et al.* (2008) did a time in motion study in 36 hospitals in the USA amongst 763 PNs in a 10 hour shift (consisting of 600 minutes). This study identified two categories, NNTs and nursing tasks, which consume a PN's time in various proportions. The NNTs (consuming a total of 9.4% of the PNs' time) included: waste ("waiting, looking or retrieving and delivering") consuming 36,3 minutes (6.6%) and unit-related functions ("preparation of equipment, counting narcotics, patient transport, fax and copy, review or update status board") consuming 15.2 minutes (2.8%). The nursing tasks (consuming a total of 90.6% of the PNs' time) included: nursing practice ("documentation", "care coordination", "patient care activities",

“medication administration”, “assessment/vitals”) consuming 417 minutes (77.7%) and nonclinical (“personal time, patient or family care, administration/teaching”) consuming 67.9 minutes (12.6%). Of all the time spent in various categories, 38.6% of it took place at the nursing station, 30.8% of it took place in the patient’s room, 23.7% took place in the unit and 6.9% of it took place out of the unit (Hendrich *et al.*, 2008:27-30).

This study was the first to quantify how PNs spend their time in “real time” and found that three-quarters of PNs’ time was spent on activities related to the nursing practice, but less than one-fifth of their time was spent on genuine patient care activities. It was found that most of the PNs’ time was spent at the nursing station. This was attributed to the fact that the three activities that took up most of the nursing practice time was spent on documentation (147.5 minutes) and the majority of documentation (80.6%) (along with care coordination at 69.2%) took place at the nursing station. Communication between departments and team members accounted for 20.6% of time in the nursing practice. A minority of documentation (2.8%) and care co-ordination (2.8%) took place in the patient’s room.

Another time in motion study (Desjardins *et al.*, 2008:29-36) done in surgical units in the USA, observed 30 PNs over a period of 201 working hours. Four categories of nursing tasks were identified and the percentage of time spent in each category was identified. The nursing tasks (totalling to 88.5%) included: direct care (providing information to patient, bedside comforting, assessments/vitals, medication administration, personal patient care, assisting patient at positioning to an upright position, inserting IV, turning patient, providing ambulation) consuming 32.8% of the

PN's time; indirect nursing care ("charting", travel time, "review care plans", "check medication", "write out assignments", "update care plans", "prepare medication", "gather supplies", "retrieve information from chart", "write shift report") consuming 55.7% of PNs' time. The NNTs ("replenish charts and forms", "tidy up room", "make beds", "answer phone", "search for people", "gather linen" and "answer call bell") consumed 9.0% of PNs' time. Personal time consumed 2.5% of PNs' time. Substantially more time was spent on indirect care (55.7%) than on direct care (32.8%). Regarding indirect nursing care, most of the time was spent on documentation, verifying/preparing medication and communicating with health professionals. NNTs consumed only a small number of PNs' time in this study.

From the two time-in-motion studies done in the USA, it is clear that performing nursing tasks, also leads to NTLU by PNs. Less time was spent on direct care or patient care activities. Some of the most time consuming activities identified were documentation, medication administration/verification and care coordination/communication between health care professionals (Hendrich *et al.*, 2008; Desjardins *et al.*, 2008).

Nationally, there are not many studies which directly explore NTLU. In the study done by Van Tonder, (1988:9), PNs had to complete administrative tasks firstly in order for supplies to be issued, before they were able to attend to patients. This suggests that nursing tasks should firstly be left undone until NNTs were completed.

Pietersen (2005) did a study at a government hospital in the Limpopo Province of South Africa and examined the job satisfaction levels of 109 PNs. Interestingly, 38%

of PNs mentioned that one of the four main things which they disliked most, was “work not in job description” (Pietersen, 2005:23). This quote makes sense in view of what Tran, Johnson, Fernandez and Jones (2010:153) found: PNs who have good role clarity in terms of their work, have lower levels of role conflict and are more likely to be satisfied with their jobs. This study also revealed that if the PN experience increased levels of stress, prolonged pressure, uncertainty and contradiction within her role, she will be less satisfied with her job.

Some valid outcomes in studies revealed that by identifying work below their skill level which PNs undertake, job re-organisation of staff and other services and clarifying nursing scope of practices (which still require further studies) will help the profession in optimizing the use of PNs and their job satisfaction levels (Desjardins *et al.*, 2008:37; Duffield *et al.*, 2008:3272; 3273).

2.5 JOB SATISFACTION

According to MOST (1991:398; 612) the term “job satisfaction” refers among other things to a sense of achievement, finding joy, contentment, fulfilment, pleasure and pride in for instance your calling, career, employment, occupation, position, work or profession.

The theory subscribed to in this study, is that of Herzberg. Herzberg (1968) refers to job satisfaction as being motivated by a number of factors, namely growth, work itself, responsibility, achievement, advancement and recognition. When these factors are not met, job satisfaction diminishes. O’Brien-Pallas, Thomson, McGillis Hall, Pink, Kerr, Wang, Li and Meyer (2004:29) executed a study among PNs which

reported that PNs that were satisfied with their jobs, were 58% less likely to intend to leave their jobs. Thus, there exists a certain relationship between job satisfaction and a person's intention to leave (Moore, 2000:142) and literature reveals that job dissatisfaction is the primary indication for PNs' intention to leave their job (Larrabee, Janney, Ostrow, Witbrow, Hobbs & Burant, 2003). In view of the increase in overall shortages of PNs, a scarce resource in the health sector, it is crucial to preserve job satisfaction in order to retain more PNs.

Internationally, Aiken *et al.* (2012:10) reported on a study undertaken in twelve countries which included job satisfaction levels of PNs and their intention to leave their jobs within the next year. Among these twelve countries, the top five countries with the highest job dissatisfaction levels were Greece (56%), Ireland (42%), England (42%), Spain (38%) and Germany (37%). Significantly four out of the top five countries with the highest job dissatisfaction levels were also in the top five countries in which PNs intended to leave their jobs within the next year: Finland (49%), Greece (49%), Ireland (44%), England (44%) and Germany (36%).

A study conducted in Canada revealed that job satisfaction amongst PNs decreased substantially due to "nursing department problems" and "system problems". The "nursing department problems" caused PNs to have a negative perception of their practice environments and for those who intended to stay at their department, their commitment was neutral, while those who intended to leave their department had a negative commitment. The "system problems" included poorly functioning "support services". These were majorly defined as "pernicious, persistent and unsolvable" by PN managers and as a result left PN managers with feelings of "powerlessness".

These problems were present mostly due to a lack of communication across departments (Gagnon, Ritchie, Lynch, Drouin, Cass, Rinfret, Rouleau, Valois, Shannon, Smith, Leiriao & Sourdif, 2006:15-17). In addition, a study done in five countries (United States, Canada, England, Scotland and Germany), revealed that only about 44% of PNs reported that there were adequate support services (Aiken *et al.*, 2001:47). The presence of adequately staffed and properly functioning support services are crucial, as they are mainly utilized to relieve PNs from performing NNTs in areas such as housekeeping, porter services and catering services. These will also enable them to function to their full scope of practice and contribute to job satisfaction levels (O'Brien-Pallas *et al.*, 2004:29).

In South Africa, Pillay (2009) compared job satisfaction levels of PNs in private and public hospitals. PNs in the private sector proved to be more satisfied than those in the public sector, who were generally dissatisfied with their jobs. The private sector had better resources than those in the public sector – for instance available and working equipment, time, medication and staff. These factors lead to more efficient and effective health care, which sees the patients as priority and ensures that their needs are met. In contrast, the public sector does not always have available resources, which might mean the opposite of the private sector outcomes – less efficient and less effective health care where patients' needs are not met due to NTLU.

Another study done in critical care units (CCUs) in private and public hospitals in SA, revealed the following about the levels of job satisfaction amongst PNs in South Africa (Klopper, Coetzee, Pretorius & Bester, 2012:689): 9.5% of PNs were very

dissatisfied, 12.5 % of PNs were a little dissatisfied, 36.2% of PNs were moderately satisfied and 41.8% of PNs were very satisfied (see Figure 2.2).

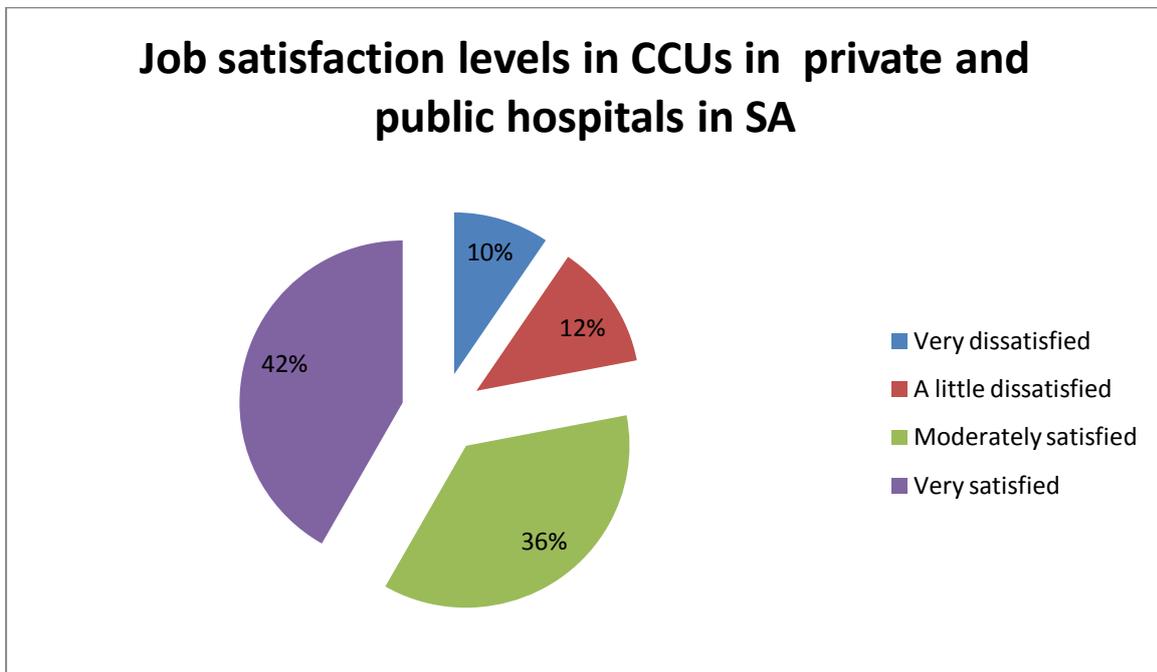


Figure 2.1: Level of job satisfaction in CCUs

From the results shown in Figure 2.1 it is evident that the PNs in South African CCUs are relatively satisfied with their jobs. Factors which influenced their job satisfaction were “wages” (66.1%), “professional advancement” (35.7%) and “reward and leave” (34.2%) (see Figure 2.2) (Klopper *et al.*, 2012:690).

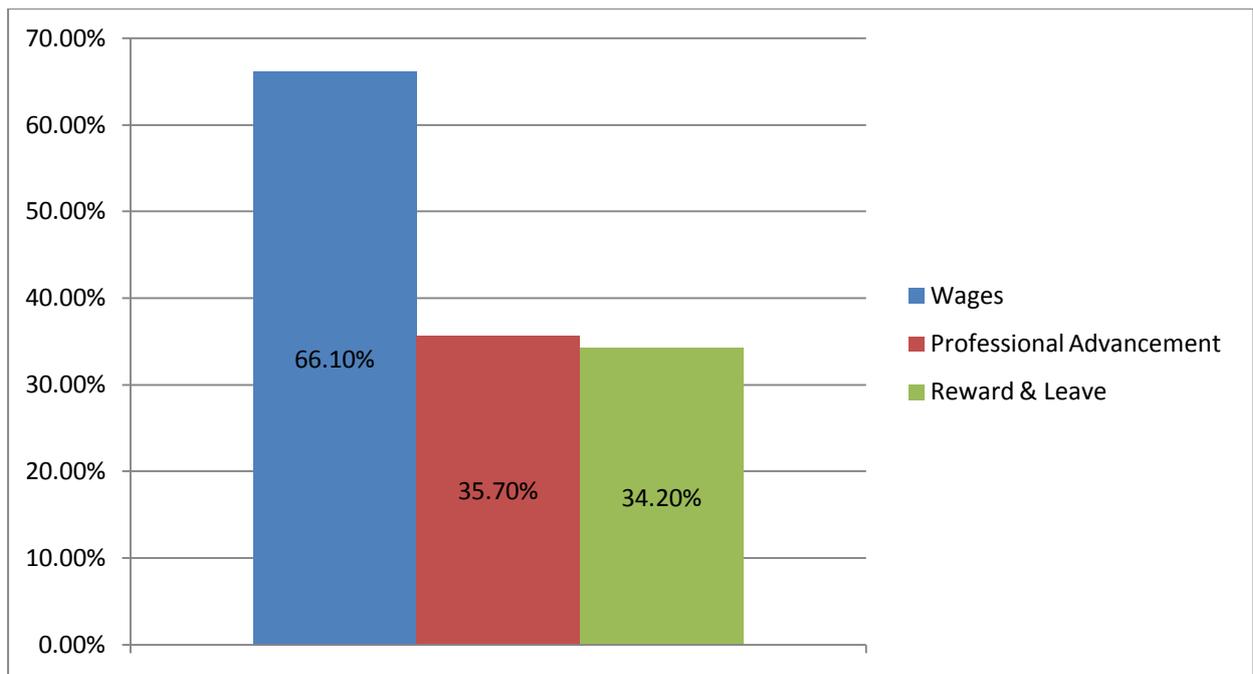


Figure 2.2: Factors influencing job satisfaction among PNs

Furthermore, Coetzee *et al.* (2013:169-170) confirmed that nearly a third of PNs in medical and surgical units in South Africa were dissatisfied with their jobs, whereas it was more common in the public sector. In private hospitals 51.3% and in public hospitals 59% of PNs intend to leave their jobs within the next year. This leaves over half of the PNs in South Africa that say they intend to leave their jobs within the next year.

Other studies done in South Africa reveal that factors that mostly lower the level of job satisfaction are pay, workload, resource availability, lack of enough time to perform nursing tasks and poor relationships with hospital management (Kekana, Du Rand & Van Wyk, 2007:29; 32; Pietersen, 2005:23; Pillay, 2009). However, great motivational factors for PNs to “keep on serving the community” were: good relationships with their co-workers, teamwork, communication and socialisation with colleagues, having colleagues as “best friends”, having time off for family

responsibilities, chances to help other people, opportunity to make decisions about the care of their patients, job challenges and opportunities to perform preferred tasks (Kekana *et al.*, 2007:33-34), good patient relationships and the gratification PNs obtained from providing patient care (Pietersen, 2005:19; 23; Pillay, 2009). Interestingly, work related social support seem to mediate the negative impact which the performance of NNTs (specifically administration/clerical duties) has on PNs (Teo *et al.*, 2012:1450).

2.6 LINK BETWEEN NNTs, NTLU AND JOB SATISFACITON

Chronic PN shortages poses a threat to the future of South Africa`s health care. South Africa is one of the donor countries concerning nurse migration (Kline, 2003:108) probably due to the fact that almost a third of South African PNs are dissatisfied with their jobs and more than half want to leave their jobs within the next year (Coetzee *et al.*, 2013:169). The literature reveals that there is a significant relationship between NNTs, and NTLU, and also between NNTs and job satisfaction, and NTLU and job satisfaction. International studies have shown that when a PN spends time to perform NNTs, she has less time to perform the nursing tasks at hand, thus leading to job dissatisfaction (Al-Kandari & Thomas, 2009:3439; Gabriel *et al.*, 2011:1103; Jordan, 1991:91).

The first study to be done that links all the variables of NNTs, NTLU and job satisfaction was conducted in Dublin (Scott, *et al.*, 2012:11; 15; 16), and revealed that a great number of NNTs were performed by PNs, which had an impact on NTLU and PNs` level of job satisfaction. Results showed that NNT`s were “often” performed by 43% of PNs, answering phones or performing clerical duties were

reported as “often” by 88% of PNs and 26.5% PNs were “often” filling-in for non-nursing services (Scott *et al.*, 2012:16). Between 49-69% of PNs reported they did not get to update or develop care plans, did not get time to educate patients and families and did not provide comfort/talk to patients; 23-34% of PNs did not adequately document nursing care, did not get to planning patient’s care, could not prepare patients or families properly for discharge, did not adequately provide patient surveillance and did not perform oral hygiene; 10-19% of PNs did not provide skin care, did not administer medications on time and did not frequently change the position of patients, and lastly, 4-6% of PNs reported they did not provide proper pain management or treatment and procedures (Scott *et al.*, 2012:17). Moreover, 44% of these 612 PNs reported that they wanted to leave their job as a result of job dissatisfaction within the next year (Scott *et al.*, 2012:11).

Surprisingly, the last study that was done on NNTs in South Africa was in 1988 and even then, a lot of NNTs were performed by PNs (Van Tonder, 1988). However, since 1988, much has changed internationally and nationally in the health system. International challenges to the health system include: transitions in epidemiology and demography, innovations in technology, population demands and professional differentiation (Frenk & Chen 2010:7). Nationally, major changes have taken place politically, which greatly impacted on health care in South Africa. In South Africa, the ruling system changed from an apartheid-driven state to a democracy-supported ruling party (Van Rensburg & Pelsler, 2004:110-112; Coovadia, Jewkes, Barrons, Sanders & McIntyre, 2009:819). In the public sector, the health system was introduced to a Primary Health Care approach and conformed to a District Health System (DHS), which is subsidised by the state (Cullinan, 2006).

2.7 CONTEXT OF SOUTH AFRICA

South Africa consists of a dual health system (Pillay, 2009) which includes a private and a public health sector. According to the Council of Medical Schemes (2012:11,48), 17.6% of all South Africans are covered by medical aids and 16% of the population, who cannot afford medical schemes, pay to see private doctors and dentists, while using public hospitals in cases of serious illnesses and often buy over-the-counter drugs otherwise. The rest of the population are totally dependent upon public health services.

In the private sector patients are obligated to pay (out of their pockets or through medical aid) for all services delivered to them as these hospitals operate as businesses. Most private hospitals are considered to be super-specialist hospitals, which mean that primary, secondary and tertiary care are given in one place. Upon appointment, patients can directly go to their general practitioner with any medical queries (Matsebula & Willie, 2007:159,160). There are several privately owned hospital groups in South Africa which roughly play a role in 30% of the country's health system and own 21% of all hospitals beds in South Africa (Shuping & Kabane, 2007:164; Matsebula & Willie, 2007:160). The three main private hospital groups are Life Healthcare, Medi-Clinic and Netcare (two of which participated in this study). These three hospital groups own over 80% of theatres, 75.6% beds and 66.5% of private hospitals in the country (Shuping & Kabane, 2007:164).

The South African public health services function in a hierarchy in order to preserve scarce resources and to use them more efficiently. Higher levels of care (secondary

and tertiary levels of care) are accessed by patients only after being assessed and referred at primary level by health workers (except in cases of medical emergencies) (Cullinan, 2006) (see Figure 2.1). Moreover, the DHS consists of health regions, health districts and municipalities which are staffed with management teams (Pillay, McCoy & Asia, 2001).



Figure 2.3: The referral system of a DHS (Chatora & Tumusiime, 2004:32)

For South Africans, the first point of entry into health services on a public level is at local clinics and community health centres which include services that prevent illnesses, promote health, cure and rehabilitate. Clinics are defined as health care institutions open for at least eight hours a day, five days a week, supplying a one-stop approach by rendering integrated PHC services (Department of Health (DOH),

2000:12; Department of Health (DOH), 2007:12). The main health care services that can be expected at primary level are: mother and child care, family planning, immunisations, treatment of sexually transmitted infections (STI's), treatment of chronic illnesses (e.g. hypertension, diabetes, cardiac failure, hypercholesterolemia) and cases of minor trauma or emergency referral (Cullinan, 2006). Community Health Centres are defined as a health care institution that provides PHC services and is open 24 hours a day for maternity services, accidents and emergencies. The facility is able to provide observation for up to 48 hours and can have up to 30 beds. There is no theatre and no general anaesthetics are given, but a procedure room is present which does not include admission of patients as inpatients. Although there are some similarities, they should not be confused with district hospitals (Cullinan, 2006; DOH, 2007:13). Although PHC services are mainly run by PNs, doctors visit many clinics regularly. Patients are referred by clinic staff to secondary levels of care (Level 1, 2 and 3 hospitals) when more specialised care is needed (Cullinan, 2006).

In each health district, there is a base hospital to which clinics can refer more complicated cases or emergencies. These are called Level 1 hospitals and are referred to as district hospitals. These hospitals may include facilities such as a 24 hour laboratory, a blood bank, X-ray facilities, a fully equipped operating theatre, emergency transport services to Level 2 and Level 3 hospitals and may be visited by specialist doctors such as obstetricians (DOH, 2007:13). Level 2 hospitals are referred to as "provincial hospitals". These hospitals can do all the functions of a Level 1 hospital and may sometimes also be the base hospital for nearby clinics and community health centres. Level 2 hospitals provide supervision and support to

Level 1 hospitals. These hospitals may include all facilities found in Level 1 hospitals as well as facilities that cater for severely ill patients, including an intensive care unit, multidisciplinary care and these hospitals also have full-time specialists (DOH, 2007:14). Level 3 hospitals are central hospitals providing tertiary care. They consist over all the functions of Level 1 and Level 2 hospitals, have full-time specialists in their employ, of whom some have subspecialty skills, cater for patients who are extremely ill or have complicated diagnoses. These facilities also include clinics for combined specialist conditions e.g. cardiac and diabetic pregnancy clinics. These hospitals supervise and support Level 1 and Level 2 hospitals and are responsible for the development of policies and protocols (DOH, 2007:14-15).

In view of the above, the reason for the current study is to find out if a relationship exists between NNTs, NTLU and job satisfaction in private and public hospitals in medical and surgical units in South Africa. Many international studies have been done, yielding many valid results on the various relationships between NNTs, NTLU and job satisfaction. However, studies done in South Africa focus mainly on aspects of job satisfaction and exclude NNTs and NTLU, with the last study conducted on NNTs in 1988, while there is no recorded study of NTLU in South Africa. In terms of measuring the relationship between NNTs, NTLU and job satisfaction all together, only one international study was found. Thus, a gap exists in international and South African literature in terms of the relationship between NNT, NTLU and job satisfaction.

2.8 SUMMARY

In this chapter, the search strategy for this study was discussed. NNTs, NTLU and job satisfaction were discussed and the relationship between these variables explored by discussing various international and national research findings. Furthermore, national challenges and changes in the health system were elaborated upon. Thereafter a conclusion was reached in terms of the current available literature.

In the next chapter an article, as prepared for the *Journal of Nursing Management*, is presented. This article includes a shortened version of the literature review, purpose of the study, methods, results, discussion, limitations and conclusion.

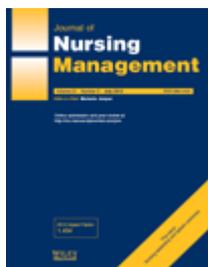
CHAPTER 3 – ARTICLE

PREAMBLE I

Article author guidelines: Journal of nursing management

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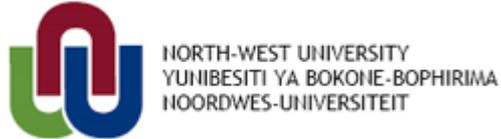
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Private Bag X6001
Potchefstroom
South Africa
2520

Tel: (018) 299-4900
Fax: (018) 299-4910
Web: <http://www.nwu.ac.za>

School of Nursing Science
Tel: (018) 299 1879
Fax (018) 299 1715
E-Mail Siedine.Knobloch@nwu.ac.za

Date

Dear Editor-in-chief

Journal of Nursing Management

RE: ARTICLE FOR SUBMISSION

The authors hereby submit the article “The relationship between non-nursing tasks, nursing tasks left undone and job satisfaction among professional nurses in South African hospitals.” This article has not been published or submitted for publication elsewhere. The content of the article was approved by the contributing authors. Ethical approval was granted by the North-West University (Certificate no: NWU-0015-08-S1). Participants in this study gave voluntary informed consent for the research and data was collected anonymously. There is no conflict of interest present in this study.

Thank you for your consideration of the submitted article.

Kind Regards

Siedine K Coetzee (PhD, RN, RM)

Senior Lecturer

Tel: +27 (0)18 299 1879

Fax: +27 (0)18 299 1715

Siedine.Knobloch@nwu.ac.za

The relationship between non-nursing tasks, nursing tasks left undone and job satisfaction among professional nurses in South African hospitals

MONIQUE BEKKER RN

Masters Student, School of Nursing Science, North-West University (Potchefstroom Campus), South Africa

*SIEDINE K. COETZEE PhD; RN; RM

Senior Lecturer, School of Nursing Science, North-West University (Potchefstroom Campus), South Africa

HESTER KLOPPER PhD; MBA; RN; RM; FANSA

Professor, School of Nursing Science, North-West University (Potchefstroom Campus), South Africa

SURIA ELLIS Pr Sci Nat, PhD

Head: Statistical Consultation Services, North-West University (Potchefstroom Campus), South Africa

*Corresponding author

Siedine K Coetzee

North-West University (Potchefstroom Campus)

School of Nursing Science

Building F7/8

Potchefstroom, 2520

South Africa

Siedine.Knobloch@nwu.ac.za

Word Count: 5148

3.1 ABSTRACT

Aim: To investigate the relationship between non-nursing tasks (NNTs), nursing tasks left undone (NTLU) and job satisfaction among professional nurses (PNs) in South Africa.

Background: This study joins the international debate about the relationship between NNTs, NTLU and job satisfaction, and is the first study of its kind to be conducted in SA.

Method: A cross-sectional survey design of 1166 PNs in 60 medical and surgical units in 55 private hospitals and 7 national referral hospitals in SA.

Results: Nationally, the three main NNTs performed was filling-in for non-nursing services ($d=0.47$), cleaning patient's rooms and equipment ($d=0.48$) and obtaining supplies and equipment ($d=0.64$), while the main NTLU were comfort/talk with patients (62.2%), educating patients and family (57.9%) and develop/update nursing care plans/pathways (51.6%). NTLU were only related to three NNTs, and job satisfaction correlated most highly with NTLU.

Conclusion: PNs conduct many NNTs, but do not perceive this as the reason for NTLU. NTLUs cause the greatest degree of job dissatisfaction amongst PNs.

Implications for Nursing Management: Role overlapping and work performed by PNs below their skill level should be identified and re-organised; support services

should be employed and efficiently used. Attention must be paid to PNs' overall workload.

Keywords: non-nursing task, nursing tasks left undone, job satisfaction, professional nurse, South Africa

Word count: 199 words

3.2 INTRODUCTION

International research highlights a relationship between non-nursing tasks (NNTs) and nursing tasks left undone (NTLU) by professional nurses (PNs) (Aiken *et al.*, 2001:49; Al-Kandari & Thomas, 2009; Furaker, 2009). International studies have also highlighted a significant impact which NNTs and NTLU respectively, have on job satisfaction (AONE, 2008; Desjardins *et al.*, 2008; Kalisch, 2011; Teo *et al.*, 2012).

Only one study has explored the relationship between all three concepts (Scott *et al.*, 2012), and this study will further the international debate by exploring the relationship between these variables at individual and unit level. Also, this is the first study to be conducted on NTLU in South Africa, and also the first to follow up on NNTs performed by PNs since the initial study of 1988 with the health care system having vastly changed since then – democracy, the introduction to the primary health care (PHC) approach and the district health system (Van der Merwe, 2010).

3.3 BACKGROUND

Non-nursing tasks (NNTs)

NNTs include all tasks performed by PNs that are below their scope of practice (Bruyneel *et al*, 2012) and are associated with tasks not related to direct patient care or tasks not requiring professional nursing skills during one nursing shift (Al-Kandari & Thomas, 2008). According to various sources, NNTs can generally be divided into nine categories: Delivering and retrieving food trays; housekeeping duties; transporting patients; ordering supplies; obtaining equipment; discharge referral arrangements; routine phlebotomies; filling in for off-hours non-nursing services and clerical duties (Aiken *et al.*, 2001; Bruyneel *et al.*, 2012; Van Tonder, 1988).

Bruyneel *et al.*, (2012) did a study of PNs performing NNTs on their last shift in twelve countries. Clerical duties were most commonly performed by all countries – in England by 99.7% of PNs and in Sweden by 94.6% of PNs. This study also highlighted that foreign trained nurses from developing countries were more likely to perform NNTs. Furthermore, studies over the past few years have shown an increased prevalence in overall performance of NNTs by PNs during their last shift: Bruyneel, *et al.* (2012) reported 62%, Fitzgerald *et al.* (2003) reported 35% and Jordan (1991) reported 34%.

Nursing tasks left undone (NTLU)

NTLU are any nursing tasks, e.g. assessment of patients, care plan development and provision of nursing care, required for patient care that the PN was unable to fully complete during the previous shift (Al-Kandari & Thomas, 2008 and Al-Kandari & Thomas, 2009).

Thirteen necessary nursing tasks that are most commonly left undone, have been identified as: patient surveillance, skin care, oral hygiene, pain management, comfort/talk with patients, educating patients and family, treatments and procedures, administering medications on time, preparing patients and families for discharge, adequately documenting nursing care, developing or updating nursing care plans/care pathways, planning care and frequent changing of patient position (Sermeus *et al.* 2011; AONE, 2008).

Duffield *et al.* (2008) reported that one of the reasons for NTLU is performing NNTs by PNs. Another factor that impacts the number of NTLU is the number of nursing tasks (workload) the PN has to perform during a shift (Al-Kandari & Thomas, 2009; Hendrich *et al.*, 2008; Desjardins *et al.*, 2008).

In the South African context, no study has been conducted on NTLU, and the last study done on NNTs was conducted in 1988. Van Tonder (1988) found that 46.3% of a PNs time was spent on NNTs in a nine-hour shift. This was either due to a lack of support services (e.g. housekeeping and catering), support services staff not doing their work effectively or the improper use of support services by PNs (Van Tonder, 1988).

Job satisfaction

According to MOST (1991) the term “job satisfaction” refers to a sense of for instance achievement, finding joy, contentment, fulfilment, pleasure and pride in your calling, career, employment, occupation, position, work, profession, among others.

Aiken *et al.* (2012) reported on job dissatisfaction levels of PNs in twelve countries. The top five countries were: Greece with 56%, Ireland with 42%, England with 39%, Spain with 38%, and Germany with 37%. Recently, Coetzee *et al.* (2013) confirmed that nearly a third (32.2%) of South Africa's PNs (of which 25.8% are in private hospitals and 42.2% are in public hospitals) in medical and surgical units are dissatisfied with their jobs and over half of PNs said they intend to leave their jobs within the next year (of which 51.3% were in private hospitals and 59% were in public hospitals).

Although international studies have highlighted the significant impact which NNTs and NTLU respectively have on job satisfaction, only one study has explored the relationship between all three variables – Scott *et al.* (2012). This study, conducted in Dublin, found that a great number of NNTs were performed by PNs and this had an impact on NTLU and PNs' level of job satisfaction.

The results showed that 43% of PNs "often" performed NNTs, 88% of PNs reported that answering phones or performing clerical duties were done "often" and 26.5% PNs "often" filled in for non-nursing services. Between 49 and 69% of PNs reported they did not get time to update or develop care plans, educate patients and families or provide comfort/talk to patients; 23 to 34% of PNs did not adequately document nursing care, get to planning patients' care, prepare patients or families properly for discharge, adequately provide patient surveillance or perform oral hygiene; 10 to 19% of PNs did not provide skin care, administer medications on time or frequently change the position of patients and lastly, 4 to 6% of PNs reported they did not

provide proper pain management or treatment and procedures. Moreover, 44% of these 612 PNs reported that they wanted to leave their job within the next year as a result of job dissatisfaction (Scott *et al.*, 2012).

This paper adds to the international investigation on the relationship between NNTs, NTLU and job satisfaction by exploring the relationship both on an individual and unit level, while also adding to the scarce and outdated data on these three concepts in South Africa.

3.4 PURPOSE OF THE STUDY

The purpose of this study is to investigate the relationship between NNTs, NTLU and job satisfaction among PNs in medical and surgical units in private and public hospitals in South Africa.

3.5 METHOD

3.5.1 Setting and sample

This study forms part of the RN4CAST programme (Nurse forecasting in Europe) – an international collaborative research programme which is a consortium of fifteen partners in eleven European countries: Belgium, Finland, Germany, Greece, Ireland, Poland, Spain, Sweden, Switzerland, the Netherlands, the United Kingdom (UK); and three partners outside Europe: Botswana, China and South Africa. RN4CAST aims to expand typical forecasting models with reference to the features of work environments, nurse staffing, qualifications of the nurse workforce and the impact of

these on nurse retention, nurse outcomes and patient outcomes (Bruyneel *et al.*, 2009). In order to achieve the purpose of the study, the research approach is quantitative, with a cross-sectional survey design and descriptive, explanatory and contextual research strategies.

The population included 1166 PNs in South Africa who worked in 60 medical and surgical units in public and private hospitals. The study included 62 hospitals in six of the nine provinces in SA. These provinces are Gauteng, North-West, Free State, Eastern Cape, Western Cape and KwaZulu-Natal, which include most hospitals in the private sector and most national referral hospitals in the public sector (Klopper *et al.*, 2012). Of the three largest private hospital groups in South Africa, only two gave permission to participate. The public health sector includes a district, provincial and a national referral level. At district level, which generally do not employ medical specialists, basic services are available. Therefore, patients with more serious conditions are generally referred to national or provincial hospitals as high cost, multi-disciplinary and super specialist services with medical specialists are available at these level hospitals. In the private sector all the super specialist services are available at the hospitals (Van Rensburg & Pelsler, 2004).

The sample sizes were n=55 (N=83) private hospitals (with an urban area location and a bed capacity of a 100 beds or more) and n= 7 (N=8) national referral hospitals in the public sector. Although there are eight national referral hospitals in the public sector, two were excluded due to prolonged ethical clearance. Therefore a provincial hospital in the North-West province was included due to a lack of national referral hospitals in this province and because the researchers wanted to have both

private and public hospitals represented in the sample of the six provinces. Questionnaires were distributed in medical, surgical and critical care units, whereas data from only the 60 medical and surgical units were included in this study. In total 5004 questionnaires were distributed with a response rate of 42.4%. Only 1166 (N=1166) out of 2122 questionnaires from the medical and surgical units were included in this study. Private hospitals had a response rate of 38.2% and public hospitals had a response rate of 53.3%. The higher percentage in the public sector might be due to the fact that the research team distributed the questionnaires themselves in the public sector (Coetzee *et al.*, 2013:164-165).

3.5.2 Instrument

The RN4CAST paper-based survey was used to collect data for this study. The survey contains 118 questions and is categorised into four sections: Section A (About your job), Section B (Quality and safety), Section C (About your most recent shift at work in this hospital) and Section D (About you).

Sections in the survey that are applicable to this study include job satisfaction and aspects of job satisfaction (from Section A), NNTs and NTLU (from Section C) and demographics (from Section D). The job satisfaction section consists of a single question “How satisfied are you with your current job in this hospital?” and responses range from 1 (very dissatisfied) to 4 (very satisfied). There were also items on the PNs satisfaction with nine aspects of their job (of which only six were included), namely work schedule flexibility, opportunities for advancement, independence at work, professional status, wages and educational opportunities, rated on a scale from 1 (very dissatisfied) to 4 (very satisfied) (Sermeus *et al.*, 2011).

In Section C NNTs are determined by the question “On your most recent shift, how often did you perform the following tasks?” and it consisted of nine NNTs rated on a three-point Likert scale ranging from zero (never) to 2 (often). These NNTs are listed as: “Delivering and retrieving food trays”, “Performing non-nursing care”, “Arranging discharge referrals and transportation (including long-term care)”, “Routine phlebotomy/blood drawing for tests”, “Transporting of patients within hospital”, “Cleaning patients’ rooms and equipment”, “Filling in for non-nursing services not available on off-hours” and “Answering phones, clerical duties”.

NLU are determined by the question “On your most recent shift, which of the following activities were necessary but left undone because you lacked the time to complete them?” and it consists of a list of thirteen nursing tasks which are commonly left undone with “Yes” or “No” tick boxes. These tasks include: “Adequate patient surveillance”, “Skin care”, “Oral hygiene”, “Pain management”, “Comfort/talk with patients”, “Educating patients and family”, “Treatments and procedures”, “Administer medications on time”, “Prepare patients and families for discharge”, “Adequately document nursing care”, “Develop or update nursing care plans/care pathways”, “Planning care” and “Frequent changing of patient position”.

3.5.3 Data collection

Appointments were made by the RN4CAST project manager, with the Chief Executive Officers (CEOs) and the RN4CAST programme and procedures were explained to nursing managers of the selected public and private hospitals. Data collection strategies differed in private and public hospitals due to a lack of available

human resources in public hospitals. Private hospitals had an allocated employee (nurse) who collected the data under the project manager's supervision. Proper orientation and training was given about RN4CAST and the distribution and collection of the surveys. The surveys were delivered to appointed wards and were collected by the fieldworker within one week.

In the public hospitals the RN4CAST project manager met with the CEO and nursing managers of each hospital to discuss a data collection plan that would best suit the hospital and selected wards. I participated as a fieldworker in the data collection process in the public hospitals in the North-West Province and Gauteng. Upon arrival at each hospital, the project manager would first confirm our presence at the manager's office before starting with data collection. Thereafter the other fieldworkers and I visited the selected wards with surveys, explained the research project to either the unit manager of the ward (to inform the other staff) or directly to all the staff on duty and made them aware of the contents of the information leaflet. The leaflet explained the purpose of the study, the voluntary nature of participation, and the benefit of the study to the hospital and country. We collected the surveys more or less six hours later. No incentives were offered for participation, only a RN4CAST badge was awarded to each participant in order to create awareness of the RN4CAST programme in the hospital. In some instances where staff could not complete the surveys, extra time was given. The surveys were numbered with codes in order to ensure confidentiality of the information provided by participants. Survey completion implied participant consent.

3.5.4 Data analysis

The computer programme EPIDATA 3.1 (Lauritsen, 2008) was used to capture the data using double entry verification to ensure accuracy and it was analysed by using SPSS 21.0 and the SAS programme. Surveys that had sections missing were excluded from the study, but in instances where only a few questions were missing the data was just left blank in SPSS.

In the survey, ordinal data was collected through Likert scale-type questions and dichotomous data (yes/no). Due to the dependency of answers of PNs in the same unit, hierarchical linear modelling was used, meaning the answers of PNs in a unit were pooled. Statistical significance (p), which indicates that certain results are unlikely to be due to chance (Burns & Grove, 2009) and practical significance (d), which indicates whether results are important in practice (Burns & Grove, 2009) were evaluated. Effect size is a measure of practical significance and is independent from the sample size. The effect size for the difference in means is described by Cohen's d -values as measure of the standardised difference between means and the interpretation guidelines are 0.2 for small; 0.5 for medium and 0.8 for large associations (Ellis & Steyn, 2003:52-53). Cramer's V is used as an effect size to indicate the strength of the association in cross-tabulations, while the correlation coefficient itself gives the strength of the association and the interpretation guidelines are 0.1 for small; 0.3 for medium and 0.5 for large associations (Ellis & Steyn, 2003:52-53). Correlations between and among NNTs, NTLU and job satisfaction are described using a Spearman rank-order correlation coefficient (r) where data of PNs per unit were pooled to account for interdependence of data per unit. Associations in two-way frequency tables, where the dependence of PNs in each unit was taken into

account with PROC SURVEYFREQ of SAS, were also used to examine these relationships through the Chi-square test of independence and an effect size was calculated from it (w) (Burns & Grove, 2009). The formula used for the effect size of the Chi-square test of independence is $w = \sqrt{\frac{x^2}{N}}$ – where x^2 is the Chi-square statistic for the two-way frequency tables used in the results and N stands for the number of participants (Steyn, 2002). The guidelines for interpretation of Spearman rank-order correlation coefficient and w are 0.1 for small; 0.3 for medium and 0.5 for large correlations. Only statistically and practically significant results were reported.

3.6 RESULTS

Sample demographics of PNs between private and public hospitals (see Table 3.1)

INSERT TABLE 3.1 HERE.

Although not significant in practice, public hospitals were more likely to have PNs with baccalaureate degrees than private hospitals. This might be due the mandatory community service year which newly qualified PNs have to complete and also, private hospitals have their own bridging courses qualifying PNs only until diploma level. Gender and age demographics are in accordance with the statistics of the South African Nursing Council (2012).

Descriptive data on NNTs performed by PNs (see Table 3.2)

INSERT TABLE 3.2 HERE.

The four NNTs most commonly conducted by PNs were answering phones, clerical duties (M=1.81), arranging discharge referrals and transportation (M=1.38), performing non-nursing care (M=1.33) and obtaining supplies and equipment (M=1.12). The descriptive data on NNTs revealed a medium practical significant difference between three items: obtaining supplies/equipment ($d=0.64$), cleaning patients' rooms and equipment ($d=0.48$), filling in for non-nursing services ($d=0.47$) and demonstrating that PNs in public hospitals conducted these tasks significantly more times than PNs in private hospitals.

Descriptive data on NTLU by PNs (see Table 3.3)

INSERT TABLE 3.3 HERE.

Percentages reflect the statistics of those who answered yes to the question. Data revealed that more than 50% of PNs nationally reported that comfort/talk with patients (62.2%), educating patients and family (57.9%) and develop or update nursing care plans/pathways (51.6%), were nursing tasks that they left undone. NTLU following shortly hereafter were adequate patient surveillance (44.2%) and adequately document nursing care (43.3%). Although not a significant difference, PNs in private hospitals tended to leave a greater number of NTLU than those in public hospitals.

Descriptive data on job satisfaction and aspects of job satisfaction of PNs (see Table 3.4).

INSERT TABLE 3.4 HERE.

Data revealed that PNs in private hospitals are more satisfied in their jobs than PNs in public hospitals. PNs were most dissatisfied with the following aspects of their jobs: opportunities for advancement ($M=2.60$) and educational opportunities ($M=2.64$). In all aspects, PNs in the private sector were more satisfied than PNs in the public sector, but three aspects that showed the most significant difference between the groups were educational opportunities ($d=0.62$), independence at work ($d=0.50$) and opportunities for advancement ($d=0.49$). Statistical significance was revealed in all but one variable – wages ($p=0.847$), and this was also the aspect PNs were most dissatisfied with.

Correlations between NNTs and NTLU at unit level (see Table 3.5)

INSERT TABLE 3.5 HERE.

Although both Spearman rank order correlations and two-way frequency tables were used, only the Spearman rank order correlations will be reported on, as both showed more or less similar results.

In instances where NNTs correlate positively with NTLU, it means that when a PN performed that NNT, other nursing tasks were left undone. In instances where NNTs correlate negatively with NTLU, it means that when the PN performed that NNT, it left the associated nursing tasks completed.

The NNT “Delivering and retrieving food trays” correlated positively with all thirteen NTLU items. “Routine phlebotomy/blood drawing for tests” correlated positively with four NTLU items – oral hygiene ($r=0.29$), administering medications on time ($r=0.29$), adequately document nursing care ($r=0.30$) and frequent changing of patient position ($r=0.37$). “Cleaning patients’ rooms and equipment” correlated positively with eight NTLU items - adequate patient surveillance ($r=0.30$), oral hygiene ($r=0.33$), pain management ($r=0.29$), administer medications on time ($r=0.28$), adequately document nursing care ($r=0.32$), develop or update nursing care plans/pathways ($r=0.30$), planning care ($r=0.27$) and frequent changing of patient position ($r=0.35$). “Arranging discharge referrals and transportation” correlated negatively with one NTLU item - prepare patients and families for discharge ($r=-0.30$). “Transporting patients in hospital” also correlated negatively with two NTLU items - pain management ($r=-0.28$) and treatments & procedures ($r=-0.29$).

All other NNTs (performing non-nursing care, filling in for non-nursing services not available off-hours, obtaining supplies/equipment and answering phones/clerical duties) showed no correlation with NTLU.

Correlations between “Job satisfaction” and “Aspects of job satisfaction”, “NNTs” & “NTLU” respectively at unit level (see Table 3.6).

INSERT TABLE 3.6 HERE

In instances where job satisfaction or aspects of job satisfaction correlate positively with NTLU or NNTs, it means that PNs were dissatisfied when they had certain nursing tasks left undone or had to perform certain NNTs.

“How satisfied are you with your current job” had no significant correlations with NNTs. However, it correlated negatively with twelve NTLU: adequate patient surveillance ($r=-0.30$), skin care ($r=-0.38$), oral hygiene ($r=-0.30$), pain management ($r=-0.32$), educating patients and family ($r=-0.26$), treatments and procedures ($r=-0.31$), administer medications on time ($r=-0.39$), prepare patients and families for discharge ($r=-0.32$), adequately document nursing care ($r=-0.33$), develop or update nursing care plans/pathways ($r=-0.37$), planning care ($r=-0.33$), frequent changing of patient position ($r=-0.28$).

“Work schedule flexibility” correlated negatively with two NNTs: filling in for non-nursing services not available off-hours ($r=-0.27$) and obtaining supplies or equipment ($r=-0.39$). There was no significant correlation between this aspect of job satisfaction and NTLU.

“Opportunities for advancement” correlated negatively with one NNT: obtaining supplies or equipment ($r=-0.25$). Also, “Opportunities for advancement” correlated negatively with eight NTLU: adequate patient surveillance ($r=-0.27$), skin care ($r=-0.38$), pain management ($r=-0.30$), treatments and procedures ($r=-0.30$), administer medications on time ($r=-0.32$), prepare patients and families for discharge ($r=-0.29$), adequately document nursing care ($r=-0.32$), develop or update nursing care plans/pathways ($r=-0.27$).

“Independence at work” correlated negatively with one NNT – cleaning patients’ rooms and equipment ($r=-0.33$). Moreover, it correlated negatively with seven NTLU:

adequate patient surveillance ($r=-0.27$), skin care ($r=-0.28$), oral hygiene ($r=-0.29$), pain management ($r=-0.27$), administer medications on time ($r=-0.26$), develop or update nursing care plans/pathways ($r=-0.27$), frequent changing of patient position ($r=-0.34$).

“Educational opportunities” had no significant correlations with NNTs. However, it correlated negatively with twelve NTLU: adequate patient surveillance ($r=-0.32$), skin care ($r=-0.39$), oral hygiene ($r=-0.33$), pain management ($r=-0.32$), comfort/talk with patients ($r=-0.33$), educating patients and family ($r=-0.32$), treatments and procedures ($r=-0.33$), administer medications on time ($r=-0.38$), prepare patients and families for discharge ($r=-0.35$), adequately document nursing care ($r=-0.35$), develop or update nursing care plans/pathways ($r=-0.33$) and planning care ($r=-0.34$).

“Professional status” and “Wages” correlated with no NNTs nor NTLU.

3.7 DISCUSSION

According to South African PNs the four most commonly performed NNTs are – answering phones/clerical duties; arranging discharge referrals and transportation, performing non-nursing care and obtaining supplies and equipment. This corresponds with international and national findings, whereas answering phones/clerical duties were reported as the most frequent performed NNT (Bruyneel *et al.*, 2012; Pillay, 2009; Scott *et al.*, 2012; Van Tonder, 1988). Overall, PNs in the public sector conducted more NNTs than PNs in the private sector. The three tasks conducted significantly more by PNs in the public sector than in the private sector were – obtaining supplies and equipment; cleaning patients’ rooms and equipment;

and filling in for non-nursing services not available off hours. Public hospitals in South Africa frequently lack resources, therefore supplies and equipment might not always be obtainable or in working condition (Pillay, 2009; Mokoka, Ehlers & Oosthuizen, 2011). The other NNTs are related to support services and the reason might be that support services function less adequately in public hospitals than in private hospitals.

The five most common NTLU were comfort/talk with patients, educating patients and family and develop or update nursing care plans/pathways, closely followed by adequate patient surveillance and adequately document nursing care. Three of these NTLU were reported by more than 50% of South African PNs and were also reported in a study done in Ireland (Scott *et al.*, 2012) and Kuwait (Al-Kandari & Thomas, 2009). The Kuwait study found that comfort/talk with patients was related to high ward occupancy or wards with more than 25 beds. The average age of PNs in this study is 42 years, categorising them as part of the generation X. Some research has shown they tend to be cynical and therefore pose communication and caring challenges (Appel, 2005). Might this be the reason for communication-related NTLU? However, the two nursing tasks less likely to be left undone were pain management and treatments and procedures (also in accordance with the tasks in the Dublin study (Scott *et al.*, 2012)). This might be because these tasks are associated with discharges, referrals and procedures outside the ward which encourage task completion as well as patients who complain when they have pain. Lastly in terms of NTLU private hospitals revealed the highest number of NTLU. This might be due to many billings and sometimes more charting required by PNs in private hospitals.

PNs in private hospitals were more satisfied with their jobs than PNs in public hospitals. Pillay (2009) and Coetzee *et al.* (2013) support this finding through their studies done in SA. The aspects PNs were the most dissatisfied with in their jobs were opportunities for advancement and educational opportunities. PNs in public hospitals were significantly more dissatisfied with these two aspects. This might be due to low personal growth and low career development experienced by PNs in public hospitals (Oosthuizen & Ehlers, 2007). Dissatisfaction with opportunities for advancement among SA PNs is supported by both Pillay (2009) and Klopper *et al.* (2012).

Interestingly only three NNTs correlated positively with NTLU: delivering and retrieving food trays, routine phlebotomy/blood drawing for tests and cleaning patients' rooms and equipment. This points to the fact, that PNs may consider all the other NNTs to be nursing tasks or part of their workload, while the three NNTs highlighted have designated support services allocated to them, and are clearly recognised by PNs as NNTs and extra work. PNs roles need clarification and role overlapping needs to be addressed in order to minimize NNTs (Fitzgerald *et al.*, 2003, Gran-Moravec & Hughes, 2004). The findings revealed that, although designated support services are allocated to NNTs it appears they are not efficient in their service or not available. International and national research has also found this to be true (Aiken *et al.*, 2001; Van Tonder, 1988).

Amusingly, this study showed that two NNTs (arranging discharge referrals & transportation, and transporting patients in hospital) correlated negatively with

certain NTLU. When PNs have to arrange discharge referrals and transportation, patients and families are prepared for discharge (a NTLU). The reason for this finding might be that by arranging discharge referrals and transportation, the PN is encouraged to prepare the patient and family for discharge due to their file and nursing care that must be up to date. Another interesting finding in this study was that when patients are transported in the hospital (a NNT), it left two tasks: pain medication and treatments & procedures (two NTLU), completed. Rationale for this might be when patients are transferred or they have to go for certain tests or observations outside the ward, it is crucial that a patient receives his or her pain treatment and that all ward procedures are done before leaving the ward.

Overall, PNs were more dissatisfied with their job, not when they performed NNTs, but rather when they left nursing tasks undone (see Table 3.6). Interesting, yet typical of PNs, is that they easily take on extra work which in no way increases their job satisfaction, but actually hinders them from completing their own work. This which causes definite job dissatisfaction. Van Der Merwe (2010) captures this phenomenon well when referring to multi-skilled PNs as being used “off-label” or outside of the scope they were trained for because they are present 24 hours a day. This statement might be linked to the South African culture as South African PNs, being qualified in four nursing areas, are seen as multi-taskers and multi-skilled opposed to many other countries having nursing courses which specialise PNs in certain nursing directions.

The following NNTs influenced certain aspects of job satisfaction among PNs negatively: cleaning patients’ rooms and equipment, filling in for non-nursing

services not available off-hours and obtaining supplies or equipment. This again points to poorly functioning support services (Gagnon *et al.*, 2006) which are also there to help PNs to function to their full scope of practice and will contribute to job satisfaction levels (O'Brien-Pallas *et al.*, 2004:29). Also, a shortage of supplies and lack or poor functioning equipment can cause a hindrance for PNs to complete their nursing tasks, leading to job dissatisfaction.

In various proportions, all thirteen NTLU made PNs dissatisfied with the following four aspects of job satisfaction: overall job satisfaction, opportunities for advancement, independence at work and educational opportunities. All of these speak of PNs wanting to be independent at work, increasing one's sphere of influence, knowledge and expertise, but leaving nursing tasks undone negatively affects these aspirations. Also, Pillay (2009) mentions that opportunities for advancement and educational opportunities contribute to one's personal development and career growth which stimulates and challenges PNs. Therefore, it needs to be urgently considered what it is PNs do and what they ought to do in terms of their skills, education level and expertise (Scott. *et al.*, 2012).

3.8 LIMITATIONS

Cross-sectional data was used and this limits the ability to assert a causal link between NNTs, NTLU and job satisfaction. Moreover, purposive sampling was used and although it included a large set of hospitals across six South African provinces, the sample is not a probability sample. There are also limitations present in terms of data analysis. The Spearman rank order correlations and Chi-square techniques

were used to see if there were any associations in the results. With the Spearman rank order data analysis, data were reduced to an average value of PNs per unit, thus losing some of the data. With the Chi-square data analysis technique all the data were considered as nominal, thus assuming there is no order in the data when in fact there is. However, the fact that these two data analyses gave similar results, is positive.

3.9 CONCLUSION

This study found that South African PNs are more dissatisfied with NTLU than with the NNTs they have to perform. PNs in public hospitals are more dissatisfied with their jobs than PNs in private hospitals and there were only three NNTs associated with NTLU. It is therefore crucial for nurse managers to identify role overlapping by identifying tasks PNs undertake below their skill level. It is crucial to clarify the role of the PN by clarifying the nursing scope of practice and lastly, it is crucial to ensure adequate and full functioning support services.

3.10 ETHICAL APPROVAL

Ethical approval was granted for the RN4CAST programme in South Africa by the North-West University (NWU) in certificate number NWU-0015-08-S1. Ethical clearance was received at national, provincial and district level for the hospitals in the public sector while approval was granted by ethical committees for the two private hospital groups (Coetzee *et al.*, 2013:165).

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3.13 CONFLICT OF INTEREST

None declared.

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ANNEXURE III:

Tables

Table 3.1: Demographic characteristics of PNs (N = 1166)

Variable	Private Hospitals (n=695)	Public Hospitals (n=471)	National Hospitals (n=1166)	Sig.	Effect size
	<i>f (%)</i>	<i>f (%)</i>	<i>f (%)</i>	<i>p</i>	<i>w</i>
Participants: % Surgical units	421 (60.6)	238 (50.5)	659 (56.5)	0.001	0.099
Participants: % Medical units	274 (39.4)	233 (49.5)	507 (43.5)	0.001	0.099
Gender: % Female	663 (96.6)	417 (93.9)	1080 (95.6)	0.029	0.065
% Baccalaureate degree	81 (12.3)	75 (17.4)	156 (14.3)	0.018	0.072
% Working full-time	657 (96.2)	415 (94.1)	1072 (95.4)	0.104	0.049
	Private Hospitals (n=642)	Public Hospitals (n=421)	National Hospitals (n=1063)		Effect size
	Mean (SD)	Mean (SD)	Mean (SD)	<i>p</i>	Cohen's <i>d</i>
Average age	41(10.1)	43 (9.6)	41.95 (9.9)	0.048	0.20

Table 3.2: Descriptive data on NNTs (N=1166)

Variable	Private Hospitals (n=695)		Public Hospitals (n=471)		National Hospitals (n=1166)		Sig.	Effect size
	N	Mean (SD)	n	Mean (SD)	n	Mean (SD)	<i>p</i>	Cohen <i>d</i>
1. Delivering & retrieving food trays	666	1.07 (0.61)	425	1.08 (0.68)	1091	1.07 (0.64)	0.001	0.02
2. Performing non-nursing care	665	1.26 (0.62)	424	1.43 (0.64)	1089	1.33 (0.63)	0.003	0.26
3 Arranging discharge referrals and transportation (including to long-term care)	665	1.33 (0.71)	423	1.45 (0.67)	1088	1.38 (0.70)	0.007	0.16
4. Routine phlebotomy/ blood drawing for tests	664	0.74 (0.75)	421	0.75 (0.78)	1085	0.75 (0.76)	0.929	0.01
5. Transporting of patients within hospital	669	1.01 (0.70)	424	0.96 (0.71)	1093	0.99 (0.70)	0.277	0.07
6. Cleaning patients' rooms and equipment	657	0.80 (0.69)	420	1.13 (0.7)	1077	0.93 (0.71)	0.001	0.48
7. Filling in for non-nursing services not available off-hours	656	0.68 (0.69)	416	1.03 (0.76)	1072	0.81 (0.74)	0.001	0.47
8. Obtaining supplies or equipment	660	0.95 (0.67)	426	1.38 (0.65)	1086	1.12 (0.70)	0.001	0.64
9. Answering phones, clerical duties	675	1.81 (0.41)	426	1.82 (0.42)	1101	1.81 (0.42)	0.845	0.01

Table 3.3: Descriptive data on NTLU (N=1166)

Variable	Private Hospitals (n=695)	Public Hospitals (n=471)	National Hospitals (n=1166)	Asymp. Sig. (2-sided)	Effect Size
	<i>f (%)</i>	<i>f (%)</i>	<i>f (%)</i>	<i>p</i>	<i>w</i>
1. Adequate patient surveillance	247 (42.7)	172 (46.6)	419 (44.2)	0.241	0.038
2. Skin care	194 (33.6)	123 (33.3)	317 (33.5)	0.942	0.002
3. Oral hygiene	211 (36.5)	140 (37.9)	351 (37.1)	0.656	0.014
4. Pain management	77 (13.3)	51 (13.8)	128 (13.5)	0.827	0.007
5. Comfort/talk with patients	377 (65.2)	212 (57.5)	589 (62.2)	0.016	0.078
6. Educating patients & family	339 (58.7)	209 (56.6)	548 (57.9)	0.541	0.020
7. Treatments & procedures	72 (12.5)	46 (12.5)	118 (12.5)	0.997	0.000
8. Administer medications on time	162 (28.0)	82 (22.2)	244 (25.8)	0.046	0.065
9. Prepare patients and families for discharge	144 (24.9)	133 (36.0)	277 (29.3)	0.000	0.119
10. Adequately document nursing care	260 (45.0)	150 (40.7)	410 (43.3)	0.189	0.043
11. Develop or update nursing care plans/pathways	309 (53.5)	180 (48.8)	489 (51.6)	0.160	0.046
12. Planning care	220 (38.1)	116 (31.4)	336 (35.5)	0.038	0.068
13. Frequent changing of patient position	212 (36.7)	139 (37.7)	351 (37.1)	0.758	0.010

Table 3.4: Descriptive data on job satisfaction and aspects of job satisfaction (N=1166)

Variable	Private Hospitals (n=695)		Public Hospitals (n=471)		National Hospitals (n=1166)		Sig.	Effect size
	n	Mean (SD)	n	Mean (SD)	n	Mean (SD)	<i>p</i>	Cohen's <i>d</i>
1. Job satisfaction with current job	681	2.82 (0.87)	450	2.46 (0.97)	1131	2.68 (0.92)	0.001	0.43
2. Work schedule flexibility	684	3.02 (0.84)	458	2.71 (0.84)	1142	2.89 (0.85)	0.005	0.44
3. Opportunities for advancement	675	2.77 (0.89)	446	2.36 (0.94)	1121	2.60 (0.93)	0.001	0.49
4. Independence at work	682	3.11 (0.79)	452	2.77 (0.89)	1134	2.97 (0.85)	0.001	0.50
5. Professional status	672	3.07 (0.83)	445	2.78 (0.91)	1117	2.95 (0.87)	0.001	0.40
6. Wages	684	2.03 (0.96)	455	1.99 (0.95)	1139	2.01 (0.96)	0.466	0.05
7. Educational opportunities	668	2.86 (0.89)	454	2.32 (0.99)	1122	2.64 (0.97)	0.001	0.62

Table 3.5: Results of Spearman rank order correlations between NNTs and NTLU (n=60)

	1.1.Delivering & Retrieving food trays	1.2. Performing non-nursing care	1.3. Arranging discharge referrals and transportation	1.4.Routine phlebotomy/ blood drawing for tests	1.5. Transporting patients in hospital	1.6.Cleaning patients' rooms and equipment	1.7.Filling in for non-nursing services not available off-hours	1.8.Obtaining supplies/ equipment	1.9.Answering phones, clerical duties
1. Adequate patient surveillance	0.47*	0.08	-0.16	0.25	-0.22	0.30*	0.19	0.02	0.07
2. Skin care	0.42*	0.03	-0.16	0.23	-0.23	0.23	0.05	0.02	-0.01
3. Oral hygiene	0.43*	0.06	-0.11	0.29*	-0.12	0.33*	0.14	0.01	0.05
4. Pain management	0.40*	0.00	-0.13	0.24	-0.28*	0.29*	0.09	0.08	-0.05
5. Comfort/talk with patients	0.31*	0.03	-0.24	0.12	-0.19	0.23	0.16	0.00	0.06
6. Educating patients & family	0.31*	0.08	-0.23	0.14	-0.12	0.19	0.17	-0.01	-0.01
7. Treatments & procedures	0.40*	0.02	-0.15	0.24	-0.29*	0.26	0.07	0.11	-0.01
8. Administer medications on time	0.43*	-0.01	-0.18	0.29*	-0.23	0.28*	0.06	0.03	-0.03
9. Prepare patients and families for discharge	0.30*	-0.04	-0.30*	0.12	-0.18	0.17	0.09	0.01	-0.10
10. Adequately document nursing care	0.37*	0.05	-0.07	0.30*	-0.18	0.32*	0.11	0.07	0.01
11. Develop or update nursing care plans/pathways	0.40*	-0.05	-0.24	0.19	-0.22	0.30*	0.03	-0.02	0.03
12. Planning care	0.38*	-0.02	-0.18	0.24	-0.26	0.27*	0.06	-0.01	-0.03
13. Frequent changing of patient position	0.38*	0.00	-0.07	0.37*	-0.15	0.35*	0.09	-0.01	0.03

* Indicates statistical significance

Table 3.6: Results of Spearman rank order Correlations between “Job satisfaction and Aspects of job satisfaction” and “NNTs” and “NTLU” respectively (n=60)

	How satisfied are you with your current job?	Work schedule flexibility	Opportunities for advancement	Independence at work	Professional status	Wages	Educational opportunities
1. NNTs							
1.1. Delivering & retrieving food trays	-0.03	0.10	0.02	-0.12	-0.02	-0.11	-0.05
1.2. Performing non-nursing care	0.02	0.05	-0.07	-0.22	-0.09	0.06	-0.18
1.3. Arranging discharge referrals and transportation (including long-term care)	-0.03	0.01	-0.09	0.04	0.15	0.21	0.08
1.4. Routine phlebotomy/ blood drawing for tests	-0.02	0.13	0.00	-0.06	0.04	0.10	0.00
1.5. Transporting of patients within hospital	0.20	0.00	.023	0.12	0.17	-0.09	0.21
1.6. Cleaning patients' rooms and equipment	-0.05	-0.16	0.07	-0.33*	-0.15	-0.18	-0.11
1.7. Filling in for non-nursing services not available off-hours	-0.20	-0.27*	-0.16	-0.08	-0.23	-0.11	-0.06
1.8. Obtaining supplies or equipment	-0.17	-0.39*	-0.25*	-0.19	-0.24	0.04	-0.21
1.9. Answering phones, clerical duties	-0.02	0.06	-0.12	-0.08	-0.07	0.00	-0.02
1. NTLU							
2.1. Adequate patient surveillance	-0.30*	-0.06	-0.27*	-0.27*	-0.09	-0.13	-0.32*
2.2. Skin care	-0.38*	-0.14	-0.38*	-0.28*	-0.20	-0.13	-0.39*
2.3. Oral hygiene	-0.30*	-0.07	-0.23	-0.29*	-0.15	-0.14	-0.33*
2.4. Pain management	-0.32*	-0.19	-0.30*	-0.27*	-0.16	-0.11	-0.32*
2.5. Comfort/talk with patients	-0.25	-0.06	-0.20	-0.17	-0.06	-0.18	-0.33*
2.6. Educating patients & family	-0.26*	-0.07	-0.20	-0.18	-0.02	-0.18	-0.32*
2.7. Treatments & procedures	-0.31*	-0.19	-0.30*	-0.27	-0.18	-0.11	-0.33*
2.8. Administer medications on time	-0.39*	-0.16	-0.32*	-0.26*	-0.23	-0.21	-0.38*
2.9. Prepare patients and families for discharge	-0.32*	-0.25	-0.29*	-0.25	-0.16	-0.23	-0.35*
2.10. Adequately document nursing care	-0.33*	-0.13	-0.32*	-0.24	-0.23	-0.12	-0.35*
2.11. Develop or update nursing care plans/pathways	-0.37*	-0.18	-0.27*	-0.27*	-0.13	-0.13	-0.33*
2.12. Planning care	-0.33*	-0.14	-0.25	-0.24	-0.15	-0.13	-0.34*
2.13. Frequent changing of patient position	-0.28*	-0.06	-0.17	-0.34*	-0.15	-0.15	-0.26

*Indicates statistical significance

CHAPTER 4: EVALUATION OF THE STUDY, LIMITATIONS AND RECOMMENDATIONS FOR PRACTICE, EDUCATION, RESEARCH AND POLICY

4.1 INTRODUCTION

An evaluation of this study is done in order to determine whether outcomes were reached. Conclusions of this study are discussed within a portion of this chapter.

Limitations will be discussed in order to establish whether there are theoretical and methodological restrictions or weaknesses that may decrease the capacity to generalise the findings in the study (Burns & Grove, 2009:707).

Recommendations will be given in order to express the ideas that emerged from this study and from previous studies done in the same area that can give direction for the future (Burns & Grove, 2009:718). These ideas are directed toward recommendations for non-nursing tasks, nursing tasks left undone and job satisfaction among PNs in medical and surgical units.

4.2 EVALUATION OF THE STUDY

This study was performed in fulfilment of the degree *Magister Curationis* requirements. In terms of the research process, the researcher gained confidence and understanding while completing the dissertation.

The study aimed to investigate the relationship between NNTs, NTLU and job satisfaction amongst PNs in medical and surgical units in private and public hospitals in South Africa.

A need for this study was identified when an international gap was identified in terms of combined exploration between NNTs, NTLU and job satisfaction as well as exploring these variables on both individual (PN) and unit level. Another need for this study was identified after finding that the last study done on NNTs in South Africa was in 1988. In addition, a need for research on NTLU in South Africa was identified.

A cross-sectional survey design and descriptive, explanatory and contextual research strategies were used in order to answer four questions: 1) What is the frequency of non-nursing tasks performed, the number of nursing tasks left undone and the level of job satisfaction amongst PNs in medical and surgical units in private and public hospitals in South Africa? 2) What relationship exists between non-nursing task and nursing tasks left undone amongst PNs on their most recent shifts in medical and surgical units in private and public hospitals in South Africa? 3) What relationship exists between non-nursing tasks and the level of job satisfaction amongst PNs in medical and surgical units in private and public hospitals in South Africa? 4) What relationship exists between nursing tasks left undone and the level of job satisfaction amongst PNs in medical and surgical units in private and public hospitals in South Africa? The RN4CAST survey was used for data collection and the data was statistically analysed in order to answer the questions.

Findings included that Ho1 (There is no significant relationship between NNTs performed, the number of NTLU and job satisfaction amongst PNs in medical and surgical units in SA) was rejected and Ha1 (There is a significant relationship between NNTs performed, the number of NTLU and job satisfaction of PNs on their most recent shift) was accepted.

This study revealed that South African PNs most commonly perform the following NNTs: answering phones, clerical duties (M=1.81); arranging discharge referrals and transportation (M=1.38), performing non-nursing care (M=1.33) and obtaining supplies and equipment (M=1.12). PNs in the public sector conducted more NNTs than PNs in the private sector. Moreover, three tasks were conducted significantly more often by PNs in the public sector than in the private sector. These tasks were: obtaining supplies and equipment (M=1.38); cleaning patients' rooms and equipment (M=1.13); and filling in for non-nursing services not available off hours (M=1.03).

NTLU descriptive data revealed that more than 50% of PNs (see Table 3.3) nationally reported that comfort/talk with patients (62.2%), educating patients and family (57.9%) and develop or update nursing care plans/pathways (51.6%), were nursing tasks that they left undone. Close to 50% of NTLU were adequate patient surveillance (44.2%) and adequately document nursing care (43.3%). Although not a significant difference, PNs in private hospitals tended to leave a greater number of NTLU than public hospitals.

The descriptive data on aspects of job satisfaction with current job revealed that PNs in private hospitals are more satisfied than PNs in public hospitals. PNs were most

dissatisfied with the following aspects of their jobs: opportunities for advancement ($M=2.60$) and educational opportunities ($M=2.64$). In all aspects PNs in the private sector were more satisfied than PNs in the public sector, but three aspects that showed the most significant difference between private and public hospitals were educational opportunities ($d=0.62$), independence at work ($d=0.50$) and opportunities for advancement ($d=0.49$) in public hospitals. Statistical significance was revealed in all but one variable – wages ($p=0.847$), and this was also the aspect PNs were most dissatisfied with.

When PNs perform the following NNTs, some nursing tasks are left undone: delivering and retrieving food trays, routine phlebotomy/blood drawing for tests and cleaning patients' rooms and equipment. However, when PNs arrange discharge referrals & transportation, and transport patients in hospital, nursing tasks are done.

PNs were dissatisfied with their job, not when they performed NNTs, but rather when they left nursing tasks undone. Three out of nine NNTs (cleaning patients' rooms and equipment, filling in for non-nursing services not available off-hours and obtaining supplies or equipment) that made PNs dissatisfied with three aspects of job satisfaction (work schedule flexibility, opportunities for advancement and independence at work). Whereas all thirteen NTLU made PNs dissatisfied with overall job satisfaction as well as three aspects of job satisfaction (opportunities for advancement, independence at work and educational opportunities).

Herzberg's (1968) motivational hygiene theory is used as a theoretical assumption in this study. According to this theory there are motivational factors (which can lead to

job satisfaction) and hygiene factors (which can lead to job dissatisfaction) (see Chapter 1). It was assumed that when NNTs (work itself) are performed instead of nursing tasks (or leaving nursing tasks undone) the sense of a PNs responsibility and achievement (both motivational factors) are not experienced by the PN. Therefore, when a PN lacks fulfilment in certain motivational factors – growth, work, responsibility, achievement, advancement, or recognition, it can lead to job dissatisfaction. It was revealed by the study that NTLU leads to greater job dissatisfaction than when NNTs are performed. It is also true that when hygiene factors (which include status) are present, it can cause job dissatisfaction. In this study the aspects of job satisfaction – opportunities for advancement, independence at work and educational opportunities can be related to status. Therefore with as many as thirteen NTLU, PNs were dissatisfied with these aspects of their jobs.

4.3 CONCLUSIONS

The following conclusions are based on the results found in this study in terms of NNTs, NTLU and job satisfaction.

4.3.1 PNs are unclear about what NNTs are.

Only three NNTs correlated positively with NTLU: delivering and retrieving food trays, routine phlebotomy/blood drawing for tests and cleaning patients' rooms and equipment. This shows that PNs may consider all the other NNTs to be nursing tasks or part of their workload, while the three NNTs highlighted have designated support services allocated to them, and are clearly recognised by PNs as NNTs and extra work.

4.3.2 NNTs are more commonly performed in public hospitals than in private hospitals

Because public hospitals in South Africa frequently lack resources, supplies and equipment might not always be obtainable or in working condition (Pillay, 2009). Moreover, some of these activities are related to support services and the reason might be that support services function less adequately in public hospitals than in private hospitals.

4.3.3 Public hospital PNs are more dissatisfied with their jobs than private hospital PNs in SA

This study concurs with two other studies done in SA (Oosthuizen & Ehlers, 2007; Pillay, 2009). PNs in public hospitals are more dissatisfied with opportunities for advancement and educational opportunities than PNs in private hospitals. These two opportunities are prospects of further personal development, creating stimulation and challenge in growing in a career and essentially contributing to one's morale (Pillay, 2009). When these are suppressed, it can lead to job dissatisfaction.

4.3.4 Job satisfaction among PNs in South African hospitals is not significantly affected by NNTs

No NNT correlated with the current job satisfaction of PNs. In terms of the aspects of job satisfaction, there were only four (out of nine) NNTs which correlated with three (out of four) aspects. This might be because PNs are unclear about what NNTs are.

4.3.5 NTLU strongly correlated with job dissatisfaction among PNs in SA

In various proportions, all thirteen NTLU made PNs dissatisfied with overall job satisfaction and the following three aspects of job satisfaction: opportunities for advancement, independence at work and educational opportunities. All of these speak of PNs wanting to be independent at work, increasing one's sphere of influence, knowledge and expertise, but leaving nursing tasks undone negatively affects these aspirations. Also, Pillay (2009) mentions that opportunities for advancement and educational opportunities contribute to one's personal development and career growth which stimulates and challenges PNs.

4.4 LIMITATIONS

Cross-sectional data was used and this limits the ability to assert a causal link between NNTs, NTLU and job satisfaction. Moreover, purposive sampling was used and although it included a large set of hospitals across six South African provinces, the sample is not a probability sample. There are also limitations in terms of data analysis. The Spearman rank order correlations and Chi-square techniques were used in order to determine whether there were any associations in the results. With the Spearman rank order data analysis, data were reduced to an average value of PNs per unit, thus losing some of the data. With the Chi-square data analysis technique all the data were considered as nominal, thus assuming there is no order in the data when in fact there is. However, the fact that these two data analyses give similar results is positive.

4.5 RECOMMENDATIONS

Recommendations will be given in terms of nursing practice, contributions to the nursing education, possible policy improvements and orientation programmes, and further research on the topic.

4.5.1 Nursing practice

South African nursing Scope of Practice needs clarification, in order to focus PNs and to clarify their position. The version of the Scope of Practice explored in this study was based on the one of 1991. Recently, in October 2013, a new Scope of Practice was launched. Not finalised yet, it is still open for inputs. Hopefully this new version will guide PNs in order to know what their tasks are and to identify the tasks that can be delegated.

4.5.2 Nursing education

Nurse training facilities throughout South Africa should emphasise the PNs role while training, in order to focus them on the tasks they are assigned to do and clarify the role of other nursing staff and support services. PNs might also have to be taught how to collaboratively work and communicate with other nursing staff and support services in order to build a respectful colleague relationship.

4.5.3 Policy

Nurse managers can put orientation programmes, policies and collaborative meetings in place in order to clarify the role of PNs, lower category nursing staff and support services. This will lead to the creation of a collaborative working environment in which all staff is aware of their role and position, thus relieving PNs

and letting them perform their nursing tasks thoroughly and spend less time on NNTs.

4.5.4 Research

A time-and-motion study might be relevant to see whether PNs' perceptions found in this study correlate with real time research findings.

4.6 SUMMARY

An evaluation of this study was done, conclusions were given and discussed, limitations were stated and recommendations were made for nursing practice and management, nursing education and nursing research.

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ADDENDUM I:

Language editing certificate



Astute Editing and Research

November 2013

To Whom It May Concern

Dear Sir/Madam,

This is to certify that I have fully edited the MA thesis of Ms Monique Bekker entitled "The relationship between non-nursing tasks, nursing tasks left undone and job satisfaction among professional nurses in South African hospitals" for North-West University. The text was checked for style, clarity and ease of reading, grammar and usage, spelling and punctuation, consistency in the use of text and figures in illustrations and tables, completeness and consistency in references, consistency in page numbering, headers and footers and suggestions were offered. The editor makes no pretension to have improved the intellectual content of the thesis and did not rewrite any text. The editor's suggestions are to be accepted or rejected by the author(s). The author(s) effected the final changes themselves.

Yours sincerely,

C.D. Schutte (D Litt et Phil, Full Member, Professional Editors' Group)
Telephone 012-342-3518 Mobile 083-310-1806
4 Gospel Close, 821 Stanza Bopape Street, Arcadia 0083, Pretoria.