

**EFFECTS OF SECONDARY TRAUMATIC STRESS AMONGST
NURSES IN AN ACUTE TERTIARY PSYCHIATRIC HOSPITAL IN
KWAZULU-NATAL**

BY

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DECLARATION

I, Anashnee Chinaboo hereby declare that all the content within this dissertation is my own work. Researchers or authors that have contributed to this dissertation have been duly acknowledged within. The work has not previously been submitted in any form to the Durban University of Technology or to any other institution for assessment or any other purpose.

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DEDICATION

This dissertation is dedicated to my mum Chandeni Marian, my late dad Balakrishna Marian and my beautiful sister, Kavitha Naidoo. Thank you for always being a pillar of strength and support.

Lastly to the most wonderful friend and earth angel I could have ever asked for, Lucelle Ramlucken. I will forever cherish your love and constant unwavering support.

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ABSTRACT

BACKGROUND: Mental healthcare nurses (MHCNs) are often exposed to the narratives of the mental healthcare users (MHCUs) who often describe graphic details of occurrences or incidents they have experienced such as child abuse, violence and sexual assault. Due to their empathetic engagement and level of exposure to the MHCUs trauma, MHCNs may become traumatised themselves resulting in secondary traumatic stress (STS).

PURPOSE OF THE STUDY: The purpose of the study was to determine the prevalence and the personal and professional effects of STS among nurses working in a tertiary psychiatric hospital in KwaZulu-Natal (KZN).

METHODOLOGY: The study followed a quantitative, non-experimental descriptive design and took place at a tertiary psychiatric hospital in KZN. Non-probability purposive sampling was used to select 183 respondents. Data were collected using survey questionnaires. The theoretical framework was the Professional Quality of Life Model (ProQOL) (Stamm 2005).

RESULTS: The findings of this study showed that there is a prevalence of STS. Although 66.5% (n = 122) of the respondents experienced little to mild to no STS, a significant percentage of the respondents (33.5%, n = 61) experienced moderate to high levels of STS. The enrolled nurses (ENs) reported higher levels of STS, job dissatisfaction and personal life dissatisfaction compared to the registered nurses (RNs) and enrolled nursing assistants (ENAs).

RECOMMENDATIONS: The inclusion of STS into the nursing curriculum is recommended.

KEYWORDS: Psychiatric institution, Mental healthcare practitioner, Mental healthcare user, Secondary traumatic stress.

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GLOSSARY OF TERMS

Mental healthcare user: According to the Mental Health Care Act, No. 17 of 2002 a mental healthcare user (MHCU) is a person receiving care, treatment and rehabilitation services, or using a health service at a health establishment aimed at enhancing the mental health status of a user (Republic of South Africa, Department of Health 2002).

Mental healthcare practitioner: According to the Mental Health Care Act 17 of 2002) (Republic of South Africa, Department of Health 2002: 10), a mental healthcare practitioner (MHCP) is a psychiatrist or registered medical practitioner or a nurse, occupational therapist, psychologist or social worker who has been trained to provide prescribed mental healthcare, treatment and rehabilitation services.

Psychiatric institution: A psychiatric hospital is a health establishment that provides care, treatment and rehabilitation services only for users with mental illness (Republic of South Africa, Department of Health 2002: 7).

Secondary traumatic stress: According to Dr Charles Figley (1995: 7), secondary traumatic stress (STS) is “the natural consequent behaviours, resulting from knowledge about a traumatising event experienced by a significant other. It is the stress resulting from helping or wanting to help a traumatised or suffering person.”

LIST OF ACRONYMS

Acronyms	Full Name
MHCU	Mental healthcare user
KZN	KwaZulu-Natal
STS	Secondary traumatic stress
PTSD	Post-traumatic stress disorder
CS	Compassion satisfaction
CF	Compassion fatigue
STSD	Secondary traumatic stress disorder
SANC	South African Nursing Council
PN	Professional nurse
EN	Enrolled nurse
ENA	Enrolled nursing assistant
SA	South Africa
DSM	Diagnostic and statistical manual

CHAPTER 1: STUDY OVERVIEW

1.1 Introduction and background

Sigmund Freud is an influential scientist in the field of psychiatry and was one of the first people to investigate the concept of secondary traumatic stress (STS) in 1910. His theory of countertransference was initially used to describe the ways a therapist allowed their personal feelings, thoughts and experiences to interfere with how they conceptualised a client (Johnson 2016: 25).

The use of the term 'secondary traumatic stress' was described by Charles Figley (1995: 7) as being a natural behaviour and an emotion in one individual as a result of knowing about a traumatising event that was experienced by another. The concept of STS was developed by Figley and Beth Stamm in the early 1990s (Figley 1995: 1). They aimed to understand the reason that certain service providers demonstrated similar symptoms to post-traumatic stress disorder (PTSD) despite not having been exposed to the trauma incident themselves. They then claimed that service professionals can either experience the positive or the negative impact of helping others. The positive outcome from engaging with challenging patients has been defined as compassion satisfaction (CS) (Cetrano *et al.* 2017: 2). On the other hand, compassion fatigue (CF), or STS, is the negative effect of assisting clients who have had negative or traumatic experiences. For this research, the term STS has been adopted, however at times the more general term 'compassion fatigue' will be used as certain researchers make use of this term.

Thompson (2018: 1) states that being exposed to the traumatic experiences of a client while assisting them to recover from their trauma tends to psychologically harm the helper. This can result in professional exhaustion or burnout (BO), or it can turn into real trauma on the side of the helper, a concept that was termed 'secondary trauma' (Stamm 2005: 5). As such, the quality of life of service professionals is determined by the balance of the two factors: CS and CF. Others have argued that the condition of experiencing STS has been so termed because it resembles that of PTSD (Golab,

Partyka and Rzeszutek 2014: 63). However, Jacobs *et al.* (2019: 2) are of the view that STS symptoms are a form of primary traumatic stress, arising from caring for a traumatised patient.

Unfortunate incidents occur almost daily in our environment such as witnessing a death, an injury, being attacked or a fatal accident or illness (Benjet *et al.* 2016: 1). The connection of these distressing incidents with the human psyche is daily fodder for psychologists. While it is not argued that all unfortunate incidents cause significant trauma, Missouriidou (2017: 110) contends that psychological trauma results from a failure in an individual's ability to integrate overwhelming emotional experiences and may develop into a deep psychological injury at an unconscious level. The mind is overwhelmed and cannot either rationalise the incident or justify it. Violent crime is among many causes of traumatic stress (Jacobs and Coetzee 2018: 177) and it is now common in many contexts. Sub-Saharan Africa is home to many forms of violent crimes, such as human trafficking (Bello and Olutolo 2021: 1), ethnic and civil conflicts in the form of xenophobia (Tella 2016: 1), gender-based violence (Bamiwuye and Odimegwu 2014: 1) and HIV/AIDS and sexual mutilation (Kharsany and Karim 2016: 1). Africa Check (2019) mentions that in 2016/2017 there were 19 016 murders and on average 40 035 rapes each day, and 625 incidents of house burglaries.

Studies in South Africa (SA) indicate similar accounts of traumatic experiences such as xenophobic attacks (Durokifa and Ijeoma 2017: 3293), organ and human trafficking (Somduth 2018), and robberies (Koelble 2018: 1). According to the 2019 South African Crime Statistics, violent crime is on the rise with murder rising by 3.4%, attempted murder 4.1%, and sexual offences by 4.6% (Africa Check 2019). According to the South African Depression and Anxiety Group (2014), violent crime and other traumatic experiences tend to push many people into suicide (Bateman 2014: 29). However, the majority of crime survivors seek assistance from a number of social services centres and are seen by healthcare professionals.

Mental healthcare users (MHCUs) who have been traumatised may thus seek the assistance of a mental healthcare practitioner (MHCP) such as a mental healthcare nurse (MHCN) to assist them to cope with these traumatic experiences. According to the South African Nursing Council (SANC) (South African Nursing Council [SANC]

SANC 2005: 34) nurses are classified into professional nurse (PN), enrolled nurse (EN) and enrolled nursing assistant/auxiliary (ENA) as specified in section 31(1) of the Nursing Act, No 33 of 2005. These different categories of nurses, deal with MHCUs who have experienced various forms of trauma and violence.

MHCNs are constantly exposed to the distressing realities of the patient's trauma since in seeking assistance from the MHCU, they will be required to share the sensitive or graphic details of their trauma. MHCUs include individuals that suffer from mental illness, and who have been admitted to an acute tertiary psychiatric unit for various psychiatric conditions such as substance-induced psychosis, violence and aggression and acute crisis management such as suicidal behaviour. This exposure to the MHCUs' trauma can be harmful to nurses' quality of life (Stokes *et al.* 2017: 6) and may lead to re-traumatisation of the caregiver (Christodoulou-Fella *et al.* 2017: 3).

In the quest to empathise with the victims of traumatic events, care providers like nurses can end up taking on the suffering of patients as a significant element of the cost of caring (Franza, Del Buono and Pellegrino 2015: 321). Shoji, Douglas, Melville, Luszczynska and Benight (2015: 3) mention that one of the necessary conditions that is needed to develop STS is indirect exposure to trauma. According to Bock *et al.* (2020: 2), indirect exposure to the trauma of others may have devastating emotional effects on an individual's health.

Carey (2017: 44) concurs with Bock *et al.* (2020: 2), stating that the exposure to the haunting nature of the tales of patients' narratives may affect individuals psychologically, resulting in emotions that may be traumatic. For example, it may result in MHCNs experiencing feelings of intrusion, arousal or avoidance symptoms which are associated with STS (Guitar and Molinaro 2017: 42). Furthermore, these symptoms may negatively impact on the behaviours, beliefs and emotions of the healthcare worker (Vîrgă *et al.* 2020: 2).

According to Johnson (2016: 27), these symptoms can have deleterious effects in the form of psychological distress, somatic symptoms such as headaches, chronic fatigue, gastrointestinal issues, and may disrupt interpersonal relationships. These effects may also be evident in the MHCNs personal and professional life, as individuals

experiencing STS are also more likely to suffer from sleep problems, anxiety, lack of concentration, avoidance, and loss of energy (MacEachern *et al.* 2019: 169). Wright (2018: 1), a former Canadian nurse, confessed that the effects of STS on her professionally and personally was one of the main reasons for her leaving the nursing profession after 22 years. Therefore, STS may be a contributing factor for many MHCNs either leaving the profession or seeking less stressful fields such as general or community nursing.

Despite some research indicating that STS has negative consequences on carers, many believe that the gratification aspect or CS that healthcare professionals obtain from their work may be a motivating factor for most professionals to stay in their profession (Adeyemo *et al.* 2015: 69; Sacco *et al.* 2015: 35).

Thus, the act of being empathetic and caring for the MHCU may be detrimental and become a double-edged sword for MHCNs either evoking positive or negative feelings when rendering care.

1.2 Problem statement

According to Thompson (2017: 5), the field of psychiatry can be hazardous and demanding. Johnson (2016: 14) states that STS is an occupational hazard for those who render direct services to traumatised individuals. If MHCNs are under considerable strain from their work environment there is a likelihood of them being negligent resulting in litigation from the MHCUs or their families. Williams (2018: 17) states that over the years there has been a significant increase in the number of negligence claims in SA which is costing the provincial department millions of rands.

At the current institution where the study was carried out, the researcher observed that MHCNs showed signs and symptoms of STS often expressing that they felt overwhelmed, frustrated, constantly fatigued and had a low professional performance as a result of working with individuals that have been subjected to trauma. Some MHCNs, for example in the Child and Adolescent Unit, stated that their way of coping with the psychological stress of their patients was sometimes avoidance of certain MHCUs. According to them, this is a means of helping them cope psychologically as the traumatic narratives of these MHCUs had affected their physical and mental

health. According to the human resources manager, the sick leave rate at the current institution is relatively high as around 10% of staff book off sick every month. Additionally, there is not much awareness of the effects of STS on psychiatric nurses in SA. Studies carried out in SA have mainly focused on the nurse's experiences, coping methods or professional quality of life of nurses working in psychiatric institutions (Sobekwa and Arunachallam 2015; Bimenyimana *et al.* 2009; Buthelezi *et al.* 2015; Yusi 2015, Maila, Martin and Chipps 2020). To date, no studies have focused on the effects of STS on nurses working in acute tertiary psychiatric hospitals in KwaZulu-Natal. For this reason, the study will focus on MHCNs working in an acute tertiary psychiatric institution. This study will, therefore, hopefully, reduce the volume of litigation involving psychiatric nurses as they will become aware of the ramifications of working with traumatised MHCUs.

1.3 Study aim

The study aims to determine the effects of secondary traumatic stress among nurses in an acute tertiary psychiatric hospital in KwaZulu-Natal.

1.3.1 Objectives

The objectives of the study were to:

- Determine the prevalence of secondary traumatic stress experienced by nurses working in an acute psychiatric hospital.
- Determine the effects of secondary traumatic stress on the nurses' personal life.
- Determine the effects of secondary traumatic stress on the nurses' professional life.

1.4 Significance of the study

There is paucity of local literature related to the topic, therefore research in this area for psychiatric nurses is of great value. The significance of this research is that it documents the prevalence of STS in MHCNs rendering mental healthcare nursing thus contributing to management of their overall well-being. Furthermore, the data from this study can be used to develop a greater understanding of how to prevent STS in MHCNs and how to promote CS instead. The motivation for nursing education to

include STS may also be strengthened. This study will hopefully also reduce the volume of litigation involving psychiatric nurses as they will become aware of the ramifications of working with traumatised MHCUs.

1.5 Structure of the dissertation

The dissertation consists of seven chapters, as indicated in Table 1.1.

Table 1.1: Chapters of the dissertation

Chapter	Content
1. Orientation to the study	Introduction and background to the study.
2. Literature review	Review of the related literature.
3. Theoretical framework	Theoretical framework which guided the study.
4. Research design and methodology	Research design, sampling process, data collection and analysis as well as ethical considerations.
5. Results	Presentation of results.
6. Discussion of results	Discussion and explanation of results.
7. Conclusion, limitations and recommendations	Summary of findings, study limitations and recommendations.

1.6 Summary of the chapter

This chapter presented the introduction and background of STS. The purpose and objectives of this study were stated. Literature reviewed for this study will be discussed in detail in the next chapter.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

The literature reviewed for this study will be discussed in this chapter. In the process of the literature review, the researcher used information from books, peer-reviewed articles and electronic databases. The literature review will be structured as follows: STS among healthcare workers globally, then in sub-Saharan Africa. The role of the SANC, challenges of the mental healthcare nurses, various terminologies related to STS, symptoms of STS and the prevalence of STS are also discussed. This is followed by the factors contributing to STS and the consequences of STS on the personal and professional lives of the MHCN. Lastly, the strategies to prevent STS are discussed.

2.2 Prevalence of secondary traumatic stress in healthcare providers globally

According to Sherko, Sotiri and Lika (2013: 458), the recounting of events may include vivid and explicit details of traumatic experiences such as sexual or physical abuse of the patient. Listening to graphic accounts of trauma may impact negatively on the mental health of the professional. Christodoulou-Fella *et al.* (2017: 3) postulate that individuals who render care to individuals who have been traumatised may inadvertently experience the indirect effect of their patient's traumatic experiences. Furthermore, the rate of exposure to the MHCUs trauma may contribute to the prevalence of STS among these workers.

Over the years, various global studies have attempted to quantify the prevalence of STS among health care individuals (for example: Baniewicz 2015; Baum 2016; Bercier 2013; Glenwright 2015; Christodoulou-Fella *et al.* 2017; Franza, Del Buono and Pelegriano 2015). These studies have shown conflicting results regarding the prevalence among individuals in the caring field, some of whom displayed high to moderate levels of STS, while others had little to no STS. However, studies that have been conducted among nurses have shown that a substantial number of them are afflicted by STS. For example, the following studies among healthcare workers, the majority of whom were nurses, were found to have high levels of STS (Baniewicz 2015;

Christodoulou-Fella *et al.* 2015; Cieslak *et al.* 2013; Zerach and Shalev 2015; Franza *et al.* 2015).

A study by Mangoulia *et al.* (2015: 334) investigated the prevalence of STS among 174 psychiatric nurses in 12 public hospitals in Greece and concluded that 44.8% of the nurses had increased risk for STS. A recent study by Orrù *et al.* (2021: 10) titled Secondary Traumatic Stress and Burnout in Healthcare Workers during Covid-19 Outbreak found that 47.5% of the healthcare workers displayed moderate to severe traumatisation after being exposed to the trauma of patients.

Contrary the findings of the above studies, Rajeswari and Sreelekha (2017: 1) found that the intensity of STS among mental healthcare workers was relatively low. According to Kintzle, Yarvis and Bride (2013: 1313) lower levels of STS among respondents can be because they did not work directly with clients that were exposed to trauma symptomology as well as and/or because of the low number of clients they attended to. Thompson (2017: 43) credited the lower effects of STS to the respondents remaining objective regarding the clients' problems and not feeling responsible for solving their problems.

In their study, (Sacco *et al.* 2015: 35) concluded that an individual's exposure to trauma stories did not significantly predict STS scores as suggested by theory. However, Craig and Sprang (cited by Johnson 2016: 29), state that "the prevalence and scope of compassion fatigue in mental health practitioners remains undetermined".

2.3 Prevalence of secondary traumatic stress among healthcare providers in sub-Saharan Africa

In sub-Saharan Africa, studies have confirmed the prevalence of STS among nurses. A study by Adam, Biraboneye and Bukusi (2015: 26) among medical healthcare workers in Kenya determined that STS levels were higher among nurses as compared to medical practitioners. The study found that the crude prevalence rate of STS was 29.6% for medical practitioners as compared to 33.1% for nurses (Adam, Biraboneye and Bukusi 2015: 29). This discrepancy was attributed to higher educational levels by medical practitioners compared to those graduating from middle level nursing colleges

(Adam, Biraboneye and Bukusi 2015: 28). Furthermore, self-factors contributed to nurses' higher STS levels, whereas the work environment largely influenced the medical practitioners. Both groups were therefore not exempt to CF and its effects.

In the study of Adeyemo *et al.* (2015: 69) on experiences of violence, CF and CS on the professional quality of life of mental health professionals at a tertiary psychiatric facility in Nigeria, it was determined that workplace violence was significantly associated with STS. The finding confirmed that mental health carers who experienced violence were more susceptible to the characteristic features of STS. Adeyemo *et al.* (2015: 71) added that it is practically impossible for mental health professionals having contact with psychotic patients not to experience violence either directly or indirectly.

However, Smith and Keatley's (2014: 13) study on local mental health professionals in post-conflict Sierra Leone who were constantly exposed to violence differed from the above finding. Despite STS being prevalent among the workers in their study, it was relatively low. Smith and Keatley (2014: 13) attributed the lower levels of STS to their organisations preparing them adequately to work with trauma survivors. This, therefore, suggests that if nurses are made aware by education of the ramifications of STS this may have a positive effect in reducing STS. The study further revealed that younger professionals were more likely to report psychiatric distress than their elder counterparts, highlighting the need for organisations to adopt policies and procedures that provide additional guidance and support to young local mental health professionals (Smith and Keatley 2014: 132).

2.4 Mental healthcare in South Africa

Galderisi *et al.* (2015: 231) state that according to the founding documents of the World Health Organisation (WHO 1948) health encompasses physical, mental, and social aspects of well-being. In other words, the concept of mental health has a descriptive and intentional aspect, promoting autonomy and a productive lifestyle. As can be imagined, this state ranges on a continuum from a healthy state to a severely compromised or psychotic state. However, often there is a correlation between different categories of health (Galderisi *et al.* 2015: 231). For example, the mental healthcare status of South Africans remains affected by various factors such as

violence and communicable diseases such as HIV and AIDS, contributing to the high number of psychiatric disorders in the country (Kagee *et al.* 2017: 4-5).

In SA mental healthcare was institutionalised until the 1997 White Paper, when the government decided to deinstitutionalise mental health and make it the sole mandate of the primary care setting (Thom as cited by Petersen and Lund 2011: 751).

According to the National Health Act (No. 61 of 2003) (Republic of South Africa, Department of Health 2003), SA has the following categories of hospitals, district hospitals, regional hospitals, tertiary hospitals, central hospitals and specialised hospitals. District hospitals serve a defined population within a health district and support primary healthcare. A regional hospital must, on a 24-hour basis, provide health services in the field of internal medicine, paediatric and general surgery, whereas tertiary hospitals provide specialist level services and intensive care services under the supervision of a specialist. Tertiary hospitals also provide training for healthcare service providers and receive referrals from regional hospitals and have a bed capacity of between 400 to 800 beds. Specialised hospitals provide health services like psychiatric services, tuberculosis services, infectious diseases and rehabilitation services.

Tertiary psychiatric hospitals provide specialised care by MHCNs. These MHCNs are trained to render care to MHCUs that have psychiatric problems and those who may warrant specialised interventions such a cognitive behaviour therapy.

The Mental Health Care Act No 17 (Republic of South Africa, Department of Health, 2002) prescribed district and regional healthcare systems primary roles in mental healthcare. For instance, all MHCUs needed an initial 72-hour observation period in the designated district and regional hospitals before being referred to a tertiary hospital. The law aimed to increase accessibility and availability of mental health services to MHCUs and to decrease the number of referrals to psychiatric hospitals. However, despite the many different levels of hospitals, tertiary psychiatric hospitals in SA are inundated with problems, a classic revolving door phenomenon.

According to Fikreyesus, Soboka and Feyissa (2016: 5), the high rate of re-admissions to tertiary psychiatric hospitals are possibly due to MHCUs not being compliant with treatment, the high rate of substance abuse among the majority of the patients, and, at times, because of the critical bed shortages. These may, therefore, contribute to the MHCUs being discharged prematurely. Other common problems that tertiary psychiatric hospitals are confronted with are of MHCUs being directly admitted to tertiary hospitals, thus contributing to nurses in these hospitals being overworked and highly stressed.

2.5 Psychiatric nursing in South Africa

The field of psychiatric nursing is considered a speciality in most countries, including SA where the MHCNs form the largest group of healthcare professionals that spend most of their time with the MHCUs (Joubert 2015: 6).

As defined by Joubert (2015: 17) psychiatric mental healthcare registered nurses, are nurses who have competency in caring for patients with mental health issues, problems and psychiatric disorders. As such, in the South African context, a registered psychiatric nurse is a nurse who has met the requirements of the SANC Regulation R880 and has obtained at least a Diploma in Psychiatric Nursing, which constitutes a 12-month specialised training (SANC 1985). To be deemed a registered psychiatric nurse, the individual must meet the requirements of the SANC Regulation R425, which grants them training in general nursing psychiatry, community nursing, and midwifery. This usually extends over four years (SANC 1985). Most psychiatric curricula involve training in the treatment, prevention and nursing care of individuals suffering from a mental condition and its related effects (Republic of South Africa, Department of Health 2002: 1).

The emphasis of psychiatric nursing is on the promotion of mental health, prevention of mental illness, early identification of and intervention in emotional disturbances, and follow-up care specifically aimed at reducing the long-term effects of mental illness in MHCUs, over and above the general nursing activities (Republic of South Africa, Department of Health 2002: 1). Specialisation in psychiatric nursing involves familiarisation with the diagnostic criteria stated in the American Psychiatric

Association Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association 2013) because this is the manual mainly used by MHCNs and other mental health professionals for diagnosis of mental illness.

While the nursing profession generally requires persons of specific characteristics, it is uncontroversial to imagine that psychiatric nursing places great emphasis on good communication skills, patience, empathy, and compassion for nurses interested in caring for the needs of the MHCUs. Mental healthcare nurses are critical to the well-being of MHCUs, and also provide support and care to the families and the communities affected by mental illness. Needless to say, while caring for these patients and communities, they are in turn affected by the trauma, leading to them being emotionally burdened. This may be inevitable in certain instances. Figley (1995: 2), a renowned professor and one of the original researchers on trauma, notes that absorbing the trauma of the patient often depletes the healthcare worker and eventually can result in STS.

2.5.1 The South African Nursing Council and psychiatric nursing

As a professional regulatory body for the nursing profession, the SANC currently categorises nursing into four categories, namely, registered nurse (RN), enrolled nurse (EN), enrolled nursing assistant (ENA) and specialist registered midwife (SRN) (Uys and Klopper 2013: 1). RNs are ultimately responsible for the supervision of the ENs and ENAs. The EN performs limited nursing care, while the nursing auxiliaries perform basic procedures and care for patients on a general level. Each of these nursing categories has a mandated scope within which they must practice in line with their training, as stated in the South African Nursing Act (33 of 2005) (Republic of South Africa, Department of Health, 2005). A typical healthcare facility contains a good mix of these different categories, biased towards the functions of the facility. For example, a psychiatric healthcare facility, such as the one in which this study was undertaken, would have the first three categories of nurses (RNs, ENs, and ENAs) rendering care to the MHCUs. The duties of these nurses are governed by the scope of practice contained in Regulation R 2598, as amended (SANC 1985: 1). As public servants, nurses must also uphold the Constitution of South Africa (Act 108 of 1996: 1247) and other professional and ethical codes that govern public service.

Part of upholding the professional ethics for most public servants is to attain and retain the level of competence required for the effective performance of one's duties. As such, MHCNs who are employed in a psychiatric hospital should be qualified and competent to practice their nursing skills, according to the level prescribed by SANC (Regulation No. 2598 of 30 November 1984) (SANC 1984). While creating a regulatory framework within which nurses work, SANC also advocates for the public, who are the main beneficiaries and clients, to ensure that nursing professional in different facilities have the requisite training and education to do justice to patient needs (Haakestad 2014: 14). In cases where some nursing categories such as the ENs and ENAs, who have no training in mental health, they have to practice under the supervision of RNs who must be in a position to properly navigate the traumatic aspects of dealing with MHCUs and their families (Netshakhuma 2016: 43). The regulations are straight forward and in terms of the scope of practice of different categories, Netshakhuma (2016: 68) notes that in practice non-psychiatric nurses, including ENs and ENAs, still perform important aspects of caring for MHCUs such as therapeutic groups. RNs are often tasked with managerial duties, thus the ENs and ENAs spend more time counselling and running therapeutic groups, which in the process exposes them to the trauma of the patient. Hence, one can conclude that because these two categories share a therapeutic relationship and the majority of their time with the MHCU, this may make them susceptible to STS (Netshakhuma 2016: 43).

Upton (2018: 22) goes further in arguing that nurses should acknowledge the trauma that comes with caring for MHCUs as they are often not as well-prepared as they should be. Therefore, all psychiatric nurses should be made aware of the causes and symptoms of STS from the onset of their career. Considering STS has been deemed as an occupational hazard, it should be imperative that all have the necessary knowledge and skill of how to deal with the stressors of the exposure to their client's traumatic experiences. SANC, as a regulatory body, can assist in ensuring that these skills are included in psychiatric training for all MHCNs and ensure that those professionals who find themselves affected get the necessary support from services such as employee assistance programmes (EAPs) (Hanisch *et al.* 2016: 1).

2.6 Challenges encountered by psychiatric nurses

According to the South African Mental Health Care Act No 17. of 2002 (Republic of South Africa, Department of Health 2002), MHCUs are admitted to designated psychiatric facilities to be cared for by trained health professionals. While these have provided relief to many clients and their families, MHCNs that work in these facilities often face various challenges, such as inflexible acute units and severe staff shortages (Copeland and Henry 2018: 1; Sobekwa and Arunachallam 2015: 4).

In a study conducted among 81 professional nurses in SA, van der Colff and Rothmann (2014: 375) found that the most severe stressors in most healthcare facilities are understaffing, under-compensation, and excessive workloads. These observations were confirmed in a similar study by Er and Sokmen (2018: 206) who found that most healthcare professionals felt overworked with limited support from management.

The National Mental Health Policy Framework and 2013 Strategic Plan aimed to reduce the mental health treatment gap and burden (Matlala *et al.* 2018: 46). However, various challenges such as a high rate of mental illness and severe staff shortages are likely to compromise that objective. According to De Kock and Pillay (2016: 1), SA has a distressing shortage of MHCNs, with only 38.7% of 160 facilities employing a total of 116 MHCNs. These nurses serve an estimated population of 17 million. The South African healthcare system also remains underfunded and under-resourced (Robertson *et al.* 2018: 362). According to Blecher *et al.* (2017: 3), health spending in SA has nominally gone from R18.7 billion in 1995/96 to over R220 billion in 2019/20, being an average of between 8.5% and 10.5% of the national budget.

Budget allocations may give a semblance of high levels of commitment by the national government to health outcomes, but Blecher *et al.* (2017: 3) argue that in real terms, when weighted in relation to the increase of the proportion of the uninsured population which has been growing at an average of 1.5% in the same period, government health expenditure has plateaued or even decreased. Furthermore, the portion of the budget allocated for mental healthcare is insufficient as the 3.5% of the health budget for

Gauteng in 2017/2018 was way less than what is recommended by the WHO (Robertson *et al.* 2018: 362).

From this background, one finds part of the explanation of why tragedies like the Life Esidimeni case in 2017 happened (Dhai 2017: 1). While the national and provincial budgets are biased towards primary healthcare, mental healthcare is left under-resourced and hence privatised, where only the wealthy can afford to purchase private mental health services. Indigents are forced to contend with meagre resources, with the Life Esidimeni scandal resulting in over 100 deaths of vulnerable, indigent, MHCUs (Dhai 2017: 1).

The system is inadequate for effective psychiatric care. Most psychiatric nurses are exposed to aggressive and violent behaviour of the MHCUs. Joubert (2015: 67) and d'Ettore and Pellicani (2017: 337) agree that the employees in psychiatric hospitals are often confronted with verbal and physical abuse from their patients and the patients' family members.

Ngako, Van Rensburg and Mataboge (2012: 5) conducted a study in a psychiatric hospital in Gauteng and found that the nurses felt disrespected by the behaviour of their patients; for example, there were cases of them being sexually intimidated.

The physical and emotional abuse from MHCUs may result in unhealthy and negative stress in nurses. According to Sobekwa and Arunachalam (2015: 5), when healthcare professionals encounter incidents such as assault and violence from their patients it can become highly stressful for them. The above challenges can therefore create a stage for MHCNs to be highly vulnerable to dissatisfaction at work. The MHCNs that are exposed to these conditions and challenges may inevitably lose the drive and will to render care to their clients and may also fall into depressive episodes. According to Kovane (2015: 1) and Ramokgopa (Timeslive April 2018), the Gauteng Health MEC concurred that the excessive sick rate in nurses is of great concern and has economic implications of between R161 million to R312 million

2.7 Secondary traumatic stress and other terminologies

Over the years, various terminologies in the professional literature have been used to indicate the “cost of caring” for those in emotional pain, such as secondary victimisation, “saviour syndrome”, co-victimisation (Figley 1995: 9) and STS. Figley (1995: 15) states that although STS is referred to by various names, the terms compassion stress (CS) and compassion fatigue (CF) are the appropriate substitutes for STS. Figley has been studying the phenomenon of STS over the past 30 years, initially calling it a form of BO or “secondary victimisation” (Figley 2013: 2). The term STS has been conventionally preferred by many scholars (Thompson 2017: 13) and as such will be used in this research.

Figley (1995: xv) acknowledges the connotational equivalence of CF to secondary traumatic stress disorder (STSD) and PTSD. Thompson (2017: 13) argues for the palatability of the term STS for pragmatic reasons; apparently “it lands softer on the ears of the sufferers”. Despite researchers being conflicted with which terminology and syntactic arrangements to adopt, all agree on the connotations and semantics of the condition; carers who are exposed to emotionally stressed clients do get affected by it (Figley 1995: xv). As such, mental healthcare practitioners must be concerned with the fact that they are at risk of serious effects of their immediate work with patients (Thompson 2017: 3).

2.8 Symptoms of secondary traumatic stress

According to Good Therapy (2020), STS can manifest in various ways and affect the physical, mental, spiritual and emotional health of an individual. The author further states that the following symptoms are common in individuals with STS: bad temper, self-loathing, headaches, weight loss, poor job satisfaction or emotional fatigue.

In a study by Duffy, Avalos and Dowling (2015: 10) the following symptoms were identified: intrusive thoughts about the patient, psychological distress, feeling unenthusiastic and discouraged about their future. As MHCNs are often exposed to the vivid details of their patients’ experiences and in the process of supporting their recovery, they are therefore more likely to experience the emotional effects of STS.

Christodoulou-Fella *et al.*'s (2017: 6) study also indicated that the majority of the mental healthcare professionals had experienced symptoms of STS to such an extent that they had felt emotionally exhausted and had decided to leave their jobs. According to Colombo, Emanuel and Zito (2019: 2), the symptoms of STS can have deleterious effects and may be evidenced on a personal and professional level. For example, on a professional level, the individual may lose interest in his/her job or may leave the profession (Wright 2018: 1). On a personal level, an individual may alienate themselves, or distance themselves from family members and friends (MacEachern *et al.* 2019: 169).

2.9 Prevalence of secondary traumatic stress

Through the years, various studies have attempted to quantify the prevalence of STS among various groups including mental healthcare professionals (Iyamuremye and Brysiewicz 2015; Baniewicz 2015; Adeyemo *et al.* 2015) emergency personnel (Wheater and Erasmus 2017) midwives (Beck, LoGiudice and Gable 2015) teachers (Kaminer and Eagle 2017) and domestic violence counsellors (Beckerman and Wozniak 2018). Various variables, such as gender, educational level, and age have been used to determine who are most affected by this condition.

Psychotherapy allows patients to vent their feelings and experiences as a form of catharsis. The significant amount of time MHCNs spend rendering therapeutic care, which aims to meet and enhance the physical, psychological, and spiritual needs of their clients, predisposes them to stress-related conditions such as STS. As a result of the MHCN recounting the events of their traumatic narratives, a close intimate bond is forged (Jarrad *et al.* 2018: 2). The recounting of events may comprise vivid and explicit details of traumatic experiences such as sexual or physical abuse of the patient (Sherko, Sotiri and Lika 2013: 458). Listening to graphic accounts of trauma may thus impact negatively on the mental health of the MHCN.

Several international studies have been carried out on mental healthcare professionals and their susceptibility to STS (Baniewicz 2015; Christodoulou-Fella *et al.* 2017 Cieslak *et al.* 2013; Zerach and Shalev 2015; Franza, Del Buono and Pelegrino 2015), all with affirmative findings. Similar results were found with MHCNs in Nairobi (Adam,

Biraboneye and Bukusi 2015), Nigeria (Adeyemo *et al.* 2015) and in SA (Nolte *et al.* 2017; Mashego *et al.* 2016), confirming that carers of MHCUs are among those at high risk for developing STS.

Despite the traumatic contexts of their work, some studies have recorded low to moderate levels of STS among MHCNs. These include studies of nurse midwives, military and mental healthcare providers in America (Beck *et al.* 2015; Kintzle, Yarvis and Bride 2013: 1313), mental healthcare nurses in Sierra Leone (Smith and Keatley 2014), and oncology nurses and student nurses in Durban, SA (Mathias and Wentzel 2017; Wentzel and Brysiewicz 2018: 82). Sodeke-Gregson, Holttum and Billings (2013: 1) argued that despite being at risk of STS, individuals' exposure to trauma stories does not significantly predict STS. However, while acknowledging the contributions of previous studies, the current study argues that to even minimise the low risk of STS among health professionals, and specifically MHCNs, a thorough exposition is needed to ascertain the dangers, especially within the context of SA.

2.10 Factors contributing to secondary traumatic stress

It is interesting to note that some MHCNs may develop STS while others may not. Research tends to point to several possible influences or factors that could cause STS to develop in some individuals and not in others. Such factors include family support/workplace support (Ariapooran 2014: 5), a history of personal trauma, previous negative coping skills (such as bottling up or not confronting their emotions) or being excessively meticulous or obsessive, could contribute to certain individuals developing the symptoms of STS. Figley (1995: 20) attributes the development of STS in trauma workers to the fact that these individuals are recurrently drenched in the extreme intensity of trauma-inducing facts. The author identified four reasons why trauma workers become vulnerable to STS, namely: empathy, being previously exposed to trauma, having some form of unresolved trauma, and lack of personal and professional support.

2.10.1 Empathic ability

Given the increase in diseases such as HIV/AIDS and increase in violent crimes in SA, it is natural to expect that MHCNs working in psychiatric hospitals will be exposed

to traumatised MHCUs and will therefore have empathetic engagement with them (Thompson 2017: 27). Empathy is an essential skill that psychiatric nurses need to possess (Mousa 2015: 98). It is often assumed that psychiatric nurses have a sympathetic and empathetic side, which can sometimes be costly in their professional practice (Thompson 2017: 27). According to Adam, Biraboneye and Bukusi (2015: 25), healthcare providers may become traumatised because of the empathic engagement that requires the MHCU to discuss traumatic details of their experience. This can be in the form of role-playing or dramatic re-enactment of the traumatic event. In the process of empathising with a patient, the healthcare provider may become traumatised (Thompson 2017: 27). Thus, the ability to be empathetic can be burdensome especially if the absorption of this disturbing information is not managed effectively. As such, paradoxically, this ability of MHCN to be empathetic may contribute to them being at a greater risk of developing STS.

2.10.2 Personal trauma history

No person is an island, and therefore no individual exists in a vacuum. Most people will have experienced some form of personal trauma at some point in their lives and may still harbour unresolved feelings regarding the incident. In their initial work on STS, Boscarino, Adams and Figley (2010: 3) determined that having unresolved issues such as experience of sexual and domestic violence may expose an individual to reactivation of that unresolved traumatic event, and pre-dispose them to conditions like STS. Thus, listening to the MHCUs telling their stories of trauma may bring to the surface the MHCNs' personal traumatic experiences. While it is not a prerequisite for developing STS, having a history of previous trauma increased the possibility of symptoms of STS in such individuals (Cieslak *et al.* 2013: 20; Baniewicz 2015: 60).

2.10.3 Complicated nature of violence

There are two main forms of relationships between violence and STS: cause and effect. The first one is described by Copeland and Henry (2018: 1) as being exposed to violence (physical and/or non-physical) which can lead to psychological effects of STS. As previously discussed, psychiatric units are permeated with violence of many forms, some captive in the experiences of patients, while others perpetrated by patients on the healthcare professionals. Either way, according to these authors, these

forms of violence can result in STS. This has been corroborated by Adeyemo *et al.* (2015: 69) who, in their study *Experiences of Violence, Compassion Fatigue and Compassion Satisfaction on the Professional Quality of Life* discovered that the experience of workplace violence by MHCNs was significantly associated with STS.

Other studies (Smith and Keatley 2014: 1) have noted the behavioural side of the relationship i.e., STS's violent effects. Their study on local mental health professionals in post-conflict Sierra Leone noted that victims of STS had tendencies to perpetrate violence on clients, either physical and or non-physical (passive aggression). The study also found that organisations had, fortunately, prepared their staff adequately to work with trauma survivors, thus ensuring that their levels of STS did not increase and thus have negative repercussions on their patients.

2.10.4 Lack of support

MHCNs' caseloads often include MHCUs that have been affected by a myriad of issues. Listening to the narratives of the MHCUs may be traumatising for MHCNs and may therefore require them to have the support of family, friends and/or colleagues to allow them to vent their feelings. Ariapooran (2014: 5) states that merely listening or showing concern may greatly reduce the symptoms of STS in the healthcare worker. Individuals with fewer support systems are more likely to suffer from psychological and physical health problems and have a higher rate of STS (Manning-Jones, de Terte and Stephens 2016: 27; Glenwright 2015: 56).

According to Ariapooran (2014: 5), support system programmes should be developed for the nurses who are at risk for STS, as studies have shown that simply having a supportive manager and good social support greatly reduces the development of STS in workers (Hunsaker *et al.* 2015: 14; Greinacher *et al.* 2019: 10). This observation has also been supported by the Chadwick Trauma-Informed Systems Dissemination and Implementation Project (2016: 10) that has recommended that supervisors should ideally provide support services and orientate new staff to the realities of STS. In addition to supportive leadership and work environment, studies have also shown that having the support of one's peers significantly decreases the risk of healthcare professionals developing the symptoms of STS (Manning-Jones, de terte and

Stephens 2016: 27; Caringi *et al.* 2017: 1; Handran 2015: 14). This may be because having a colleague who is undergoing a similar experience to you may assist in relating experiences and sharing coping mechanisms.

2.11 Variables associated with secondary traumatic stress

Over the last few years there have been several research studies among groups of healthcare professionals seeking to identify the prevalence of STS, including among nurses, psychologists, nurse midwives, social workers and psychotherapists (Adam, Biraboneye and Bukusi 2015; Amir, Stephen and George 2016; Beck *et al.* 2015; Caringi *et al.* 2017; Kabunga, Anyolitho and Betty 2020). Various variables such as level of education, years of experience, frequency of exposure, age and gender were mooted as accelerators to either the development of, or resilience to, STS (Dagan, Itzhaky and Ben-Porat 2015: 602-603).

2.11.1 Gender and secondary traumatic stress

Literature regarding the association between gender and STS shows conflicting findings. Some studies suggest that females are at higher risk of STS (Ramatsipele 2014: 49; Zeidner *et al.* 2013: 605), while others have found no gender differences (Howe, Falkenbach and Massey 2014: 337; Malkina-Pykh 2017: 25; Amir, Stephen and George 2016: 42). Amir, Stephen and George (2016: 38) are of the view that the discrepancy in results between the sexes may be attributed to the difference in gender distribution within the profession since nursing is female dominated.

2.11.2 Age and secondary traumatic stress

Some researchers have argued that there is a relationship between age and STS. For example, some studies have indicated that the younger the MHCN is, the more susceptible they are to STS as compared to their older counterparts (Sacco *et al.* 2015: 37; Dworkin, Sorell and Allen 2016: 747). These researchers attributed the fact that the younger nurses were more vulnerable to STS to lack of experience and resilience. Bercier' (2013: 35) explanation was that individuals with a longer employment period become more immune to hearing traumatic stories. On the other hand, Amir, Stephen and George (2016: 43) contend that the tendency for STS increases with age since older nurses are more empathetic than younger ones. Zaidi, Yaqoob and Saeed

(2017: 317) agree further that with a higher number of years in the service the stress levels of an individual increases and so does their levels of STS. Only a few studies argued that there was no correlation between age and STS in the nursing profession (Thurmer 2013: 44; Mairean, Cimpoesu and Turliuc 2014: 287).

2.11.3 Education/Experience

The previous section has argued that the age/STS relationship needs experience as an intervening variable for any results to be significant. However, Mangoulia *et al.* (2015: 337) argue that experience is correlated with education in its impact on STS. For example, Mangoulia *et al.* (2015: 337) believe that knowledge from training or experience is a powerful protective tool against STS, and that inadequate training and a lack of experience is a contributing factor to developing STS.

Mangoulia *et al.*'s (2015: 337) study found that STS was higher in nursing assistants compared to the RNs. This was attributed to nursing assistants having a lower level of education compared to the RNs. Similarly, Adam, Biraboneye and Bukusi's (2015: 27) study in Kenyatta National Hospital in Nairobi found that those with college-level training compared to university level education were more at risk of STS. This study compared college-trained nurses with university-educated doctors and concluded that the level of STS among nurses was approximately double that of the medical practitioners (Adam, Biraboneye and Bukusi 2015: 27). Whilst Kintzle, Yarvis and Bride (2013: 1313) and Hunsaker *et al.* (2015: 11) in their studies with MHCNs, military workers and emergency nurses concluded that individuals with education and experience in their field had lower levels of STS.

2.12 Consequences of secondary traumatic stress

According to the Professional Quality of Life (ProQOL) model designed by Stamm (2005: 5), an individual may experience either positive or negative aspects from working with individuals in the helping field. For example, MHCNs may either derive satisfaction or pleasure from rendering care to their patients, or dissatisfaction. This stress may be manifested in the nurse's personal or professional life.

According to Stamm (2010: 10), the characteristics of the work environment are associated with individual-personal characteristics as well as exposure to trauma (primary and secondary). The three environments (work, client, person) influence both the positive and negative aspects of rendering care to others. Thus, if they have stress from clients or challenges in the environment, nurses are more likely to be stressed and not function optimally. For example, the stress of exposure to the patient's narratives of abuse, trauma, and suffering may render the nurses emotionally exhausted and prone to developing the symptoms of STS.

According to Thompson (2017: 1) the absorption of suffering, by merely listening to the hurts of the patient experiences, may result in problems such as sleep disturbances, problems in their relationships with family members, being physically and emotionally drained, or isolating themselves from others.

Furthermore, STS may contribute to the following consequences: professionals leaving the profession, BO, job dissatisfaction or absenteeism (Wright 2018: 1; Cieslak *et al.* 2014: 82). According to Kintzle, Yarvis and Bride (2013: 1310) and Wentzel and Brysiewicz (2018: 95) individuals with STS are probably more likely to make poor professional judgements such as abuse of patients, misdiagnosis, and employers may have difficulty in retaining their staff.

2.12.1 Consequences of secondary traumatic stress on the personal and professional lives of mental healthcare nurses

According to Figley (1995: 2), those professionals that work with individuals who have endured emotional suffering are likely to absorb this pain. This mirrors the caution raised by Jean Watson in the Theory of Human Caring (Pittman 2016: 2).

When healthcare workers include the vital feature of caring for others in their everyday work there is the possibility of them internalising and embracing what the patient may be experiencing or feeling, despite this being a negative or positive experience.

Exposure to the adverse experiences of what the patient is feeling may affect the healthcare worker and contribute to a sense of disconnection, intolerance, melancholy,

annoyance, lack of empathy or compassion in them (Wentzel and Brysiewicz 2014: 95). This may manifest on a personal, professional, or interpersonal level (Ratrou and Hamdan-Mansour 2017: 1209) affecting an individual's physical and emotional well-being (Koinis *et al.* 2015: 12).

Manolis (2013: 61) found that healthcare professionals working with children that have been traumatised found this to be challenging. The stress of working with sensitive issues and listening to the children's tales of trauma had negatively impacted their personal life. Their personal life was impacted to such an extent that they felt alienated from their family and friends and further felt that their family or friends would not be able to listen to all the trauma that they were exposed to. Other respondents expressed feelings of frustration and physical and emotional exhaustion, which adversely impacted their parenting activities and personas.

According to Manolis (2013: 61), the result of physical and emotional exhaustion may contribute to individuals succumbing to alcohol and substance abuse and/or emotional eating as a means of escaping or temporarily forgetting their pain of empathising with the patient's circumstances. A study by Jarrad *et al.* (2018: 5) linked these destructive personal and social habits to high levels of STS. Matter and Thabet (2016: 6) also indicated that there was a significant relationship between anxiety and STS, with the most common anxiety symptoms being somatic (muscular) (43,4%), depressed mood (43%) and anxious mood (42%). Johnson (2016: 14) and Kintzle, Yarvis and Bride (2013: 1310) concluded that STS is an occupational hazard, because even if individuals with STS remain within the profession, they are more likely to make poor professional judgements, such as abuse of patients, misdiagnosis, and employers may have difficulty in retaining their staff.

2.12.2 Consequences of secondary traumatic stress on nurse-patient relationship

MHCNs often have a close therapeutic relationship with MHCUs. However, as Thompson (2017: 7) has observed, when a therapist assists a patient through a trying and difficult time, they may end up shouldering the load of anxiety, the hurt and the pain of the patient. Training for MHCNs does emphasise the need for setting emotional

boundaries and keeping professional distance, but nevertheless boundaries are often difficult to maintain, hence the therapeutic relationship can be compromised leading to countertransference (Bercier 2013: 13).

Countertransference, according to Thompson (2017: 7), is a state in which a therapist reacts to the information that is shared with them by their client, and it is as if the incident was happening to them. As a means of protection from countertransference, MHCNs may distance themselves from the MHCU, thus creating a negative relationship between the two parties. According to Ramatsipele (2014: 8), mental healthcare workers may feel an obligation to rescue the patient or vice versa where the patient may try to protect the healthcare worker, hence creating an ethical bind based on the exploitation of the patient.

2.13 Strategies to deal with secondary traumatic stress

Cocker and Joss (2016: 1) state that STS can be detrimental to the health of an individual. Therefore, interventions are needed to ensure resilience to reduce the levels of STS, and the chance of an individual developing a more serious mental illness such as depression or anxiety. Since STS can arise abruptly (Figley 1995: 12), those in the mental healthcare field must be able to detect it at an early stage to protect themselves. However, although there is a sudden and rapid onset, the good thing is that the recovery rate, if treated early, is quick. Various strategies are recommended in the literature to both prevent and deal with the symptoms of STS.

2.13.1 Education

According to the Chadwick Trauma-Informed Dissemination and Implementation Systems Project (2016: 12), education is vital in reducing STS and therefore every employee must ideally receive information and the necessary resources on how to prepare themselves against the impact of STS on them. The knowledge of STS should include the signs and symptoms, risk factors and management strategies. Education on the effects of STS must be detailed and introduce the concept and its symptoms but also recognise the likelihood of CS. Therefore, not only the negative aspects of the job should be emphasised, but employees should also be educated on the satisfaction

or benefits of their work and the means to maximise these while reducing the negatives.

2.13.2 Diagnostic tools

Various tools are available to assist MHCNs to identify STS. Most often these self-assessment tools are found in the form of checklist, questionnaires, or scales. The Chadwick Trauma-Informed Dissemination and Implementation Systems Project (2016: 20), recommends that individuals must take note that these tools are asnapshot in time and often require the user to reflect on a certain period when responding to the questions. Three of these tools are listed in Table 2.1.

Table 2.1: STS diagnostic tools (Beck 2011 and Bercier 2013)

Tool	Description
<i>Secondary Traumatic Stress Scale (STSS).</i>	This is a 17-item test which measures the level of secondary traumatic stress in an individual.
<i>Compassion Fatigue Self-Test.</i>	This 40-item test measures the risk of compassion fatigue.
<i>ProQOL 5.</i>	This 30-item test measures the level of compassion fatigue and compassion satisfaction, as well as the level of burnout.

2.14 Organisational strategies

Organisational strategies for preventing the development of STS and/or alleviating its effects include the use of organisational structures, co-workers, and specialised support programmes, such as employee assistance programmes (EAP) (Mazzotta 2015: 13).

MHCNs experiencing STS may find it difficult to provide high-quality care to MHCUs. Organisations can successfully help MHCNs to function optimally and to reduce the development of STS (Benuto *et al.* 2019: 339). Organisational leaders possess the authority to implement policies, programmes and procedures that prevent, lessen and treat the effects of CF/STS (Handran 2015: 10). Organisations should encourage a culture that enables MHCNs to talk and share their experiences.

The literature on STS places emphasis on the importance of peer supervision and mentor support. For example, Fogel (2015: 27) contends that the ability to maintain positive relationships with co-workers reduces secondary trauma. The Chadwick Trauma-Informed Dissemination and Implementation Systems Project (2016: 18) adds that organisations should have experienced staff with good morals and a positive attitude to support newer and younger staff. These studies have been based on an argument that the ability to confide in a colleague and share ideas helps to relieve work stress, possibly because colleagues are easier to relate to and better understand the pressures of work situations (Fogel 2015: 27).

MHCNs should ideally also have access to EAPs where they are able to overcome personal problems confidentially. According to Terblanche and Van Wyk (2014: 2), EAPs play a crucial role in reducing STS in healthcare workers as they aim to normalise the reactions of the employee after a critical incident. However, it has been noted that not many employees are keen on utilising support facilities provided by employers, as they are often suspicious of the relationship of such platforms to management and other employees (Hanisch *et al.* 2016: 1).

As indicated earlier, the support of one's family or other interpersonal networks play a huge role in assisting healthcare workers to recover from a traumatic experience (Figley 1995: 5). For example, having the support of one's peers can help as nurses will be able to share their experiences of STS, resulting in the normalisation of the experience. The normalisation of STS will allow the MHCN to maintain objectivity. Peer supervision is just as important as family support. Having a colleague that one can talk to within the limitations of confidentiality and in a safe and secure environment, may assist the MHCN to debrief ethically.

2.14.1 Personal strategies

The psychological and emotional effects of working with MHCUs are often overwhelming, therefore personal strategies must be employed by the MHCN to increase resilience and combat the negative effects of STS. These can range from self-care strategies, spirituality, use of humour and setting boundaries.

2.14.2 Self-care strategies

In caring professions, such as nursing, professionals may end up putting patient needs ahead of their own. As such, due to such possibilities, many studies have reiterated the need for healthcare professionals to be reminded to take care of themselves as much as they take care of others. Various strategies of self-care can be used by MHCNs to renew their energy and offset the negative effects of working with traumatised victims. Ways to take better care of oneself such as using strategies such as self-care maintaining a healthy lifestyle, getting adequate rest, ensuring regular exercise, taking a vacation, or the pursuit of spiritual development, can be employed (Adimando 2018: 304). Self-care can be both at an individual as well as a professional level, and they are both equally important.

Professional self-care includes tasks such as the regular appraisal of one's work life, improving management and communication skills, and reflective writing such as journaling. Journaling is a remarkable method that MHCNs may use to process and release the negative emotions that they may experience in their everyday work. The process of journaling is highly praised for its cathartic effects. Mahlanze and Sibiyi (2017: 82) observe that journaling allows one to take the time to connect with personal thoughts and feelings, which may help to subdue extreme emotions. Their study on nursing students in KwaZulu-Natal concluded that the majority (60%) of respondents acknowledged that penning their thoughts in a reflective journal helped them to positively make proactive decisions. Harris and Griffin (2015: 86) state that if journaling is coupled with reflection and debriefing, it can help reduce STS. Therefore, journaling could be one example of effective self-care strategies for nurses working in traumatic environments.

2.14.3 Mindfulness and spirituality

According to Ducar *et al.* (2020: 2) mindfulness is having the ability to be present in the moment and is an intentional nonjudgmental awareness. The use of mindfulness has shown great promise as a protective factor against STS (Harker *et al.* 2016: 633; Hotchkiss 2018: 8).

Gallagher (2013: 268) recommends the mindfulness technique to nurses of taking slow, deep breaths or even thinking of a scenario in which they feel happy and content, perhaps their favourite sport. This can be done to reduce stress before a nurse attends to their client. Spirituality has been adopted by many as a buffer to physical and psychological ailments (Newmeyer *et al.* 2014: 17). As such, cultivating one's spiritual life can have positive effects in protecting an MHCN from the negative effects of STS.

2.14.4 Humour

The adage 'laughter is the best medicine' is perceived as more than just rhetoric in many psychological circles, where professionals appreciate the psychosomatic benefits of laughter. They believe that laughter releases endorphins that lower stress and tension (Hatzipapas, Visser and Janse van Rensburg 2017: 208). In psychology, laughter is often used as a cathartic practice, being used to release or heal emotional pain. Hatzipapas, Visser and Janse van Rensburg (2017: 208) state that laughter has the capability of releasing feelings of pain that could have been suppressed over time.

According to their study findings, Hatzipapas, Visser and Janse van Rensburg (2017: 1) found that laughter therapy was a beneficial low-cost strategy to reduce stress and that the respondents that were exposed to laughter therapy reported to have had more positive emotions, better coping and improved interpersonal relationships. Although humour may be a beneficial strategy to reduce stress, its use in different contexts may also provoke a situation, as what is funny to one person may not be funny to another. The Chadwick Trauma-Informed Dissemination and Implementation Systems Project (2016: 21) recommends that humour should not be used to disparage any individual and should never include deliberate offensive language or comments. Neither should humour be used in a passive-aggressive manner.

2.14.5 Leave work at work

Nursing is a very demanding job, and nurses are normally very work-driven and often spend more time at work than they do at home. This may adversely affect their personal and social life. According to Fogel (2015: 29), a work-life balance is essential to reduce STS and its consequences. MHCNs facing imbalance in their personal and work-life are more susceptible to STS. This warrants that boundaries be established,

and work-related issues left at work to reduce the impact on the healthcare worker's personal life.

2.15 Positive effects of working with traumatised mental healthcare users

Although most of the literature tends to point towards negative consequences of interactions with MHCUs, some researchers (Mashego *et al.* 2016: 1; Wentzel and Brysiewicz, 2018: 84; Adeyemo *et al.* 2015: 69) argue that some MHCNs experience CS, indicating positive aspects of working with MHCUs. These individuals obtain a sense of gratification from helping their patient and are therefore likely to reap the reward of having better psychological health and less STS (Adeyemo *et al.* 2015: 71).

2.16 Summary of the chapter

This chapter reviewed both global and local literature related to the study. The literature highlighted the effects, variables and factors associated with secondary traumatic stress in healthcare workers. The following chapter will discuss the theoretical framework.

CHAPTER 3: THEORETICAL FRAMEWORK

3.1 Introduction

This chapter discusses the theoretical framework that underpinned the study. Polit and Beck (2017: 225) state that theoretical frameworks are derived from existing theory and are the overall conceptual underpinnings of a study. Furthermore, a theoretical framework offers the background in which a problem can be tested and investigated.

3.2 Theoretical framework that guided the study

The Professional Quality of Life Scale (ProQOL) was used in this study as a guide to measure positive and negative effects of working with people who have experienced extremely stressful events. The measure was originally called the Compassion Fatigue Self-Test and developed by Charles Figley in the late 1980s. Stamm and Figley began collaborating in 1988. In 1993, Stamm added the concept of compassion satisfaction and the name of the measure changed to the Compassion Satisfaction and Fatigue Test, of which there were several versions. Through a positive joint agreement between Figley and Stamm the measure shifted entirely to Stamm in the late 1990s and was renamed the Professional Quality of Life Scale. The model has since been translated into various languages (Stamm 2010: 12). Stamm (2010: 8) defined the ProQOL as the value an individual feels about working as a helper. These feelings can be either positive or negative. The positive feelings about people's ability to help are known as 'compassion satisfaction'. The negative, secondary outcomes are referred to as 'compassion fatigue'.

3.3 Components of the ProQOL model

Professional quality of life incorporates two aspects, the positive (CS) and the negative (CF) (see Figure 1). CF comprises two parts. The first part concerns things such as exhaustion, frustration, anger and depression and are typical of burnout. STS is a negative feeling driven by fear and work-related trauma.

3.3.1 Compassion satisfaction

Stamm (2010: 12) states that CS is about the pleasure you derive from being able to do your work well. For example, you may feel like it is a pleasure to help others through your work. You may feel positively about your colleagues or your ability to contribute to the work setting or even the greater good of society. The individual with CS is characterised by feeling satisfied by the job and from helping others. These people feel invigorated by work that they like to do and feel they can keep up with new technology and protocols. They experience happy thoughts, feel successful, are happy with the work they do, want to continue to do it, and believe they can make a difference (Stamm 2010: 21).



Figure 3.1: The Professional Quality of life Model

Source: Stamm (2010: 8).

3.3.2 Compassion fatigue

CF breaks into two parts. The first part concerns symptoms such as exhaustion, frustration, anger, and depression, which are typical of BO. The second part is STS, a negative feeling driven by fear and work-related trauma. Stamm (2010: 21) states that CF is characterised by the negative aspects of providing care to those who have experienced extreme or traumatic stressors. These negative responses include

feelings of being overwhelmed by the work that are distinguished from feelings of fear associated with the work.

Figley (1995: 1) describes CF as the emotional residue of exposure to working with the suffering, particularly those suffering from the consequences of traumatic events. Professionals who work with people, particularly people who are suffering, must contend with not only the normal stress or dissatisfaction of work, but also with the emotional and personal feelings for the suffering. CF is a state of tension and preoccupation with the individual or cumulative trauma of clients as manifested in one or more ways including re-experiencing the traumatic event, avoidance/numbing of reminders of the event, and persistent arousal. There are human costs associated with CF. Job performance goes down, mistakes go up. Morale drops and personal relationships are affected, people's home lives start to deteriorate, personality deteriorates and eventually it can lead to overall decline in general health.

3.3.2.1 Burnout

According to Stamm (2010: 13), BO is one element of the negative effects of caring that is known as CF. Most people have an intuitive idea of what burnout is. From the research perspective, BO is associated with feelings of hopelessness and difficulties in dealing with work or in doing your job effectively. These negative feelings usually have a gradual onset. They can reflect the feeling that your efforts make no difference, or they can be associated with a very high workload or a non-supportive work environment. The individual with BO experiences feelings of unhappiness, disconnectedness, and insensitivity to the work environment. These can include exhaustion, feelings of being overwhelmed, of being bogged down, being "out-of-touch" with the person he or she wants to be, while having no sustaining beliefs (Stamm 2010: 21).

3.3.2.2 Secondary traumatic stress

STS is another element of CF. STS is about work-related, secondary exposure to people who have experienced extremely or traumatically stressful events. The negative effects of STS may include fear, sleep difficulties, intrusive images, or avoiding reminders of the person's traumatic experiences. STS is related to vicarious

trauma as it shares many similar characteristics. The individual with STS becomes preoccupied with thoughts of people they have helped.

Caregiver's report feeling trapped, on edge, exhausted, overwhelmed, and infected by others' trauma. Characteristics include an inability to sleep, sometimes forgetting important things, and an inability to separate one's private life and one's life as a helper experiencing the trauma of someone one helped, even to the extent of avoiding activities to avoid reminders of the trauma. It is important to note that developing problems with secondary traumatic stress is rare, but it does happen to many people (Stamm 2010: 21).

Stamm (2010: 8) mentions that if an individual has been exposed to a traumatic stressor, they at some point in time will be at risk of developing negative symptoms such as depression, post-traumatic stress disorder and BO. Stamm (2010: 8) further states that although the chances of developing problems in one's job are relatively low, if however, they do develop a problem it can be hazardous and may impact not only that individual but others that are close to them. This, in turn, impacts on their ability to render care to their patients and can eventually impact negatively on the organisation.

3.4 Theoretical path analysis of ProQOL

According to Stamm (2010: 10), development of STS follows a path which is illustrated in Figure 3.2. The diagram illustrates the theoretical path analysis of positive and negative outcomes of assisting those who have experienced traumatic stress. The components involved in the possible development of secondary traumatic stress and their interrelationships are indicated (Stamm 2010: 11).

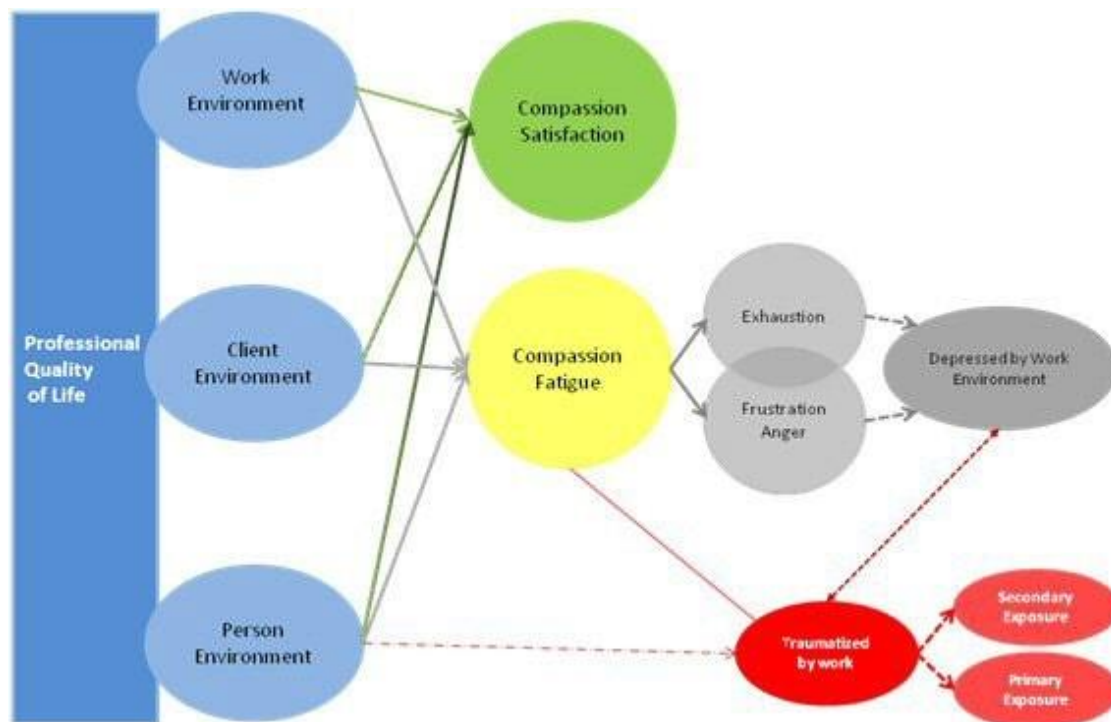


Figure 3.2. Theoretical path analysis
 Source: Stamm (2010: 11)

According to Stamm (2010: 11) path analysis consists of three environments that have either a positive or negative impact on the quality of work life, namely, work environment, the client/person helped environment, and the personal environment. The work environment includes aspects of organisation and tasks performed by the individual. A poor work environment may contribute to CF. For example, if MHCNs are exposed to stressors and challenges such as exposure to explicit details of the MHCU trauma, abuse and suffering this may render them emotionally exhausted and prone to developing STS (Carey 2017: 44).

Todaro-Franceschi (2013: 39) states that work satisfaction comes about by meeting individual personal goals and feeling like one has accomplished something meaningful. When goals are set and met, this is referred to as productivity. In the case of nursing, work productivity basically means being able to provide quality care to our patients. But nurses are not in control of the multiplicity of things that feed into the provision of care, such as staff shortages which inadvertently increase the workload. So, can one be content or happy in the workplace but still feel dissatisfied? Conversely, might one be satisfied at work but still feel unhappy or discontent? I believe both are possible and that they are different constructs.

Thompson (2017: 1) mentions that merely listening to the painful narratives of the patient's experiences may result in the listener being negatively impacted to such an extent that it may result in problems such as the individual becoming physically and emotionally drained, isolating themselves from others, or having sleep disturbances. The centre section of the diagram shows CS as being the positive aspect of aiding or assisting others, and CF as being the negative aspect of helping others. This section describes how the work, client and personal environment of an individual will contribute to either STS and/or CS. According to Stamm (2010: 13), STS is an emotion that is negative and is driven by fear or a work-related trauma or a secondary exposure by somebody that had been exposed to an episode that was deemed as traumatically stressful in their life. The model further illustrates how one can concurrently experience both CF and CS. For example, the work environment of a person could contribute to CF/STS but at the same time, that individual could also obtain gratification or CS from helping others (Stamm 2010: 11). The model also indicates the negative aspect of CF, such as exhaustion, frustration and anger which may contribute to being depressed or distressed at work (BO), and how being traumatised at work may contribute to individuals becoming prone to STS (Stamm 2010: 11). As evidenced by Joubert (2015: 34), mental healthcare nurses that render care to difficult, demanding and threatening patients have higher levels of anxiety and stress. This model, therefore, denotes that healthcare professionals who work with victims of trauma may either develop CS or CF. The model further reflects a general understanding of how STS may develop in a healthcare worker as a result of being exposed to traumatic material.

3.5 Justification for using ProQOL as the theoretical framework

The Professional Quality of Life Model (ProQOL 5) encompasses the aspects of both CS and STS. This model was chosen as the theoretical framework as it was specifically designed for those in the helping profession, as it takes into consideration the occupational and personal experiences of the healthcare professional. The diversity of the occupational and personal problems experienced by MHCNs made the ProQOL suitable for this study.

The ProQOL is not a diagnostic test, but issues raised from the respondents can be used to address problems with use of appropriate diagnostic procedures. The researcher hopes that the findings from this study can be utilised by the Department of Health to develop strategies for early identification of at risk MHCNs and institute interventions to curtail the effects on individuals and the mental health institutions at large. Issues pertaining to nursing education will benefit nursing education curriculum planners to give more attention to STS and its effects as well as teach nurses more coping strategies.

Professionals heading for CF can be identified by high scores on either STS or burnout or on both. Lower scores on CS can be an early symptom for individuals heading for clinical depression. Therefore, the ProQOL can be a guide in regard to an individual's or organisation's balance of positive and negative experience related to their work.

3.6 Summary of the chapter

In this chapter, the researcher provided an understanding and overview of the Professional Quality of Life Model (ProQOL) as the theoretical framework for the study. The next chapter will discuss the methodology which guided this study.

CHAPTER 4: METHODOLOGY

4.1 Introduction

This chapter delineates the outline of the research design that was used to guide this study. The study setting, as well as the population and sample size, is outlined. The process used to collect and analyse the data is explained in detail, and the ethical aspects of the study are presented.

4.2 Research methodology

A research design, as defined by Moule, Aveyard and Goodman (2017: 412), is a map guiding how the researcher will engage with the research subjects to achieve the outcomes needed to address the aims and objectives of the research.

4.2.1 Research design

In this study, a quantitative, non-experimental descriptive design was used. Polit and Beck (2017: 741) state that quantitative research investigates the phenomena and lends itself to detailed measurement and quantification, often involving a controlled and rigorous design. Non-experimental research is when the researcher does not intervene by influencing or manipulating the independent variable (Polit and Beck 2017: 203). Most nursing studies, according to Polit and Beck (2017: 203), are non-experimental, as the human characteristics cannot be experimentally manipulated. Polit and Beck (2017: 206) further state that non-experimental studies are descriptive research, and the purpose of descriptive studies is to describe the frequency of occurrence of a condition or behaviour.

A survey was carried out on 183 respondents in a tertiary psychiatric hospital in KZN. This design was chosen so that different views from a large number of respondents could be obtained. The design was appropriate for this study as there was social value. It was useful in generating knowledge that can lead to an improvement in health and services. In this study, the researcher wanted to determine the prevalence of STS and its effects on the MHCNs. Therefore, a qualitative approach would not have been

suitable as the researcher required the views of a large number of MHCNs, for the findings to be generalised.

4.3 Research setting

The study was carried out in a specialised acute tertiary psychiatric hospital in the uMgungundlovu District of KZN. KZN is a province of SA and the uMgungundlovu District is one of the eleven districts' municipalities of KZN.

In SA, medical services are divided into three levels namely: primary, secondary and tertiary levels. The primary services mainly concentrate on the general care of the patients while the secondary and tertiary services are geared towards more intensive health monitoring and treat more severe conditions that require specialised knowledge and treatment. The uMgungundlovu District has three specialised tertiary institutions which are Town Hill Hospital, Umgeni Hospital and Fort Napier Hospital.

The research study was conducted in a 280 bedded tertiary psychiatric hospital which is divided into 12 wards, comprising the following departments: child and adolescent unit, acute male and female units, psychogeriatric ward, psychotherapy unit, pre-discharge male and female units, neuropsychiatry ward and an Outpatient Department. Responsibilities of this institution include providing prevention and specialised psychiatric and mental healthcare, training, and provision of technical support to referral and district hospitals and clinics.

4.4 Population

O'Leary (2017: 203) states that a population can be described as the total membership of a defined class of individuals, objects or events. The total population working in the psychiatric wards consisted of ($n = 277$), which included 129 PNs, 58 ENs and 90 ENAs. The target population was $n = 183$ which included 86 PNs, 39 ENs and 58 ENAs.

4.5 Sampling and sampling strategy

Sampling according to (Polit and Beck 2017: 743) is the process of selecting a subset of the population to represent the whole population.

4.5.1 Sampling strategy

Purposive sampling, which is a non-probability sampling method was chosen as the sampling strategy for this study. Polit and Beck (2017: 254) mention that with purposive sampling the researcher makes use of their knowledge of a population to make selections and decides deliberately to select individuals who are judged to be particularly conversant about the subject to be researched.

This strategy was deemed as the most appropriate strategy for this study as the researcher deliberately selected MHCNs that were permanently employed at the institution and particularly those employees who had worked for more than six months. The reason for this was that these individuals would be naturally conversant with the daily mental anguish of the MHCUs traumatic narratives.

4.5.2 Sample size

In consultation with the statistician (Annexure 8), 183 respondents were sampled from the total population of 277 to be used in the study (Table 3).

The sample size was calculated by using an alpha value of 0.05 and a margin of error of 0.05. For this study, the minimum sample required was 160 respondents. A further 15 % (n = 23) was added to ensure that the minimum required data would yield 160 respondents even if there were spoils. The sample size was representative of the population, as a sample size of 183 is considered a reasonable size for the analysis of data.

Table 4.1: Sample size of nurses used in data collection

Category of Nurse	Present Staffing	Sample size to be used
Professional nurses	129	86
Enrolled nurses	58	39
Nursing assistants	90	58
Total	277	183

4.5.3 Recruitment of respondents

The Durban University of Technology Ethics Committee granted ethical approval for conducting the study (Appendix 3a). Thereafter, gatekeeper permission was obtained from the research setting authorities (Appendix 3b). The recruitment process began with a series of telephone calls and meetings in early July 2020 with the management of the institution and the operational managers of the different wards. This allowed the researcher to brief the management on the data collection process and to gain their co-operation and address any relevant concerns. At this meeting, the researcher obtained permission from the nursing management to allow the placing of posters in each ward advertising the presentation to interested nurses and representatives of the wards (Annexure 7). The posters were put up two weeks before data was to be collected. The poster included the venue and time of the presentation and the contact details of the researcher should there be any queries.

The day before the presentation the researcher sent a copy of the presentation to each ward as a reminder. The presentation took place on the 9th of July 2020 at the tertiary psychiatric hospital's Gym Hall. The purpose and details of the study were explained to all the MHCNs and representatives who attended, and it was explained that participation was voluntary and that they could withdraw from participating in the study at any given time. The aspect of confidentiality of names and data was explained.

4.5.4 Inclusion and exclusion criteria

Patino and Ferreira (2018:1) state that inclusion or eligibility conditions are the specified attributes of the target population such as demographic, clinical, and geographic characteristics. The inclusion and exclusion criteria utilised for this study are listed below.

4.5.4.1 Inclusion criteria

- All categories of nurses working in the selected tertiary psychiatric hospital in KZN.
- All nurses working permanently for six months and above at the selected tertiary psychiatric hospital.

4.5.4.2 Exclusion criteria

- Operational managers as they are not directly involved with patient care.
- All nurses that were not permanently employed at the selected tertiary psychiatric institution.
- All nurses who were less than six months in employment.

4.6 Data collection

According to Polit and Beck (2017: 489), data collection is the process of gathering and measuring information. The data that is collected should yield valid and accurate results.

4.6.1 Data collection instrument

In keeping with the quantitative approach, data was collected using a self-report questionnaire. The questionnaire (Annexure 6) used in this study consisted of the following subsections.

- Section A focused on demographics and included personal and professional data information.
- Section B was the Secondary Traumatic Stress Scale.
- Section C consisted of 17 Likert scale questions relating to the respondent's professional life.
- Section D entailed questions relating to the respondent's personal life.

The researcher made use of the Secondary Traumatic Stress Scale (STSS) (Section B) to measure the three domains of STS, namely, intrusive thoughts, avoidance and arousal symptoms. The scale is a 17-item, self-report test which uses a 5-point Likert scale with the responses ranging from never to very often. The tool was designed by Bride *et al.* (2004), a university professor at the school of social work at the Georgia State University, Atlanta, Georgia, USA. Permission was obtained from Dr Bride for the use of the tool (Annexure 5).

To further assess the effects of STS on professional life (Section C) and personal life (Section D), a separate questionnaire was designed by the researcher using literature

and in consultation with the statistician and the supervisors to gain the relevant data. Section C consisted of 17 questions relating to the effects of STS on professional life and used a 5-point Likert scale with the responses ranging from strongly disagree to strongly agree. Section D comprised 12 questions relating to the effect of STS on the personal life of the MHCN and also used a 5-point Likert scale with responses ranging from strongly disagree to strongly agree.

4.6.2 Pilot study

A pilot study was conducted on the 5th of February 2020 by the researcher on one PN/EN/ENA from the hospital's outpatient department. These respondents had met the inclusion criteria. All ethical principles were adhered to during the pilot study. Results of the pilot study were analysed and indicated that all the respondents understood the instructions clearly and did not experience any difficulties in completing the questionnaire. Therefore, no changes were needed to the questionnaire. The data collected from the pilot study was not used in the main study.

4.6.3 Validity

According to du Plooy-Cilliers, Davis and Bezuidenhout (2016: 256), validity is the degree to which an instrument measures what it is supposed to measure. Validity can be classified as content, face, construct and reliability.

4.6.3.1 Content validity

Content validity concerns the degree to which an instrument has the appropriate sample of items for the construct being measured and these adequately cover the construct (du Plooy-Cilliers, Davis and Bezuidenhout 2016: 256). To ensure content validity the researcher specifically designed questions (Section C and Section D) relating to the effects of STS on the professional and personal lives of the MHCN.

4.6.3.2 Face validity

According to du Plooy-Cilliers, Davis and Bezuidenhout (2016: 256), face validity refers to whether the instrument looks like it is measuring what it supposed to measure. The researcher ensured that the questionnaire that was used had all the relevant questions pertaining to the symptoms of STS and had therefore used the STSS as

part of the questionnaire (Section B). Pre-testing of the questionnaire during the pilot study contributed to the validity of the instrument.

4.6.3.3 Construct validity

Construct validity indicates whether the test measures the concept that it is intended to measure and is an important factor for assessing the quality of a study (Du Plooy-Cilliers, Davis and Bezuidenhout 2016: 256). The researcher fostered construct validity by ensuring that the sample of the study targeted all the categories of nurses in the study. There is good construct validity with over 200 published papers on the subject, many of the published research papers have utilised the ProQOL.

4.6.3.4 Reliability

du Plooy-Cilliers, Davis and Bezuidenhout (2016: 254) state that when assessing if a research method or instrument is reliable, the researcher needs to ask whether the same results would be produced if the research were to be repeated by a different researcher at a different time using the same method or instrument. The developers of the STSS, which was used to assess the symptoms of STS in the MHCNs in this study, indicated that the STSS has demonstrated good internal consistency (Cronbach's $\alpha = 0.95-0.97$), convergent validity, discriminant validity, and factorial validity (Yan *et al.* 2020: 1).

The STSS has also ensured reliability as it has been used in other studies on mental healthcare professionals (Christodoulou-Fella *et al.* 2017; Mangoulia *et al.* 2015). Various other studies such as Benuto *et al.* (2018: 7) and Mancini (2019: 21) have also used this tool to assess the levels of STS in individuals. Pre-testing of the questionnaire during the pilot study further contributed to the reliability of the instrument.

4.7 Data collection procedure

The researcher obtained approval for conducting the research from the Department of Health (Appendix 2b) and gatekeeper permission from the clinical facility where the study was conducted (Appendix 3b).

Appointments regarding data collection were confirmed with the consenting respondents at a time convenient to them. The researcher obtained permission to utilise an available consultation room which was conducive for the respondents and for maintaining confidentiality. Data collection took place from 13 to 27 July 2020. Day nurses opted for a slot of between 2 pm to 5 pm, while the nurses on night duty were done between 7 pm to 9 pm, as these were the most convenient times and would not interfere with the routine of the ward or compromise patient care. The respondents took 30 to 45 minutes to complete the questionnaires.

The researcher was present while the respondents filled out the questionnaires so that she could obtain them as soon as they were filled and check them for completeness. Once completed by the respondents the researcher immediately placed the questionnaires in sealed slotted boxes.

4.7.1 Data preparation and entry

Following the data collection process, the researcher personally prepared the data for analysis by checking for accuracy, omissions, and completeness of the questionnaires. Returned questionnaires were counted and totaled 183, a 100% return rate. There were no spoilt questionnaires.

Moule, Aveyard and Goodman (2017: 406) state that as part of the process of interpretation and conclusion drawing, the researcher applies codes to the data. The coding process was guided by the statistician. To facilitate data capturing the researcher made use of data coding, where each question was coded in a numerical form and entered onto an excel spreadsheet.

Data were prepared in a grid format to facilitate data entry on the computer, then it was recorded on a spreadsheet that consisted of columns containing variables or question responses. Once this was completed the researcher checked the spreadsheet to ensure that there were no errors and that it was as accurate as possible. The data was then forwarded to the statistician for statistical analysis.

4.8 Data analysis

Data analysis is decreases, organises and gives meaning to data. Data were analysed using the statistical software SPSS version 23.

Descriptive statistics describe the basic features of a data set and summarise variables. Descriptive statistics in the form of tables and graphs were used to describe the data graphically. Tables can be used by the researcher for reference and to gauge exact figures (O'Leary 2017: 350). Tests used in the analysis included Wilcoxon signed rank test, regression analysis, binomial test and Mann Whitney U test. Presentation of the data will be detailed in the following chapter.

4.9 Ethical considerations

4.9.1 Ethics approval

Once ethics clearance was granted by the Institutional Research and Ethics Committee (IREC 173/19) (Annexure 1), permission was then sought and granted by the Health Research and Knowledge Management Committee of the KZN Department of Health (Annexure 2a and 2b). The hospital ethics and research committee and hospital Chief Executive Officer (CEO) were also approached for permission to conduct the study (Annexure 3a), and permission was granted (Annexure 3b). The following principles of research ethics were maintained.

4.9.2 Informed consent

Respondents were given accurate and adequate information about the purpose of study undertaken. The researcher ensured the information given to the respondents was understood and reiterated that participation was voluntary (Annexure 4a). Respondents were given a written consent form that contained the purpose of the study, participant's expectations, time and any costs or benefits (Appendix 4b).

4.9.3 Autonomy

The right of self-determination was emphasised by informing respondents that participation was voluntary and that they could withdraw at any stage without any penalty.

4.9.4 Confidentiality

Confidentiality refers to the management of personal information to ensure only the researcher is directly involved with the study and is able to access information. The participants had the right to choose whether to share personal information. The researcher-maintained confidentiality by using a coding system instead of participant's names thereby ensuring the identity of the respondents were kept confidential. The respondents' names were known only to the researcher. The list of respondents and their codes as well as all data collected from the respondents were kept in a lock-secured safe place and will be stored for five years.

4.9.5 Respect for human dignity

This principle of human dignity according to Polit and Beck (2017: 140) includes the right to autonomy, and the right to full disclosure by the researcher. The principle of respect for human dignity addresses anonymity, confidentiality and self-determination. Informed consent according to Polit and Beck (2017: 140) covers three aspects: content, comprehension and documentation.

Informed consent was obtained from all respondents addressing the objectives, procedures, potential risk/benefits, confidentiality and anonymity. During the course of the study, respondents were assured that the data they provided to the researcher would be kept in strict confidence.

Respondents were assured that participation was voluntary and that no prejudice or victimisation would occur should any of them opt to withdraw. To protect their identity, codes were used instead of names.

4.9.6 Beneficence

Beneficence is an important research ethical principle. Respondents were informed that information divulged would be kept confidential and no discussion would be held with anyone including their employers. Beneficence imposes a duty on researchers to minimise harm and maximise benefits (Polit and Beck 2017:139). The researcher ensured that no harm came to the respondents during the data collection. Respondents were briefed to report should they experience any signs of distress, and that the researcher was available should counselling be necessary.

4.9.7 Justice

The ethical principle of justice was maintained as those respondents that had declined to participate in the study were not treated in a prejudicial manner. To ensure the respondent's privacy, their details were not written on the questionnaire. In this study all respondents were treated equally, and the same information was given to all respondents.

4.10 Summary of the chapter

This chapter delineated the research design, population, sample and survey instrument. The data collection process and analysis were also discussed. The statistical software (SSPS version 23) was introduced as the tool to analyse the data. In the next chapter, a summary of the data analysed is presented.

CHAPTER 5: PRESENTATION OF RESULTS

5.1 Introduction

This chapter presents the findings from the data analysis. The results of the findings are in line with the objectives of this study. The objectives of the study were to:

- Determine the prevalence of secondary traumatic stress experienced by nurses in a tertiary psychiatric hospital.
- Determine the effects of secondary traumatic stress on the nurse's professional life.
- Determine the effects of secondary traumatic stress on the nurse's personal life.

5.2 Presentation of the results

To manage raw data, data was captured on an excel spreadsheet. The data collected was thereafter analysed using SPSS, version 23. Tests used in the analysis included the following:

- Descriptive statistics including means and standard deviations, where applicable. Frequencies were represented in tables or graphs. These statistics describe and summarise data (Brink, van der Walt and van Rensburg 2015: 180).
- Binomial test: Polit and Beck (2017: 720) state that a binomial test is a basis for analysing dichotomous data and is used to describe the number of occurrences of an event in a series of observations.

5.3 Section A: Demographic data

This section presents data in respect of personal information of the respondents including gender, age and marital status of the respondents (Figure 5.1). These were seen as relevant in the study, as possible intervening variables in STS.

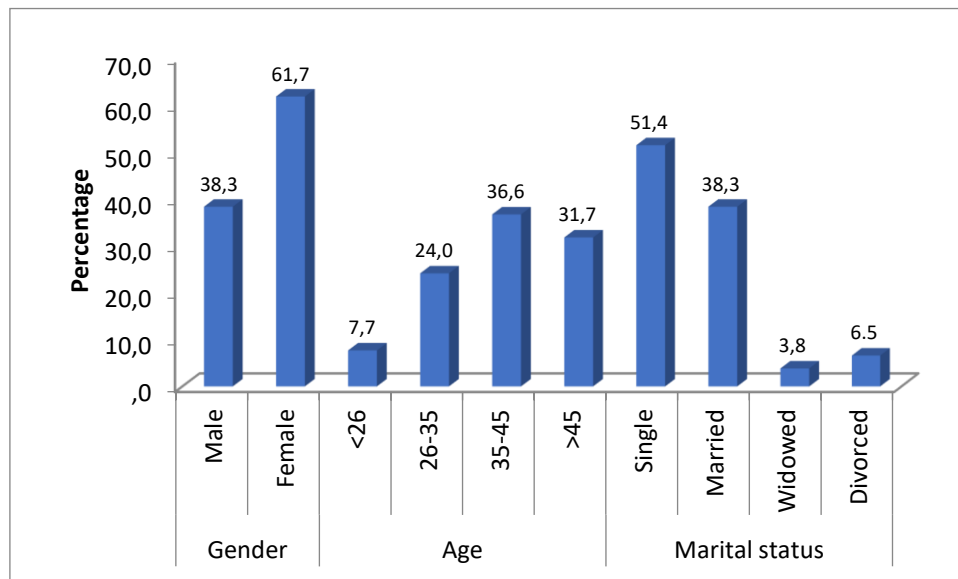


Figure 5.1: Gender, age and marital status of respondents

5.3.1 Gender

Figure 5.1 gives the breakdown of respondents by gender. Female respondents 61.7% (n = 113), were in the majority, with a lesser percentage being male respondents 38.3% (n = 70).

5.3.2 Age

From Figure 5.1 it is evident that out of (n = 183) respondents, 68.3% (n = 125) were between the ages of 35 to 45 and > 45 years of age. This reflects that there is a high level of maturity among the staff in the institution.

5.3.3 Marital status

From Figure 5.1 it is evident that over half of the respondents were single 51.4% (n = 94), while 38.3% (n = 70) were married. Just a few respondents were either divorced 6.5% (n = 12) or widowed 3.8% (n = 7).

5.3.4 Category of nurse and years of service

Figure 5.2 shows the categories of nurses from whom data was collected. In addition, the respondents were asked about their years of service in the profession.

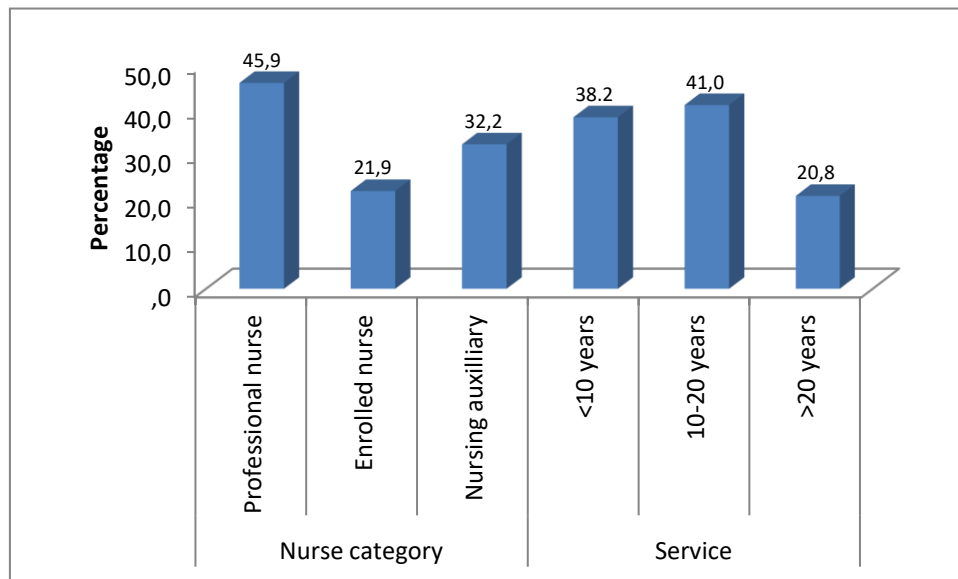


Figure 5.2: Category of nurse and years of service

5.3.5 Category of nurse

Table 5.2 reflects that 45.9% (n = 84) were professional nurses, followed by enrolled nursing assistants 32.2% (n = 59), with the least being enrolled nurses 21.9% (n = 40).

5.3.6 Years of service

Of the respondents, 41% (n = 75) reported having 10 to 20 years of service in the institution. A further 20.8% (38) had worked for more than 20 years, while 38.2% (n = 70) of respondents indicated having less than 10 years of service in the institution. (See Figure 5.2). This represents a fair distribution in terms of respondents' experience in the institution and so be able to give a balanced perspective on the trauma of being constantly exposed to the MHCUs' narratives.

5.4 Section B: Secondary traumatic stress scale

One of the objectives of this study was to assess the prevalence of STS among the MHCNs in a tertiary psychiatric hospital. Therefore, the Secondary Traumatic Stress Scale (STSS) was used to assess the frequency of STS symptoms. The STSS is a self-report instrument containing 17 items with is a 5-point Likert-type scale, with responses ranging from 1 (never) to 5 (very often). The respondents were instructed to respond to statements based on their feelings within the past seven days. The STSS

contains a total scale score and three subscales: intrusion symptoms (5 items), avoidance symptoms (7 items), and arousal symptoms (5 items).

Figure 5.3 displays the frequency with which respondents endorsed a specific STS symptom. A symptom was considered endorsed if the respondent indicated the symptom was experienced “occasionally”, “often”, or “very often” in the past seven days.

According to the developers of the STSS, the three sub-scales are formed and summarised as indicated in Table 5.1. For each sub-scale scores for an item in the STSS are added. The reliability of the sub-scale was tested using Cronbach’s alpha. An alpha value of 0.7 indicates the reliability of the sub-scale. All three subscales were highly reliable with a minimum value of 0.863 (Table 5.1).

Table 5.1: Scoring of the sub-scales

Sub-scale	Label	Items included	Range of sub-scale	Reliability
Intrusion	INT	2, 3, 6, 10, 13	5 – 25	0.863
Avoidance	AVO	1, 5, 7, 9, 12, 14, 17	7 – 35	0.890
Arousal	ARO	4, 8, 11, 15, 16	5 – 25	0.873

5.4.1 Results indicating secondary traumatic stress

Table 5.2 indicates the rating scores for STS and the percentage of respondents that experienced the symptoms of STS. According to the data, more than two-thirds of the respondents 66.5% (n = 122) had experienced little/mild/ no STS. The other one-third of the respondents 33.5% (n = 61) experienced between moderate to high levels of STS.

Table 5.2: Rating scores and respondents scores for STS

Rating Scores of STS	Percentage of respondents with STS
Below 28 (Little to no STS)	53.4
28-36 (Mild STS)	13.1
37-43 (Moderate STS)	9.3
44-48 (High STS)	5.6
49 and above (Severe)	18.6

5.4.2 Frequency of responses of secondary traumatic symptoms

As previously indicated the STSS indicates the frequency of responses to symptoms of STS. Table 5.3 reflects the frequency of responses to the intrusion, avoidance and arousal symptoms of STS.

5.4.2.1 Intrusion symptoms

Intrusion symptoms were the most common group of symptoms experienced by the respondents. As indicated in Figure 5.3, the most frequently reported intrusion symptom that was experienced by more than half of the respondents (50.5%, n = 92) were that they had constant thoughts of their work with the MHCU when they did not intend to. The symptom that was reported the least on the intrusion scale (23.8%, n = 44) was experiencing distressing dreams of the MHCU.

5.4.2.2 Avoidance symptoms

Over half of the respondents (57.2%, n = 103) acknowledged having feelings of being emotionally numb when working with MHCUs while 28.3% (n = 52) felt that they were unable to recall information relating to working with the MHCUs (Table 5.3).

5.4.2.3 Arousal symptoms

Arousal symptoms were the least experienced group of symptoms, with less than half of the respondents reporting such symptoms.

Irritability (38.2%, n = 70), sleep disturbances (35.7%, n = 65) and concentration difficulties (34.4%, n = 63), were all moderately ranked as significant by most respondents (Figure 5.3).

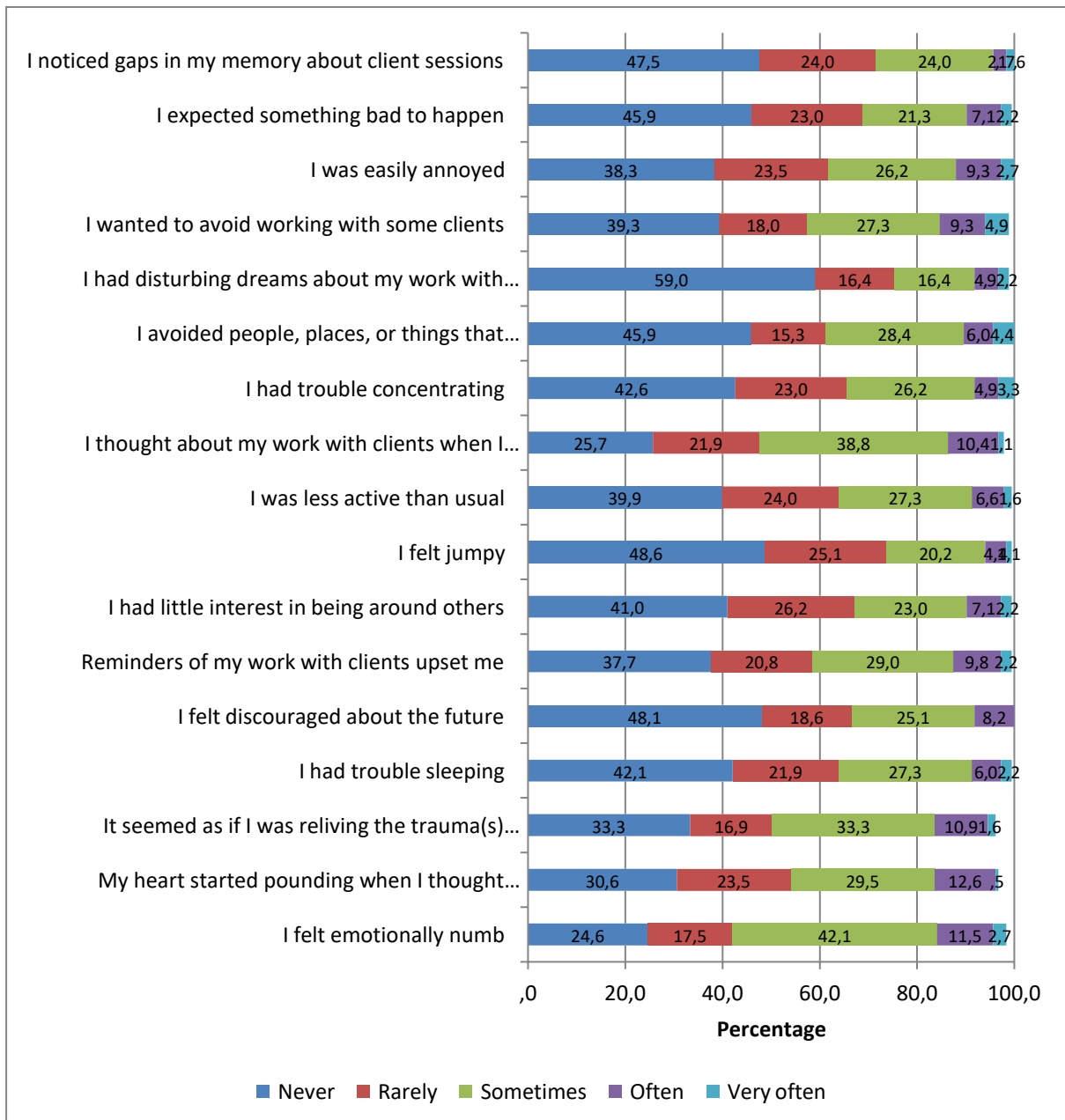


Figure 5.3: Frequency of STS symptoms

5.4.3 Associations between demographic variables and STS

Table 5.3 presents the breakdown of STS symptoms experienced by the MHCNs by demographic variables, namely gender, age, years of service, marital status and the category of the mental health care worker.

5.4.3.1 Associations between secondary traumatic stress and gender

The results showed that with regards to gender, the symptoms of STS were more prevalent among the female respondents as they had experienced higher levels of intrusion, avoidance and arousal compared to their male counterparts.

5.4.3.2 Associations between secondary traumatic stress and age

Regarding the age of the respondents, the symptoms of STS seemed to increase with age across all three sub-scales. For example, the age group of > 45 years reported the highest intrusion (36.6%), avoidance (32.42%) and arousal (28.79%) symptoms, compared with the < 26 years age group, who reported intrusion (17.67%), (avoidance) 19.64%, and arousal (18.21%).

5.4.3.3 Associations between secondary traumatic stress and years of service

The respondents with > 20 years of working in the psychiatric institution group reported the highest levels of STS symptoms along the three sub-scales (INT: 37,44%; AVO: 35.41%; ARO: 31.97%), compared to the < 10years (INT:27.53%; AVO:25.10%; ARO: 23.78%). This indicates that the longer the MHCN worked in the institution there greater the possibility that the trauma of the MHCN would affect them mentally.

5.4.3.4 Associations between secondary traumatic stress and marital status

The results show that although those that were divorced reported the highest levels of intrusion, avoidance and arousal symptoms, there was no significant difference between all of these marital groups.

5.4.3.5 Associations between secondary traumatic stress and category of nurse

Out of all three categories of nurses, the ERs were most affected by STS (INT: 36,62%; AVO: 34.37%; ARO: 33%) compared to the RNs (INT: 28,81%; AVO: 27.21%. ARO: 24.40%) and ENAs (INT:24.44%; AVO: 22.80%; ARO: 20.59%).

Table 5.3: Breakdown of symptoms of STS across demographic variables

Variable	INTRUSION SYMPTOMS			AVOIDANCE SYMPTOMS			AROUSAL SYMPTOMS		
	Mean	Median	Std. Deviation	Mean	Median	Std. Deviation	Mean	Median	Std. Deviation
Gender									
<i>Male</i>	25.84	25.00	21.49	25.28	25.00	20.80	24.00	22.50	20.94
<i>Female</i>	31.13	31.25	21.16	28.63	25.00	21.20	25.70	25.00	22.12
Age									
<26	17.67	10.00	19.17	19.64	16.07	19.64	18.21	17.50	18.97
26-35	26.44	25.00	18.42	24.56	25.00	16.66	23.40	25.00	17.97
35-45	26.76	25.00	21.51	26.41	25.00	22.08	24.32	25.00	22.11
>45	36.61	40.00	21.98	32.42	28.57	22.50	28.79	25.00	23.97
Service									
<10 years	27.53	27.50	19.68	25.10	25.00	18.40	23.78	22.50	19.51
10-20 years	26.36	25.00	21.07	25.37	25.00	21.00	22.73	20.00	21.15
>20 years	37.44	40.00	23.40	35.41	32.14	24.16	31.97	27.50	25.21
Marital status									
<i>Single</i>	27.33	27.50	20.55	26.46	25.00	20.44	23.67	20.00	20.26
<i>Married</i>	30.56	30.00	22.48	26.60	25.00	21.27	25.64	22.50	23.09
<i>Widowed</i>	28.39	18.75	25.52	25.00	10.71	29.30	20.71	10.00	29.21
<i>Divorced</i>	35.00	40.00	19.77	40.07	40.47	17.55	35.00	30.00	18.09
Category									
<i>PNs</i>	28.81	30.00	20.21	27.21	21.42	20.51	24.40	20.00	20.96
<i>ENs</i>	36.62	40.00	25.37	34.37	32.14	24.93	33.00	30.00	25.28
<i>ENAs</i>	24.44	25.00	18.88	22.80	25.00	17.78	20.59	20.00	18.612

5.5 Section C: The effect of secondary traumatic stress on the professional life of the nurse

Research question 2 sought to understand the effect of STS on the MHCNs life. Therefore, to better understand the effect of STS on the nurses' professional lives the respondents were requested to rank their agreement on aspects of their professional life on a scale of 1 "strongly disagree" to 5 "strongly agree".

As indicated in Figure 5.4, the respondents were asked various questions about their productivity and happiness at their place of work. Despite the challenges of working in a tertiary psychiatric institution there was a significant agreement by many staff that they had good friends at work (66%, n = 122). This will probably, therefore, have enabled 59.6% (n = 109) of them to report that they actively contribute to the happiness and wellbeing of their MHCUs and their colleagues. Furthermore, more than half of the respondents indicated that irrespective of the difficulty with working with psychiatric patients, they looked forward to going to work on a Monday morning.

However, despite the above positive findings, some of the respondents (23.4%, n = 43) admitted to being impatient at times with the MHCUs, and to behaving badly towards both their colleagues and the MHCUs. A further 28.5% (n = 52) reported staying away from work even when not being physically ill.

Regardless of some of the staff indicating that they looked forward to work there were some 37.2% (n = 68) who revealed that they would not voluntarily agree to work any overtime should the need arise. Figure 5.4 gives a breakdown of all findings regarding the effect of STS on professional life.

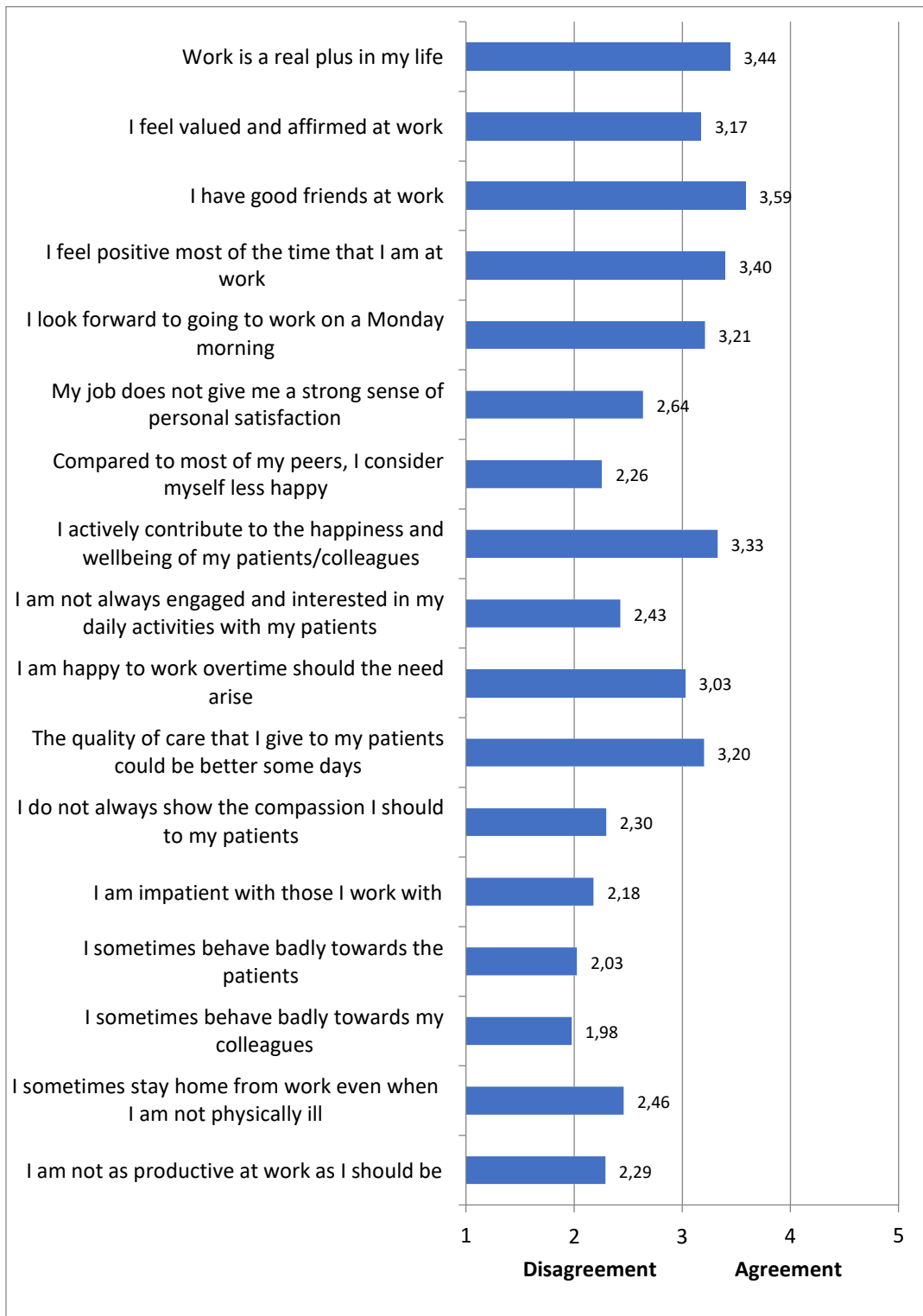


Figure 5.4: Disagreement and agreement on professional life findings

5.5.1 Results and interpretation of factors of professional life

Table 5.6 summarises the results and the interpretation of the factors that impacted the professional life of the respondents. The composite scores were measured by

taking the average of the individual item scores in the sub-scale. Both these sub-scales have values that ranged from 1 to 5 (from the Likert agreement scale).

The overall results of this study indicated that there was significant agreement that there was job satisfaction among nurses and significant disagreement that the work quality of these nurses was inadequate.

Table 5.4: Results and interpretation of the factors for professional life.

Factor	Name	Items included	Cronbach's alpha	KMO	Variance extracted
1	Poor work quality PWQ)	1-7, 9, 12	.900	.894	59.63
2	Job satisfaction (JS)	8, 10, 13-17	.884		

5.6 Section D: The effect of secondary traumatic stress on respondents' personal lives

To determine the objective of whether STS affects the personal lives of the respondents, the respondents were asked to indicate their level of agreement with statements regarding their personal life.

An overwhelming majority of the respondents (77.6%, n = 142), acknowledged that they had good relationships with close family members and that they led purposeful and meaningful lives (72.6%, n = 133). Furthermore, a large percentage of the respondents (71.6%, n = 131) agreed that spirituality played an important role in their lives.

On the other hand, 26.8% (n = 49), of the respondents did get easily irritated with their family members, with a further 23% (n = 42), acknowledging that they behaved badly towards family members at times. Although 60.1% (n = 110) of respondents felt that work was satisfying for them, 34.9% (n = 64) of respondents indicated that work had a negative impact on them and that after a long day at work they did not have the energy to engage in personal activities or interests. Table 5.5 gives a further breakdown of all the statements regarding findings on the effects of work on personal life.

Table 5.5: Disagreement and agreement on personal life findings

Statement	Disagreement	Agreement
1. I easily find myself getting irritated with my family	62.3%	26.8%
2. On my days off I like to visit friends and family	38.8%	51.4%
3. I sometimes behave badly towards my family	65.6%	23%
4. In general, I have good relationships with my close family (spouse/ children/ parents)	14.7%	77.6%
5. I lead a purposeful and meaningful life	15.3%	72.6%
6. I do not feel particularly pleased with the way I am at home	61.7%	23.6%
7. I am not particularly optimistic about my future	60.1%	23.5%
8. I feel that I am not really in control of my family life	69.4%	21.3%
9. I feel that home life is very rewarding	16.4%	73.2%
10. I have very warm feelings towards almost everyone in my family	14.7%	74.8%
11. I am committed and involved in my spiritual life	18.6%	71.6 %
12. I have energy at the end of each workday to engage in personal interest	34.9%	51.9%

5.7 Effect of secondary traumatic stress on respondents' professional and personal life across demographics

Table 5.6 reflects the relationship of gender and STS regarding their satisfaction or dissatisfaction with their personal and professional lives.

5.7.1 Effects of secondary traumatic stress on respondents' professional and personal life in relation to gender

The sample comprised 38.3% (n = 70) male and 61.7% (n = 113) female. The results of the study indicated that males had a higher rate of poor work quality (PWQ) and lower job satisfaction (JS) compared to females. Females indicated more satisfaction at home (SAH) while males had higher levels of dissatisfaction at home (DAH).

Table 5.6: Analysis of measures of secondary traumatic stress in relation to gender

	Gender	N	Mean	Std. Deviation
PWQ	Male	70	2.52	.888
	Female	113	2.30	.825
JS	Male	70	3.02	.923
	Female	113	3.48	.874
SAH	Male	70	3.53	.846
	Female	113	3.82	.705
DAH	Male	70	2.44	.825
	Female	113	2.34	.901

5.7.2 Effects of secondary traumatic stress on respondents' professional and personal life in relation to age

There was nil significant difference in poor work quality among the < 26- and 26- to 35-year age group. The respondents that were > 45 years had the highest rate of home life satisfaction.

Table 5.7: Effects of secondary traumatic stress on the professional and personal life in relation to age

	Age	N	Mean	Std. Deviation
PWQ	<26	14	2.5119	.69121
	26-35	44	2.6648	.87736
	36-45	67	2.3842	.89047
	>45	58	2.1511	.77549
	Total	183	2.3875	.85410
JS	<26	14	3.0612	.79384
	26-35	44	3.3019	.75166
	36-45	67	3.1521	.99045
	>45	58	3.5608	.94077
	Total	183	3.3107	.91947
SAH	<26	14	3.5833	.76725
	26-35	44	3.7159	.70764
	35-45	67	3.5771	.87248
	>45	58	3.9006	.67574
	Total	183	3.7135	.77377
DAH	<26	14	2.2000	.74006
	26-35	44	2.3742	.83307
	35-45	67	2.3731	.89066
	>45	58	2.4578	.92195
	Total	183	2.3870	.87256

5.7.3 Effects of secondary traumatic stress on respondents' professional and personal life in relation to work category

The effect of STS on the three categories of nurses revealed that the ENs (21.9%, n = 40) experienced the highest rate of poor work quality and also displayed more dissatisfaction at home compared to the RNs (45.9%, n = 84) and ENAs (32.2%, n = 59). The RNs appeared to be more content than their counterparts as they had higher job and home satisfaction.

5.7.4 Effects of secondary traumatic stress on respondents' professional and personal life in relation to years of service

Regarding the effects of STS on the respondents' years of service, it was evident that those who had worked in the institution for less than 10 years (38.3%, n = 70), indicated higher levels of work that they regarded as not up to standard. On the other hand, the older respondents (those with more than 20 years of service) displayed higher levels of satisfaction in their job and were happier in their home life compared to their younger colleagues.

5.7.5 Effects of secondary traumatic stress on respondents' professional and personal life in relation to marital status

The respondents that were divorced 6.6% (n = 12), had the highest level of poor quality of work followed closely by those that were single (51.4%, n = 94). The single respondents also displayed the highest level of dissatisfaction at home. Lastly, respondents that were widowed (3.8%, n = 7), indicated higher levels of job and home life satisfaction.

5.8 Summary of the chapter

This chapter presented the results of the study as produced through IBM SPSS 26 software. The chapter presented the interpretation of the results. The next chapter will link the findings of the literature review and the data collected for this study and attempt to compare and contrast the findings of this study with the existing literature and the theoretical framework.

CHAPTER 6: DISCUSSION OF THE RESULTS

6.1 Introduction

In this chapter, the results presented in the previous chapter will be discussed. The discussion is based on the study objectives, namely to:

- Determine the prevalence of secondary traumatic stress experienced by nurses in a tertiary psychiatric hospital.
- Determine the effects of secondary traumatic stress on the nurse's professional life.
- Determine the effects of secondary traumatic stress on the nurse's personal life.

6.2 Demographic findings

6.2.1 Gender

The majority of the respondents were females (61.7%). The ratio of males to females was approximately 1:1.6. This is in line with the demographic profile for all categories of nurses in SA which yields a larger ratio of female (93%) to males (7%) (SANC 2013). These findings concur with the following studies: Amir, Stephen and George (2016), Boniol *et al.* (2019: 3), and Payne *et al.* (2020: 1) which note a strong predominance of females in the nursing profession. The following studies also reflect a similar gender distribution: Aslan, Erci and Pekince (2021: 9), and Ruiz-Fernández, Pérez-García and Ortega-Galán (2020: 4).

A plausible reason for the gender differences, according to Barrett-Landau and Henle (2014: 11), is that historically nursing has been considered as solely a female orientated profession. However, this scenario is changing as more males are joining the profession (Smith 2018: 2; Buthelezi *et al.* 2015: 1). The presence of more males showing a keen interest in joining the field may change these historical gender biases in the future.

6.2.2 Age

A significant number of the respondents (68.3%) were between 35 to 45 years and older. This is in line with records of the SANC (2018) which reflect that the age distribution of registered nurses/midwives in SA, as well as enrolled nurses/midwives were that 29% of them were between the ages of 50 and 59 years, and 34% of ENAs were between the ages of 40 and 49 years. The study reflects that the institution has a mature staff complement of MHCNS, thus indicating substantial experience in the field. However, Rispel and Bruce (2014: 118) point out that the large number of older nurses practising in SA raises a concern and strategies must be developed to attract younger nurses into the profession.

6.2.3 Marital status

The study results indicate that most of the respondents had never been married (51.4%) which is similar with a South African study carried out in a psychiatric unit by Maila (2019: 39) that found that almost two-thirds of the respondents were not married (63.2%) and less than a third (29.4%) were married. A possible reason for a lower number of married respondents in the institution could be due to the long working hours of 12-hour shifts of day and night duty which may not be preferred by married respondents, as it can become mentally exhausting and affect their married life. The findings of this study were different to that of Ruiz-Fernández, Pérez-García and Ortega-Galán (2020: 4) and Burnett, Harvey and Wahl (2015: 320) who found that the majority of their respondents in their study were married.

6.2.4 Category of nurse

A total of 54.2% of the respondents was ENs and ENAs, meaning that less than half of the respondents (45.9%) were PNs. A shortage of PNs, according to Mulaudzi *et al.* (2020: 6), results in work-related stress and an increase in the workload of the available PNs in the institution. A study conducted by Hlongwa and Sibiyi (2019: 2) indicated that KwaZulu-Natal has a severe shortage of professional nurses, especially those with advanced psychiatric nursing. De Kock and Pillay (2018: 124) attribute the low number of PNs in SA to many leaving the country in search of greener pastures in richer countries.

6.2.5 Years of service

The majority of respondents (61.8%) reported to a working experience of a decade or more which reflects a sample characterised by extensive years of nursing knowledge and clinical experience. This is different to the study by Maila (2019: 39), which found that only 3.1% of respondents had more than 10 years of experience in the institution where the study was conducted.

6.3 Prevalence of secondary traumatic stress

As previously indicated, the MHCNs in this study verbalised that they felt overwhelmed and burdened when they had listened to the trauma that their MHCUs have been exposed to. The findings of this study confirm that at the time the study was conducted STS was prevalent among the MHCNs in the institution and the narratives of the MHCU did significantly impact their mental well-being as almost half of the respondents (46.5%) were affected by their daily interactions with the MHCU.

There have been several published studies examining STS among psychiatric health professionals (Adeyemo *et al.* 2015; Amir, Stephen and George 2016; Baniewicz 2015; Baum 2016; Bock *et al.* 2020). These studies also demonstrated that STS tends to be prevalent among those in the psychiatric field. Kintzle, Yarvis and Bride (2013: 1313) had almost the same findings to this study, as 46% of the respondents in their study had experienced mild to severe symptoms of STS.

The high proportion of respondents (46%) experiencing STS in this study is concerning. According to Bock *et al.* (2020: 1) the high levels of STS in nurses may contribute to anxiety disorders and major depression.

Some studies have reached different conclusions to that of this study, that individuals who work in the mental healthcare field experience little to no STS (Rajeswari and Sreelekha 2017: 1; Smith and Keatley 2014: 1; Wentzel and Brysiewicz 2018: 82).

The evidence from this study shows that there is a high prevalence of STS among the MHCNs in this institution. The results of this study are significant as it has been able to ascertain the psychological risk of the MHCNs' exposure to the MHCUs trauma. It

is, therefore, important that the institution recognises the psychological risk of being exposed to the traumatic narratives of the MHCUs.

6.4 Frequency of secondary traumatic stress

The scoring for individual symptoms was examined using the three sub-scales of intrusion, avoidance, and arousal. Of the three domains, the intrusion symptoms were the most experienced by the respondents, with 50.5% of them acknowledging that the most frequently experienced intrusive thought was thinking about their work with the MHCUs when they did not intend to. Gottschall (2016: 11) mentions that if a therapist is affected by the intrusive symptoms of their clients this will hamper them from being effective therapists and consequently will affect the therapeutic relationship.

Duffy, Avalos and Dowling (2015: 9), had similar findings to this study because they found that the majority of respondents of their study also experienced intrusion symptoms the most. Morrison and Joy's (2016: 2866) and Kintzle, Yarvis and Bride's (2013: 1313) studies, on the other hand, differed as they found that arousal symptoms and avoidance were the most commonly experienced symptoms.

6.5 Correlation of secondary traumatic stress across demographic variables

6.5.1 Gender and age

This study corroborated the following studies suggesting females present with higher STS scores than their male counterparts (Ramatsipele 2014: 39; Zeidner *et al.* 2013: 605). Baum (2016: 12) attributes this fact to women handling their stress differently to men. Borges *et al.* (2019: 4) state that females may be more vulnerable to the effects of STS as they are more empathetic and can connect better than males with their patients and would, therefore, feel their trauma and fears to a greater degree than males.

Secondary traumatic stress was most prevalent among respondents that were above the age of 45 years, thus indicating that this age group was the most prone to absorbing the suffering of their MHCUs. Baum (2016: 12) and Borges *et al.* (2019: 4) concurred with the findings of this study as they also found that older females were

more susceptible to the trauma of the patient which resulted in higher levels of STS. Borges *et al.* (2019:4) attribute increased levels of STS among the older age group as being due to the fact that STS develops over time. Sacco *et al.* (2015: 38) reached a different finding, as their results showed that the younger respondents displayed higher levels of STS as compared to the older respondents, which may be attributed to them not being long in the field.

6.5.2 Marital status and years of service

The divorced respondents in the study indicated higher levels of STS This is in contrast to the findings of Jarrad *et al.* (2018: 4) as a higher prevalence of STS among married individuals compared to among unmarried individuals where noted. This was credited to those in matrimony experiencing higher life demands which resulted in the increased level of STS. The findings of the current study were different to those of Aslan, Erci and Pekince (2021: 9) as single individuals had experienced higher levels of STS.

Amir, Stephen and George (2016: 43), and Zaidi, Yaqoob and Saeed (2017: 317), found that the longer an individual stayed in service, the more they were prone to increased levels of STS. Those findings were consistent with the current study which also found that the MHCNs that had the longest psychiatric service were somehow more affected by the trauma of the MHCU than those with the least number of years of service.

6.5.3 Category of nurse

Of the three categories of nurses, STS was the most prevalent among the ENs and least prevalent among the ENAs. While this may seem intuitively controversial, there could be an explanation in the training and operation of the categories. While the RNs are the most senior and most trained in MHCU services, it could be true that due to understaffing, ENs (with no significant training in the caring of MHCUs) may find themselves interacting more with these specialised patients than they ought to. In general, ENAs may not be as involved in the traumatic aspects of MHCU nursing as ENs and RNs are. This would result in a picture in which ENs are more susceptible to STS than RNs, who are technically equipped through their training to handle more

stressful situations. Furthermore, this could be due to the training and operational duties, of the EN as they are not specialised in MHCU care compared to RNs. As indicated by Maila, Martin and Chipps (2020: 2), ENs and ENAs have no formal education or training in psychiatric nursing except for in-service training.

Contrary to this study's findings, Maila, Martin and Chipps (2020: 5) found that ENs and ENAs showed higher levels of CS, therefore indicating that they were happier with their work compared to the RNs. These differences were attributed to the ENs and ENAs rating the following statements significantly higher than the RNs "*I am happy I chose to do this work*" and "*I am pleased with how I am able to keep up with nursing techniques and protocols*".

6.6 Effects of secondary traumatic stress on respondents' professional life

The findings of this study regarding the effect of STS on respondents' professional life were mixed. Although most of the respondents appeared content with their work-life, there were also respondents that appeared to be negatively impacted by the stressors of working with MHCUs.

It was noted that there seems to be a culture of good work ethic, strong support systems, and an overall sense of pride as respondents indicated that they had support from their friends and colleagues at work. This was consistent with the findings of several studies (Manning-Jones, de Terte and Stephens 2016: 27; Caringi *et al.* 2017: 1; Handran 2015: 14) which concluded that the support of one's peers significantly decreases the chances of developing STS. Over 60% of the respondents felt that their jobs added value to their lives, and a substantial number (45.4%) would willingly take on overtime, while most (51.4%) looked forward to going to work on a Monday morning. The culture of good work ethic and strong bonds of friendship that have been forged between these colleagues may have ultimately contributed to the respondents being resilient and gratified in their professional life, thus obtaining CS instead of CF/STS.

However, despite these positive findings, it is evident that the effects of STS were spilling over into some of the respondent's professional life resulting in emotional

exhaustion. Christodoulou-Fella *et al.* (2017: 6) and Wright (2018: 1) state that experiences of emotional exhaustion in nurses may result in them losing interest in their job and ultimately leaving their profession. The present study found that some of the respondents were having feelings of emotional exhaustion, which resulted in occasional absenteeism (28.5%). Absenteeism and sick leave rates in nurses have an impact on patient care, and, according to Kovane (2015: 1), this is a huge concern in SA. Further negative effects that appeared to take their toll on the professional life of the respondents were evident as more than half (51.4%) of the respondents acknowledged having negative thoughts about their work with MHCUs when they were off duty. Some resorted to selective interaction 42% with MHCUs while 28.3% experienced selective amnesia with regards to recalling information relating to MHCUs. All these may be symptoms of the negative impact of their work on their professional life.

6.6.1 Impact of secondary traumatic stress in relation to respondents' gender and the professional life

The findings of this study indicated that male respondents in this study were more affected by the stressors of their job compared to their female counterparts. They fared less in terms of poor work quality, satisfaction in their jobs and also had less satisfaction at home and displayed more negative behaviour at home than the females.

These findings concurred with that of Miao, Li and Bian (2017: 7), where the male healthcare workers in their study experienced lower job satisfaction compared to the females. However, they contradict findings of a study on Iranian nurses that found that the females experienced lower job satisfaction compared to their male counterparts (Akbari *et al.* 2020: 71). The correlation between gender and STS is also complicated by the obvious female-domination of the sector, in which, regardless of specialisation, male professionals may feel side-lined, which may negatively impact their job satisfaction.

6.6.2 Impact of secondary traumatic stress in relation to respondents' marital status and professional life

According to the findings, the respondents that were divorced were the most affected from working in an environment where they were exposed to the trauma of the MHCUs. The widowed respondents, on the other hand, derived the most job satisfaction. Ortega *et al.* (2018: 1) found that divorced respondents appeared to have the highest level of job satisfaction. However, a study with nurses in Cyprus found that married individuals enjoyed higher levels of job satisfaction (Andrioti *et al.* 2017: 79).

6.6.3 Impact of secondary traumatic stress in relation to respondents' age and years of service and their professional life

Those in the age group of 26-35 years displayed the highest rate of poor work quality and were found to be the most dissatisfied at work. This was consistent with the findings of Sacco *et al.* (2015: 37) and Dworkin, Sorell and Allen (2016: 747), whereby the younger professionals appeared to be most affected by the stressors of their job. The findings, therefore, suggested that despite the older MHCNs having higher levels of STS they had, however, coped better with the demands of their job as compared to the younger respondent. This can be understood in terms of aspirations, in which the younger the professionals, the more ambitious they are, the more likely they are to be frustrated by job stressors, compared to more senior and older colleagues who have more senior positions and more tempered aspirations. This, however, contradicts the findings of Zaidi, Yaqoob and Saeed (2017: 317), as their research indicated that the younger the employee the lower their levels of job-related stress.

Years of service seemed to be a significant intervening variable in the present study. Respondents with less than ten years of service were the most dissatisfied at their job as they had the highest amount of poor quality of work, while those that were longer in the field with more than 20 years were found to be the most satisfied with working in a psychiatric environment. This seems to resonate with Bercier (2013: 35), as this author argues that over time an individual becomes immune to the trauma of their patients.

6.6.4 Impact of secondary traumatic stress in relation to the respondents' category of nurse and professional life

This study found that those with lower educational levels (ENs) were the most affected in their professional life as they had the highest amount of poor quality of work. The results of this study corroborate those of Mashego *et al.* (2016: 470) as their study also indicated that lower qualifications in nurses tend to result in higher rates of job dissatisfaction. In the current study, the results of higher STS levels among the ENs could have been higher than the other two categories because they do not possess psychiatric training (Maila 2019: 61).

The study by Maila, Martin and Chipps (2020: 3) in SA among nurses that worked in a psychiatric observation unit had different findings to this study as RNs in that study had higher levels of STS compared to the other two categories. The authors attributed this to the RNs having more accountability and responsibility in their respective field.

6.7 Effects of secondary traumatic stress on respondents' personal life

Stressors that are experienced at the workplace can extend to the personal life and endanger the general wellbeing of an individual. Studies have linked occupational stress to other health problems such as alcohol and substance abuse, emotional eating, and anxiety-related conditions (Jarrad *et al.* 2018: 13; Matter and Thabet 2016: 6). According to the findings of this research, it was evident that the stressors of working with the trauma of the MHCU did extend and impact respondents both positively and negatively.

The negative impact that was evident in respondents was that 51.9% revealed that after a long day of work they had no energy to engage in personal interests. The nurses at this institution work shifts from 07H00 to 18h00 and 18h00 to 07h00, which may account for them not having the energy at the end of a shift. As a result of having no energy, this may account for why some respondents felt irritated with family 26.8%, and the 23% behaved badly towards their family members.

According to one of the developers of the ProQOL, Stamm (2010: 8), the chances of individuals developing problems in their job is relatively low. However, if the individual

does develop problems, it can have detrimental effects on the individual and those closest to them. This was evident in this study as 38.8% of respondents acknowledged that the effects of STS had affected them to the extent that they did not want to be around their family and friends, and had, therefore, alienated themselves from others. According to MacEachern *et al.* (2019: 69) these behaviours are not uncommon in the personal life of individuals that are under constant considerable strain.

It is, however, encouraging to note that despite working under considerable strain, the majority of the respondents indicated that the stressors of their job did not have deleterious effects on their personal life. One of the major strengths and possibly a protective factor was that the respondents were spiritually inclined, which may have contributed to them being satisfied in their personal life. Dewi and Hamzah (2019: 1) state that spirituality contributes to a sense of inner calmness and peace of mind, even in stressful contexts. This could have contributed to over half of the respondents feeling that their home life was rewarding and that their life was purposeful and meaningful. Over 51% got relief from spending day-offs with family and friends. This may indicate that rather than their professional lives burdening their personal lives, some respondents had supportive personal lives that assisted them to deal with work-related stressors.

6.8 Effects of secondary traumatic stress on respondents' professional life

The impact of STS on respondents' professional and personal life was more apparent in males than females. The male respondents were dissatisfied in their personal life and tended to behave more badly towards family members. Female respondents were happier and more satisfied in their jobs and therefore, performed significantly better at their work. The female respondents again showed higher satisfaction at work and lower dissatisfaction at home (DAH).

Single respondents of both genders were shown to display the most signs of negative behaviours at home, while the widowed respondents appeared to be the happiest in their personal life. In terms of the age of nurses, it was evident that the older nurses that were above the age of 45 years were the most satisfied in their personal life but remarkably also displayed the most negative behaviours at home. This also correlated

with years of service, where respondents with more than 20 years had conflicting results as they had the most satisfaction in their personal life, but also displayed negative behaviours at home, such as behaving badly towards family members.

The PNs were the happiest in their personal life, while the ENAs were the least happy in their personal domain. This distinction may be in part due to the differentiation in remunerations, in which RNs are better remunerated than ENs and ENAs, to afford relaxation activities and certain personal comforts beyond the reach of the other two categories. As compared to the other two categories of nursing staff, the impact of STS was the most evident in the enrolled nurses, resulting in negative behaviours such as irritability and bad behaviours towards family members.

6.9 Summary of the chapter

This chapter discusses the results of the research findings. Additional literature was sourced to support the findings. The main constructs of the ProQOL were discussed and integrated into the discussion. The chapter noted that while STS was evident among respondents, in the present sample and works of literature, its symptoms and impacts are mitigated by different demographic variables such as age, gender, years of service and category of a profession. It was also noted that STS affects both the professional and personal lives of some nurses more than others. The next chapter concludes the study.

CHAPTER 7: CONCLUSION, LIMITATIONS OF THE STUDY AND RECOMMENDATIONS

7.1 Introduction and summary of the study

This chapter concludes the research study. The limitations experienced were discussed and possible recommendations for the study are suggested. The study was inspired by the personal professional experience of the researcher, as well as from reading the local and international literature (Thompson 2018: 1) regarding professionals working within stressful fields of human caring, such as psychiatric nursing. While nursing professionals within mental healthcare institutions are expected to deliver high-quality services in caring for these vulnerable patients, it has been noted that their health can also be compromised, leading to diminished professional and personal lives. Little attention is paid to ameliorative services for such professionals, who after caring for traumatised patients so need relief and support for themselves too. As such, most are vulnerable to vicarious traumatisation, or what has been popularly known as secondary traumatic stress (STS) (Stamm 2005: 5).

This study, therefore, aimed to determine the effects of STS among nurses working in an acute tertiary psychiatric hospital in KwaZulu-Natal Province, SA. The study aim was divided into three objectives: to determine the prevalence of secondary traumatic stress experienced by nurses in a tertiary psychiatric hospital; to determine the effect of secondary traumatic stress on the nurse's professional life, and to determine the effect of secondary traumatic stress on the nurse's personal life. The proposed study was set in a specialised acute tertiary psychiatric hospital in the uMgungundlovu District of KwaZulu-Natal Province.

The study was informed by a positivist paradigm, which is grounded on realistic ontological assumptions. This was seen as appropriate since the researcher, based on her experience and extensive literature search, was convinced of the existence of STS among nurses working in such stressful contexts. The study followed a quantitative, non-experimental survey approach, where a self-administered

questionnaire was used as a primary instrument for data collection from 183 conveniently selected respondents.

The study was viewed through the theoretical lenses of the Professional Quality of Life (ProQOL) Model, developed by Stamm (2010). The framework aimed at assisting in crystallising the different states an individual goes through in their professional life. Both Stamm (2010) and Figley (1995) have done significant work the different states that professionals experience in the process of, or as a result of, performing their duties. These can include professional satisfaction and fatigue. In a caring profession such as nursing, it has been noted that professionals can undergo episodes of CF and CS. As such, this framework was seen as relevant in describing and explaining the manifestation and impact of STS on psychiatric nurses in the chosen research site.

A 100% questionnaire retention rate was achieved when all 183 instruments were completed and returned by the respondents. Data analysis was done in consultation with a statistician, using IBM SPSS 23 software. The analysis involved descriptive statistics, where data was described and summarised in frequencies and presented in the form of graphs and tables. Results, presentation, interpretation and discussions were constructed in line with the predetermined objectives. The hope was to contribute towards knowledge on the prevalence of STS in nurses rendering mental healthcare nursing, as well as contribute to policy changes in this regard. Given the significance of nurses in the South African health system, the study could contribute significantly towards caring for the carers.

7.2 Conclusion

The results of the study revealed the presence of mild to severe levels of STS in the sample studied. In addition, the research shows that STS is positively correlated to age and years of service. At the same time, there seems to be an impact on the professional and personal lives of those who are, over, time, exposed to the traumatic narratives of MHCUs.

7.2.1 Objective 1: Determine the prevalence of secondary traumatic stress experienced by nurses in a tertiary psychiatric hospital

This study was salient as it was one of the first studies to determine the prevalence of STS among psychiatric nurses that work in an acute tertiary hospital in the Province of Kwa-Zulu Natal. More significantly, this study has not only filled a gap in the South African context but has also raised an important area for future research. This study found that STS is prevalent among nurses that work in this tertiary psychiatric hospital. Although just over half of the respondents (66.5%) exhibited little to no symptoms of STS, while a considerable number of respondents (33.5%) exhibited mild to severe STS. Mild to moderate STS may be attributed to the nature of the psychiatric environment as MHCNs are exposed to the trauma of the MHCUs trauma history. The severity of these symptoms was highest among older respondents (> 45 years old), longer serving respondents (> 20 years), and ENs.

The higher ratings of STS among ENs specifically may be related to their training and operational expectations. As the RNs are often tasked with managerial and administrative duties such as the ordering of medication, dispensing of medication, attending managerial meetings, it falls upon the next category of staff, which is the enrolled nurse, to take on the responsibilities of the ward such as psychotherapeutic interventions. This may ultimately predispose them to the traumatic history of the MHCU thus exposing them to higher levels of STS. Another possible factor causing the higher levels of STS in ENs is their lack of formal psychiatric education and training, as compared to the RNs who complete a 4-year diploma or degree (general, community and psychiatry) and midwifery. Demographic variables, such as age, years of service, category of nurse and marital status were also seen, to varying degrees, as affecting the onset and prevalence of STS in some individuals.

7.2.2 Objective 2: Determine the effects of secondary traumatic stress on the professional life of the nurse

While literature displays a high effect of STS on nurse's professional life, the current study exhibited a somewhat moderate impact. Generally, most respondents reported having good professional lives, courtesy of positive work ethics and organisational support. According to the study, there was a sense of gratification among most of the

respondents due to strong working relationships and good support systems. One of the strengths that was identified was that staff indicated that they had good friends at work and felt positive and were valued and affirmed when at work. As such, it would seem a good organisational culture and support structures can be ameliorative to incidences of STS.

However, despite this, some respondents were negatively impacted by the stressors of their job. Several of the respondents indicated that the stressors of working in a psychiatric environment and being exposed to their traumas had made them feel emotionally numb. This led to some respondents avoiding contact with certain MHCUs, while some felt as though they were reliving the trauma of the MHCUs. Therefore, while it may be important to put in place support structures and systems, it is still vital that each professional be treated on merit since there is evidence that individual circumstances (age, gender, years of service, marital status), can affect how STS manifests in each individual.

7.2.3 Objective 3: Determine the effects of secondary traumatic stress on the personal life of the nurse

The study revealed that most of the respondents in this study were content and happy in their personal life, despite working with MHCUs. This could be largely because over 70% of respondents have a very active religious and spiritual life. However, despite these positive findings, there were also negative responses. For example, males and older respondents in the research had a higher rate of STS and dissatisfaction in their personal life, which manifested in negative behaviour at home such as them behaving badly towards family members. In addition, lower categories of nursing (ENAs and ENs) exhibited higher STS impact on personal lives compared to RNs. This may mean that more support should be targeted to lower categories, to assist them to blend their professional and personal lives, while minimising the negative impact on their families.

7.3 Limitations to the study

While the researcher is generally satisfied with the subject and process of inquiry, several limitations and delimitations were experienced during the course of the study. Firstly, the research instrument, the STSS, is designed to report the symptoms of STS

in the past seven days, it is, therefore, likely the respondents could have experienced the symptoms of STS but outside of this designated timeframe. As a closed-ended tool, the STSS could miss other manifestations of STS that are not pre-determined in the Scale. As a result, factors such as personal trauma, history of the respondent and coping style were not measured in this study. Studies have, for example, found that individuals with a high level of personal trauma are more affected by STS (Cieslak *et al.* 2013: 75; Baniewicz 2015: 55). Secondly, the questionnaire used to gather data took the respondents approximately 15-20 minutes to answer and may have posed a problem as they got bored and additionally because of time constraints in the ward they could have rushed and completed it to attend to their ward related duties. Lastly, there is a possibility of the Hawthorne Effect, in which respondents could have been reluctant to answer honestly as they were afraid of the consequences of how this study may impact them negatively, regardless of assurances of anonymity and confidentiality.

However, the researcher believes that this study reliably represents the effects of STS among the psychiatric nurses in this institution. Moreover, the strength of the study was that all three categories of nurses were invited to participate in the study. As noted, the response rate was 100%.

7.4 Recommendations

The findings of this study have implications for nursing care. Now more than ever, the mental health of nurses cannot and should not be ignored. As such, based on the findings of this study the researcher proposes the following recommendations.

7.4.1 Recommendations to the Department of Health

Research results from this study can be used as motivation to the Department of Health to consider implementing organisational strategies to prevent and treat STS in nurses. This could prove beneficial as it will contribute towards ensuring quality care of the MHCUs. Encouraging nurses to become aware of the effects of STS will allow for early detection and will encourage them to seek professional help should there be a need. This ultimately will help both the institution and the Department of Health, as there will be a reduction of litigation and reduced absenteeism and sick leave. The

researcher suggests that all MHCNs are given in-service training by the institution on strategies for coping with being exposed to the traumatic narratives of MHCUs. Also, there should be changes either in the training of lower category nurses working with MHCUs or duties performed by them, to protect them from dealing with situations they are not prepared for. This may also require amending of the staffing ratio of tertiary and other specialised hospitals.

7.4.2 Recommendations for nursing education

Currently, the nursing curriculum does not include information on the effects of secondary traumatic stress. This study has found that STS is present among MHCNs and has pervasive consequences in both the professional and personal lives of nurses. As such, it is, therefore, strongly recommended that nursing education incorporates this into their curriculum. This will equip the younger nurses that are entering the field with the necessary information and skills regarding how to avoid the negative effects of STS. This should also be included into the curricula of lower category nurses (ENs and ENAs).

7.4.3 Future research

The researcher is of the view that this topic warrants further research in the following areas.

- As this study has identified males as being more susceptible to STS, future research should concentrate on the susceptibility of male and female psychiatric nurses to STS.
- The reasons for why enrolled nurses compared to registered nurses and enrolled nursing assistants have higher levels of STS. For example, is it because they perceive the working environment differently?
- A qualitative study should be conducted to provide first-hand knowledge on the experiences of nurses working with traumatised children, such as those in the Child and Adolescent Unit.
- Research can also be conducted on the possible protective factors that may contribute to low levels of STS, in psychiatric nurses.

- In addition to these, future studies should examine the positive aspect of working with a traumatised population such as the gratification or CS that one obtains from rendering care to the MHCU.

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ANNEXURES

Annexure 1: University ethics clearance



Institutional Research Ethics Committee
Research and Postgraduate Support Directorate 2nd
Floor, Berwyn Court
Gate 1, Steve Biko Campus Durban
University of Technology

P O Box 1334, Durban, South Africa, 4001

Tel: 031 373 2375
Email: lavishad@dut.ac.za
http://www.dut.ac.za/research/institutional_research_ethics
www.dut.ac.za

10 June 2020

Mrs A. Chinaboo, 72 Woodpecker Road Northdale Pietermaritzburg

Dear Mrs. Chinaboo

Effects of secondary traumatic stress amongst nurses in an acute tertiary psychiatric hospital in KwaZulu-Natal (KZN)

Ethical Clearance number IREC 173/19

The Institutional Research Ethics Committee acknowledges receipt of your notification regarding the piloting of the data collection tool.

Kindly ensure that respondents used for the pilot study are not part of the main study. In addition, the IREC acknowledges receipt of your gatekeeper permission letters.

Please note that **FULL APPROVAL** is granted to your research proposal. You may proceed with data collection.

Any adverse events [serious or minor] which occur in connection with this study and/or which may alter its ethical consideration must be reported to the IREC according to the IREC Standard Operating Procedures (SOP's).

Please note that any deviations from the approved proposal require the approval of the IREC as outlined in the IREC SOP's.

Yours Sincerely,

Professor J. K. Adam
Chairperson

Annexure 2a: Permission letter to the KZN Department of Health

72 Woodpecker Road
Northdale
Pietermaritzburg
3201

The Health Research and Knowledge Management Component
KwaZulu-Natal Department of Health
Private Bag X9051
Pietermaritzburg
3201

Dear Dr Lutge

REQUEST FOR PERMISSION TO CONDUCT A RESEARCH STUDY

I am presently registered for a master's degree at the Durban University of Technology in the Department of Nursing. The proposed title of my study is "Effects of secondary traumatic stress amongst nurses working in a tertiary psychiatric hospital in Kwa-Zulu Natal".

I hereby request permission to conduct the study at Town Hill Hospital. A questionnaire will be used to collect data from nurses. Participation is voluntary, and informed consent will be obtained from all respondents. Confidentiality will be maintained at all times. Please find attached a copy of the summary of the research proposal. Mrs. Hazel Mahlanze is the supervisor for the study and may be contacted at 031-3732606. Her email address is hazelm@dut.ac.za.

Sincerely

.....
Mrs. A. Chinaboo (Researcher)
Telephone: 0661990772
Email: anashnee1972@gmail.com

Annexure 2b: Approval letter from the KZN Department of Health



health

Department:
Health
PROVINCE OF KWAZULU-NATAL

DIRECTORATE:

Physical Address: 330 Langalibalele Street, Pietermaritzburg
Postal Address: Private Bag X9051
Tel: 033 395 2805/ 3189/ 3123 Fax: 033 394 3782
Email: hrkm@kznhea.th.gov.za
www.kznhealth.gov.za

Health Research & Knowledge
Management

NHRD Ref: KZ_202004 001

Dear Mrs A. Chinaboo

Approval of research

1. The research proposal titled 'Effects of secondary traumatic stress amongst nurses in an acute tertiary psychiatric hospital in KwaZulu Natal' was reviewed by the KwaZulu-Natal Department of Health (KZN-DoH).

The proposal is hereby approved for research to be undertaken at Town Hill Hospital.

2. You are requested to take note of the following:
 - a. All research conducted in KwaZulu-Natal must comply with government regulations relating to Covid19. These include but are not limited to: regulations concerning social distancing, the wearing of personal protective equipment, and limitations on meetings and social gatherings.
 - b. Kindly liaise with the facility manager BEFORE your research begins in order to ensure that conditions in the facility are conducive to the conduct of your research. These include, but are not limited to, an assurance that the numbers of patients attending the facility are sufficient to support your sample size requirements, and that the space and physical infrastructure of the facility can accommodate the research team and any additional equipment required for the research.
 - c. Please ensure that you provide your letter of ethics re-certification to this unit, when the current approval expires.
 - d. Provide an interim progress report and final report (electronic and hard copies) when your research is complete to HEALTH RESEARCH AND KNOWLEDGE MANAGEMENT, 10102, PRIVATE BAG *9051, PIETERMARITZBURG, 3200 and e-mail an electronic copy to hrkm@kznhea.th.gov.za
 - e. Please note that the Department of Health shall not be held liable for any injury that occurs as a result of this study.

For any additional information please contact Mr X. Xaba on 033-395 2805.

Yours Sincerely

Dr E Lutge

Chairperson, Health Research
Committee Date: 13/05/20

Annexure 3a: Permission letter to the Chief Executive Officer of Town Hill Hospital

72 Woodpecker Road
Northdale
Pietermaritzburg
3201

The Chief Executive Officer

Town Hill Hospital

Pietermaritzburg

3200

PERMISSION TO CONDUCT RESEARCH STUDY

I am presently registered for a master's degree at the Durban University of Technology in the Department of Nursing. The proposed title of my study is "Effects of secondary traumatic stress amongst nurses working in a tertiary psychiatric hospital in Kwa-Zulu Natal."

I hereby request permission to conduct the study at Town Hill Hospital. A questionnaire will be used to collect data from nurses. Participation is voluntary, and informed consent will be obtained from all respondents. Confidentiality will be maintained at all times. Please find attached a copy of the summary of the research proposal. Mrs. HT Mahlanze is the supervisor for the study and may be contacted on 031-373 2606. Her email address is hazelm@dut.ac.za.

Sincerely

.....

Mrs A. Chinaboo (Researcher)
Telephone: 0661990772 /Email: anashnee1972@gmail.com

Annexure 3b: Approval letter from CEO of Town Hill Hospital



health
Department:
Health
PROVINCE OF KWAZULU-NATAL

Physical Address Hyslop Road Pietermaritzburg
Tel: 0333415654 Fax: 0333455720 Email: Janine.brooker@kznhealth.gov.za

Ethics and Research Committee
Town Hill Hospital

www.kznhealth.gov.za

18/03/2020

The CEO
Town Hill Hospital

Re: Effects of secondary traumatic stress amongst nurses working in a tertiary
Psychiatric hospital in KZN

Dear Mr Hadebe

Please note that the Ethics and Research Committee Town Hill Hospital, has considered the application from Mrs Chinaboo regarding the above research to be conducted at Town Hill Hospital. She has obtained provisional approval from DUT.

The Ethics and Research committee has no objection to her conducting her research at Town Hill Hospital and believe that her research will benefit future planning of Mental Health Care Facilities in the Province.

Yours Sincerely

Dr J Naidoo
Acting Head of Clinical Unit
Chairperson – Ethics and Research Committee
Town Hill Hospital

Approved / Not Approved

Mr Hadebe
CEO Town Hill Hospital

Annexure 4a: Letter of Information



LETTER OF INFORMATION

Title of the Research Study: Effects of secondary traumatic stress amongst nurses in an acute tertiary psychiatric hospital in KwaZulu- Natal

Principal Investigator/s/researcher: Anashnee Chinaboo (B Cur)

Co-Investigator/s/supervisor/s:

Mahlanze HT and Dr DG Sokhela

Brief Introduction and Purpose the Study:

Nurses are frequently exposed to heart wrenching and tragic situations of their patients; this may potentially induce trauma. Nurses are often imperilled by the narratives of their patients who describe graphic details of occurrences or incidents they have been exposed to such as child abuse, violence and sexual assault. Listening to these horrific accounts can take a negative toll on those in the healthcare service. Professionals, who are exposed to patient's trauma, run the risk of developing secondary traumatic stress (STS). The aim of this study is to determine the prevalence of secondary traumatic stress on nurses, and to further determine if secondary traumatic stress has an impact on their personal and professional life.

Outline of the Procedures:

Data will be collected using a questionnaire. You are kindly requested to complete a questionnaire, and this will take you 10-15 minutes. The questionnaires will be delivered by the researcher and an assistant. No names will be used on any of the questionnaires. The informed consent will be kept separate from the questionnaire.

Respondents will be asked to complete the questionnaire when they present on duty at their place of work.

Risks or Discomforts to the Participant:

Due to the sensitivity of the topic, which may invoke feelings of discomfort, the researcher and the assistant are advanced psychiatric practitioners. Should the need arise, they will be able to do counselling.

Benefits:

Respondents: The mental healthcare workers may benefit as they will become aware of the consequences of secondary traumatic stress. Indirectly, this study may also benefit the Department of Health, as litigations against mental healthcare nurses may reduce.

Researcher: Presentation of research paper and publication of journal articles on secondary traumatic stress among psychiatric nurses.

Reason/s why the participant may be withdrawn from the study:

The researcher foresees no reason for withdrawing the participant from the study. The participant may withdraw at any time as participation is voluntary.

Remuneration:

There is no remuneration for participating in this study.

Costs of the Study:

The participant will not bear any costs by participating in the study.

Confidentiality:

Participant confidentiality will be assured as respondents will not be required to write their names or personal details on the questionnaire. There will be a separate consent form that will be posted in a separate box. Completed questionnaires will be locked in a steel locker and will be shredded after 15yrs thus maintaining total confidentiality.

Research-related Injury:

Due to the possible sensitivity of the topic, which may invoke feelings of discomfort in some respondents, the researcher is an advanced psychiatric practitioner and will be on hand to do counselling should the need arise.

Persons to Contact in the Event of Any Problems or Queries:

Researcher: Anashnee Chinaboo: (telephone) 0661990772 or (email) anashnee1972@gmail.com

Supervisor: Ms. Hazel Mahlanze: (telephone) 0313736037 or (email) hazelm@dut.ac.za

The Institutional Research Ethics Administrator on 031 373 2375. **Complaints can be reported to:** The Director: Research and Postgraduate Support Dr L Linganiso on 031 373 2577 or researchdirector@dut.ac.za.

Annexure 4b: Letter of consent

Statement of Agreement to Participate in the Research Study:

I hereby confirm that I have been informed by the researcher, Anashnee Chinaboo, about the nature, conduct, benefits and risks of this study - Research Ethics Clearance Number: 173/19.

I have also received, read and understood the above written information (Participant Letter of Information) regarding the study.

I am aware that the results of the study, including personal details regarding my sex, age, date of birth, initials and diagnosis will be anonymously processed into a study report.

In view of the requirements of research, I agree that the data collected during this study can be processed in a computerised system by the researcher.

I may, at any stage, without prejudice, withdraw my consent and participation in the study.

I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.

I understand that significant new findings developed during the course of this research which may relate to my participation will be made available to me.

Full Name of Participant Date Time Signature / Right Thumbprint

I A. Chinaboo (name of researcher) herewith confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

A. Chinaboo

Full name of researcher

Date

Signature

Full name of witness (If applicable)

Date

Signature

Annexure 5: Request for permission and approval to use the validated questionnaire.

re: STSS Copyright Permission

Inbox

Anashnee Chinaboo <anashnee1972@gmail.com>

Fri, Apr 6,
2018, 7:36 PM

Greetings Dr. Bride,

My name is Anashnee Chinaboo, and I am currently a master's student in mental health nursing, with the University of Technology (DUT) South Africa. My proposed topic is effects of secondary traumatic stress on Professional Nurses in a tertiary psychiatric institution.

I humbly request permission to use your STSS tool in my research.

Could you please approve my request at your earliest convenience? I may be reached via email. I look forward to hearing from you.

Sincerely,

Anashnee Chinaboo
email: anashnee1972@gmail.com

Brian Bride <bbride@gsu.edu>

Fri, Apr 6,
2018, 8:25 PM

to me

Permission granted.

Brian E. Bride, Ph.D., M.S.W., M.P.H.
Distinguished University Professor
Director, School of Social Work
Georgia State University
55 Park Place NE, 5th Floor
Atlanta, GA 30302

Annexure 6: Questionnaire

Questionnaire No.:

--

Section A: Demographics of Respondents

Instruction: Please indicate your response with an X in the block provided:

1. Gender:

Male	Female

2. Age:

<26 years	26 - 35 years	36 - 45 years	>45 years

3. Category as a nurse:

Professional Nurse	Enrolled nurse	Enrolled nursing

4. Number of years of service working in mental healthcare:

<10 years	10-20 years	>20 years

5. Marital Status:

Single	Married	Widowed	Divorced

Section B: Secondary Traumatic Stress Scale

Please read the following statements and indicate how frequently (from **1= never** to **5= very often**) each statement was true for you in the **past seven days** by ticking the corresponding box next to the statement.

Statement	NEVER 1	RARELY 2	SOMETIMES 3	OFTEN 4	VERY OFTEN 5
1. I felt emotionally numb					
2. My heart started pounding when I thought about my work with my patients					
3. It seemed as if I was reliving the trauma(s) experienced by my patients					
4. I had trouble sleeping					
5. I felt discouraged about the future					
6. Reminders of my work with clients upset me					
7. I had little interest in being around others					
8. I felt jumpy					
9. I was less active than usual					
10. I thought about my work with clients when I didn't intend to					
11. I had trouble concentrating					
12. I avoided people, places, or things that reminded me of my work with clients					
13. I had disturbing dreams about my work with clients					
14. I wanted to avoid working with some clients					
15. I was easily annoyed					
16. I expected something bad to happen					
17. I noticed gaps in my memory about client sessions					

Section C: Professional Life

Indicate your agreement with the following statements regarding your professional life.

Statements	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1. I am not as productive at work as I should be					
2. I sometimes stay home from work even when I am not physically ill					
3. I sometimes behave badly towards my colleagues					
4. I sometimes behave badly towards the patients					
5. I am impatient with those I work with					
6. I do not always show the compassion I should to my patients					
7. The quality of care that I give to my patients could be better some days					
8. I am happy to work overtime should the need arise					
9. I am not always engaged and interested in my daily activities with my patients					
10. I actively contribute to the happiness and wellbeing of my patients/colleagues					
11. Compared to most of my peers, I consider myself less happy					
12. My job does not give me a strong sense of personal satisfaction					
13. I look forward to going to work on a Monday morning					
14. I feel positive most of the time that I am at work					
15. I have good friends at work					
16. I feel valued and affirmed at work					
17. Work is a real plus in my life					

Section D: Personal Life

Indicate your level of agreement with the following statements regarding your personal life by inserting an X in the appropriate space

Statements	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1. I easily find myself getting irritated with my family					
2. On my days off I like to visit friends and family					
3. I sometimes behave badly towards my family					
4. In general, I have good relationships with my close family (spouse/ children/ parents)					
5. I lead a purposeful and meaningful life					
6. I don't feel particularly pleased with the way I am at home					
7. I am not particularly optimistic about my future					
8. I feel that I am not really in control of my family life					
9. I feel that home life is very rewarding					
10. I have very warm feelings towards almost everyone in my family					
11. I am committed and involved in my spiritual life					
12. I have energy at the end of each workday to engage in personal interest					

RESEARCH PRESENTATION

I, Anashnee Chinaboo, currently a Masters' student with the Durban University of Technology (DUT), will be carrying out research on Secondary Traumatic Stress amongst mental healthcare nurses at Town Hill Hospital.

I will be presenting information on the topic and would like to invite all interested and available nurses to kindly attend, or a representative from each ward.

VENUE: Town Hill Hospital Gym Hall

TIME: 12H00 to 12H30

DATE: 9th July 2020

For additional information I can be contacted at 0661990772/
033-3415523.

Annexure 8: Sample size of nurses

POPULATION distribution	Specialised	Acute	Sub-acute	Pre discharge	
Professional nurse	45	36	31	17	129
Enrolled nurse	21	18	13	6	58
Enrolled nursing assistant	22	25	29	11	87
	88	79	73	34	274

Using an alpha value of .05 and a margin of error of .05, the MINIMUM sample needed is 160

To this we need to add about 15% to ensure getting the minimum required data after non-response/missing data occurs

MINIMUM SAMPLE required	Specialised	Acute	Sub-acute	Pre discharge	
Professional nurse	26	21	18	10	75
Enrolled nurse	12	11	8	4	34
Enrolled nursing assistant	13	15	17	6	51
	51	46	43	20	160

Adding 15% to these numbers gives...

SAMPLE required	Specialised	Acute	Sub-acute	Pre discharge	
Professional nurse	30	24	21	11	87
Enrolled nurse	14	12	9	4	39
Enrolled nursing assistant	15	17	19	7	58
	59	53	49	23	184

This last table gives the breakdown of the sample to get and is the one to include in the proposal -along with the info in red above.

Annexure 9: Letter of consultation from the statistician

Annexure 7: Letter of consultation from statistician

Gill Hendry B.Sc. (Hons), M.Sc. (Wits), PhD (UKZN)

Mathematical and Statistical Services

Cell: 083 300 9896

email : gillhendrystats@gmail.com

25 April 2019

To whom it may concern

Please be advised that I will be assisting Anashnee Chinaboo (student number 21853108) who is presently studying for a degree in master's in technology: Nursing with the statistical aspects of her study.

Yours sincerely

Gill Hendry (Dr)

Annexure 10: Certificate from the professional editor

DR RICHARD STEELE

BA HDE MTech(Hom)

HOMEOPATH

Registration No. A07309 HM

Practice No. 0807524

Freelance academic editor

**Associate member: Professional Editors'
Guild, South Africa**

110 Cato Road
Glenwood, Durban 4001
031-201-6508/082-928-6208
Postal: P.O. Box 30043, Mayville 4058
Email: rsteele@vodamail.co.za

EDITING CERTIFICATE

Re: ANASHNEE CHINABOO

**Master's dissertation (DUT): EFFECTS OF SECONDARY TRAUMATIC
STRESS AMONGST NURSES IN AN ACUTE TERTIARY PSYCHIATRIC
HOSPITAL IN KWAZULU-NATAL**

I confirm that I have edited this dissertation and the references for clarity, language and layout. I returned the document to the author with track changes so correct implementation of the changes and clarifications requested in the text and references is the responsibility of the author. I am a freelance editor specialising in proofreading and editing academic documents. My original tertiary degree which I obtained at the University of Cape Town was a B.A. with English as a major and I went on to complete an H.D.E. (P.G.) Sec. with English as my teaching subject. I obtained a distinction for my M.Tech. dissertation in the Department of Homoeopathy at Technikon Natal in 1999 (now the Durban University of Technology). I was a part-time lecturer in the Department of Homoeopathy at the Durban University of Technology for 13 years and supervised many master's degree dissertations during that period.

Dr Richard Steele

05 July 2021

per email