UNIVERSITY OF ZULULAND

EXPERIENCES OF NURSING STUDENTS IN THE MANAGEMENT OF HIV/AIDS PATIENTS IN A SELECTED PUBLIC HOSPITAL IN KWAZULU-NATAL, SOUTH AFRICA

BY

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DECLARATION BY CANDIDATE

I, Mponang Elizabeth Mncadi hereby declare that this dissertation titled, "**Experiences of Nursing Students in The Management Of HIV/AIDS Patients In A Selected Public Hospital In Kwazulu-Natal, South Africa",** submitted to the Department of Science and Agriculture at the University of Zululand, for the Master degree of Nursing Education, has not been previously submitted for any other qualification at this or any other Institution, and that it is my original work in design and execution. All references materials contained therein have been duly acknowledged.

Signature …… Date……..

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DEDICATION

I dedicate this study to God for the strength and perseverance He gave me throughout the study. I also dedicate this dissertation to my family for their unconditional support throughout my studies. Their efforts have not gone unnoticed.

ABSTRACT

Background and Introduction: General nursing students are expected to learn how to care for patients suffering from different conditions, including communicable diseases such as HIV/AIDS. Wide ranging empirical work has been done focussing on the experiences of registered nurses caring for HIV/AIDS patients, however there is limited published research looking at the experiences of student nurses caring for HIV/AIDS patients.

Aim of the study: The aim of the study was to explore and describe the experiences of nursing students in the management of HIV/AIDS patients at an identified public hospital in KwaZulu Natal, South Africa.

Methodology: Using a qualitative research design, individual in-depth interviews (n=20) were conducted with purposively selected participants. Manual data analysis was conducted using Brink's steps of analysis.

Results: - Nursing students offered wide ranging insights into their experiences of providing care to HIV/AIDS patients. Participants described a number of concerning situations that included discriminatory attitudes, overwhelming workloads, a shortage of staff, inadequate supervision by expert clinicians and stress related to fear, as challenges that compromised the care offered to HIV/AIDS patients. Importantly, they alluded to serious knowledge deficits that posed noteworthy challenges. Similarly, the description of policies related to the care of HIV/AIDS suggested that many were overly restrictive and were not responsive to the change needs of students and the patient group.

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CHAPTER 1

OVERVIEW OF THE STUDY

1.1 INTRODUCTION AND BACKGROUND

HIV/ AIDS is the most serious and most widespread pandemic affecting the world (Cohen, Hellman, Levy, DeCock & Lange, 2008) cited in (Epidemiology of HIV/AIDS, 2016). Its management has been complicated by a number of issues, not least the challenges related to the burden of care that the disease has placed on health care systems. Since the discovery of HIV/AIDS, nurses have been at forefront of managing the syndrome and the success of care efforts has been intractably related to the availability of competent care providers. Along with its complex symptomatology, HIV/AIDS has been blamed for disproportionately increasing overcrowding in hospitals (Berg & Nilsson, 2015). South Africa represents a particular example of this and most significantly, the health system has become increasingly dependent on contributions from trainee nurses. Even so, limited research has been conducted to explore the experiences of student nurses in relation to this epidemic. This is increasingly critical to the management of HIV/AIDS related health complications, not least because of the magnitude and severity of the disease.

As of 2016, approximately 36.7 million people were living with HIV globally, and of the mentioned population, approximately 18,9 million were men, 17.8 million women and 3.7 million were women under the age of 15 years (UNAIDS, 2017). Of those affected, as of 2016, 1.8 million people were newly infected (UNAIDS, 2016). Importantly, approximately 76.1 million people globally have been infected by the disease and from this, up to 35 millions deaths have been recorded over the course of time since its first identification (UNAIDS, 2016 and Moran, 2016).

In South and East Asia, a region of about 2 billion people which makes over 30% (thirty percent) of the global population as of 2010, had an estimated 4 million cases (12% of all people living with HIV), with about 250,000 deaths in 2010 (UNAIDS,2011). Research statistics confirmed low prevalence in Central Europe or Canada (UNAIDS, 2011). HIV/AIDS prevalence is the lowest in East Asia at 0.1 % (UNAIDS, 2011). By contrast, HIV/ AIDS rates in East and Southern Africa show a worsening picture (Berg

& Nilsson, 2015). As of 2016, there were 19.4 million people living with HIV in eastern and southern Africa and from this, more than half (59%) of all were women and girls. Despite the relatively low populations within the region, Eastern and southern Africa contribute nearly half (43%) of all the new infections of HIV globally (UNAIDS, 2016) Within the region, Sub-Saharan Africa has an even more alarming rate of infection of HIV/AIDS. In 2010, an estimated 68% (22.9 millions) of HIV cases and 66% of deaths (1.2 million) occurred. AIDS denialist policies have impeded creation of effective programs for distribution of antiretroviral drugs for lessening the impact of morbidity and mortality related to HIV/AIDS. Denialist policies of South Africa led to several unnecessary deaths (Chigwedere, Seage, Gruskin, Lee & Essex, 2008) cited in (Epidemiology of HIV/AIDS, 2016).

A 2012 survey in South Africa revealed a prevalence of HIV infected women as twice as higher than that of HIV infected men. Rates of new infections among young women aged 15 to 24 were more than four times greater than those of men in the same age (UNAIDS, 2014). The high prevalence of HIV among women presents a duality of concerns, firstly in terms of placing an unmanageable workload burden to the nursing workforce who are the primary care providers for the majority of those affected. Additionally, HIV/AIDS statistics confirm that the female population bear the brunt of the infection risk as they account for 60% of people living with HIV/AIDS in Sub-Saharan Africa (UNAIDS, 2017). The latter observation uniquely highlights the fact that the nursing workforce (many of whom are female) are themselves, heavily affected by HIV/AIDS. The HIV epidemic is overwhelming the coping capacity of the health workers throughout the world as nurses are exposed to increased stressful patient issues, escalating workloads and burnout threatening wellbeing and morale, leading to compromised care of patients (Haoses-Gorases, Katjire & Goraseb, 2013). In Zimbabwe, health care centres are burdened by severe shortage of resource shortages that need to be resolved in order to enable nurses to proceed delivering high quality HIV and ART (antiretroviral therapy) care for those in need in the sub-Saharan Africa. Furthermore, studies revealed that many nurses experience stress, fatigue, and burn-out linked to caring for HIV patients (Berg & Nilsson, 2015). Nurses working in hospitals are the most exposed group. The main feelings are worry, fear, and anxiety, of exposure to needle stick injuries and the accidental blood and body fluids exposure (Berg & Nilsson, 2015). In caring for HIV patients, nurses experience dilemmas related to psychosocial, cultural, and economic impacts beyond the physical

impact caused by the infection from the virus. Caring for HIV/AIDS patients is a challenge due to the related HIV malignancies, the difficulties associated with managing the symptoms, and the requirements of providing psychosocial support (Berg & Nilsson, 2015).

1.2.1 Global Overview of HIV/AIDS

According to Thanh, Moland & Fyldensnes (2012), the world has struggled to control the HIV/AIDS epidemic for three (3) decades due to the problems of discrimination, denial, and stigmatisation. These adversities have contributed in hampering international programmes, with some including, Haoses-Gorases, Katjire & Goraseb, (2013) blaming these as contributing factors to the fact that AIDS is one of the top five killer diseases in the world.

Since the emergence of the HIV/AIDS epidemic, approximately 34 million people have been killed and about 36.9 million are living with the HIV infection, with the disease existing in over 150 countries, globally (WHO, 2014). As indicated earlier, almost 71 million people have been infected with the HIV/AIDS virus and about 34 million people have died of HIV since the beginning of the epidemic (WHO, 2016). It is therefore evident that the HIV/AIDS pandemic has had an impact on every segment of society and every area within health care. Globally, approximately three quarters of the infected population has died as a result of the disease. This has been observed as a challenge faced by the nurses caring for patients affected with HIV-related illnesses (Moran, 2016).

1.2.2. Impact of HIV in East Africa

Twenty years post emergence, the global HIV/AIDS epidemic has killed an estimated 21.8 million people and another 36.1 million are living with the infection (Morison, 2016). Moreover, from a continental aspect, research has been conducted in Da es Salaam (Africa) in relation to nurses' experiences in caring for HIV/AIDS patients. The nurses experienced stress and burnout in the workplace due to the inadequate staff to patient ratio in which the high number of patients is supported by limited numbers of nurses who provide patient-care. Because of this, nurses are often subjected to the unfavourable condition of having to attend to the needs of multiple patients at a time,

resulting in them not being able to provide sufficient time of care to each individual patient (Berg & Nilsson, 2015).

Further studies indicate that, some countries in East Africa such as Uganda, have had nurses who have and continue to experience distress in the workplace. The described distress experienced by nurses has also been blamed on wider attitudes towards HIV/AIDS which perpetuate the stigmatisation and discrimination of the patients. It is notable that nurses who care for individuals affected by HIV/AIDS describe being discriminated against by society, in ways that are comparable to their patients (Erkki & Hedlund, 2013). The existence of stigmatisation expresses itself in various guises for example, in some countries such as Kenya, nurses were stigmatising patients by means of applying a negative attitude towards them. The resulting fear of being stigmatised is seen as contributing to public unwillingness to test for HIV (Erkki & Hedlund, 2013).

1.2.3. Challenges of HIV/AIDS in Sub-Saharan Africa

In South Africa -however- there is a heavy challenge, where approximately 80% of the country's population does not possess medical cover and are therefore forced to seek treatment in government clinics and hospitals (Bam & Naidoo, 2014). This has resulted in the over-crowding of government hospitals and clinics, which is cause to the increase of the nurses' workload. With the increase of HIV/AIDS patients in the government sector, nurses have been described as being subjected to the care of homogenous patients with no variety in medical conditions (Bam & Naidoo, 2014). By inference, this context of health care has a defined impact of the experiences of student nurses' with regard to their professional development particularly as it relates to their exposure to various conditions (Bam & Naidoo, 2014).

1.3 PROBLEM STATEMENT

South Arica has the largest and most high-profile HIV epidemic in the world, with an estimated 6.3 million people living with HIV in 2013 (UNAIDS, 2014). In the same year, there were 330 000 new infections, while 200 000 South Africans died from AIDS-related illnesses (UNAIDS, 2014). HIV prevalence remains high at 19.1% among the general population, but varies significantly between regions. In the province of KZN

the prevalence of HIV is almost 40% compared with 18% of the Northern Cape and the Western Cape combined (UNAIDS, 2014). Student nurses are exposed to the deadly virus of HIV/AIDS when managing HIV infected patients. Even so, previous research has given limited attention to the experiences of student nurses as it relates to the provision of care to individuals affected by HIV/AIDS and it is this observed paucity that further supports the current study.

It is notable too, that beyond the lack of specified study on student nurses' experiences, Ninety percent (90%) of nurses providing direct care to HIV/AIDS patients have reported experiencing high levels of stress and fear associated with this role (Haoses-Gorases, Katjire & Goraseb 2013). They further assert that, the stress related to caring for HIV positive patients' results in part, from the oppressive workload, secrecy and fear of disclosure that surrounds all issues related to the disease. These care challenges have been widely discussed with regard to qualified nurses but less so in the case of nursing students (Haoses-Gorases *et al*, 2013). Motivated by these and other motivations, the current study seeks to explore and develop insights into the experiences of student nurses providing care to HIV/AIDS patients.

1.4 AIM OF THE STUDY

The aim of the study was to explore and describe the experiences of nursing students regarding management of HIV/AIDS patients in a specified public hospital in KZN, in order to further improve the management of HIV/AIDS patients and thereafter design guidelines to assist nursing students.

1.5 RESEARCH OBJECTIVES

In ensuring the achievement of the above-specified aim, the study was focussed on the following objectives:

1. Exploring and describing the experiences of second year nursing students regarding management of HIV/AIDS patients.

2. Design and development of evidence based guidelines to assist nursing students regarding management of HIV/AIDS.

1.6 INTENDED CONTRIBUTION OF THE BODY OF KNOWLEDGE

The study will contribute in supporting the student nurses in their management of the care they for individuals affected by HIV/AIDS, in order to address fears and misconceptions about HIV/AIDS that may impede their ability to provide the most optimal care. Previous Studies have identified problems related to experiences encountered by student nurses when caring for HIV/AIDS patients, such as:

- The nurses' fear of exposure to body fluids by the patients, leading to patient/nurse transmission.
- The induction of stress to student nurses by overcrowded health care centres with HIV positive patients and frequent deaths of patients due to the virus.
- The marginalisation of the value that student nurses bring to the provision of meaningful care interventions to patients affected by HIV/AIDS.

The results of this study provide in-depth insights into the range of experiences that student nurses are exposed to, including the severity of the adversities faced by student nurses. The study also raises awareness of the issues that nursing students encounter, and in that respect, it offers important motivations for special consideration to be given to the challenges that face student nurses in caring for this client group.

1.7 RESEARCH METHODOLOGY

1.7.1 Research Design

A qualitative, descriptive, explorative and contextual study was carried out via individual interviews with second-year general nursing diploma students (R683) until data saturation was reached after 20 interviews.

1.7.2 Research Population

In this study, the target population was second-year general nursing students who had direct experience of providing care to individuals affected by HIV/AIDS patients as part of their practical work they engaged in on their pre-qualification work placements. The

choice of second year students (on the bridging course) was premised specifically on the fact that second-year student nurses are uniquely placed as this represented the penultimate year in which students had general nursing placements and as such, each had a rich experience with respect to the care of individuals affected by HIV/AIDS.

1.7.3 Research Setting

The study was conducted at a hospital nursing college residence in Durban, KwaZulu Natal, South Africa. The hospital had 300 students trained to practice clinical skills and within that, the hospital had a 200-bed capacity for patients. The training facilities for student nurses included the primary health care clinic, medical ward, paediatric ward, operating theatre, the antenatal clinic, midwives' obstetric unit, community outreach centre for home based patients and the casualty department. As part of the range of services offered, the hospital offered treatment for HIV patients, and also provided facilities for VCT (voluntary counselling and testing) and Prevention of Mother to Child Transmission (PMTCT).

1.7.4 Identification and selection of study participants.

The process of identifying and selecting study participants was based on non-probability sampling in which purposive sampling was used to select participants for the study. This sample of participants for the study was drawn from the full cohort of second-year general nursing diploma students (R683) involved in managing HIV/AIDS patients (n=30). From this, a total of 20 interviews were carried out as determined by the occurrence of data saturation. This process for determining the sample size was in keeping with qualitative methodology and similarly, the decisions about which students could be included in the study was determined in line with the guidance on purposive sampling. LoBiondo-Wood & Haber, (2010) confirm that purposive sampling is based on the judgment of the researcher about the participants who are knowledgeable about the question at hand and in this study, those were, all student nurses in their second year of the bridging course.

1.7.6 Data collection and Analysis processes.

In this study, semi-structured face-to-face individual interviews (n=20) were conducted and audio-recorded. Emergent data was analysed using a combination of thematic and content analysis approaches.

1.8 ETHICAL CONSIDERATIONS

Permission and Ethical clearance to conduct the study was sought and provided by the University of Zululand Ethics committee. Further permission to access the hospital site was provided by the relevant Chief Executive officer of the hospital and by Kwa-Zulu Natal Department of Health..

1.9 TRUSTWORTHINESS

Within the study, several measures were taken to ensure quality in all aspects of the research process. Key to this was ensuring trustworthiness. According to Lincoln & Guba (1995) trustworthiness is a method of establishing and ensuring rigour in qualitative research without sacrificing relevance. To that end, achieving trustworthiness within the current study involved maintenance of four credibility criteria namely credibility, transferability, dependability and conformability.

1.10.1 Trustworthiness was assured as follows:

1.10.1.1 Credibility (internal validity): the researcher ensured truthfulness when reporting on experiences of second year nursing students regarding HIV/AIDS management by spending a long time with the participants; each interview lasted up to 30 minutes and was conducted at a venue that was chosen by the participant.

1.10.1.2 Dependability (reliability): is concerned with results consistency and reproducibility. To achieve this, a detailed account and description of the research results was offered. Furthermore, the methodological processes followed have all been explicitly described to allow for possible reproducibility.

1.10.1.3 Conformability (Objectivity): refers to how neutral the findings are in terms of whether they are reflective of the informants and the enquiry and not a product of the researcher's bias and prejudice. To adhere to the criterion of objectivity, the researcher prepared a journalised report on the study and engaged two participants so they could assess the apparent truthfulness of their asserted viewpoint(s).

1.10.1.4 Transferability: refers to showing that the findings have applicability in other contexts. It is attained through purposive non-probability sampling, saturation of data

and thick description of the research strategy and method of the study which the researcher intends to apply in the current study.

1.14 PRELIMINARY CHAPTER DIVISION

To faclitate easy-to-follow progress, the development of this dissertation was conducted over six incremental chapters that reflect the resaerch process. The summation below provides an outline of the expected chapters.

Chapter 1 – Overview and Introduction to the study

Chapter 2 – Literature review

Chapter 3 – Theoretical and conceptual framework

Chapter 4 – Research design and method

Chapter 5 –Presentation, analysis and interpretation of emergent data from the results

Chapter 6 – Conclusion, discussion and recommendations

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

Chapter one of this study dissertation focussed on the background of the study, and provided an overview of the study as it was conducted. Such information as the overview of the study area, study aim and objectives, the problem statement are all presented with respect to the experiences of student nurses caring for HIV/AIDS patients in a selected public hospital in KwaZulu-Natal. This chapter presents a literature review, specifically exploring and describing the experiences of student nurses caring for HIV/AIDS patients. Brink, Van der Walt and van Rensburg (2012) define a literature review as a considered overview of written sources relevant to the topic of the researcher's interest and involves understanding, finding, making conclusions about the subject focus and research question(s). The purpose of a literature review is to demonstrate to the reader that the researcher has a good grasp of the main published work concerning a particular topic or question in the identified field. Furthermore, the review should be a critical discussion, not just a description of what other people have published. Arguments that present insight, awareness, approaches and applicable theories are prioritised (Taylor, 2006). In order to attain this, a methodical approach was applied in accordance to the guidance recommended by Parahoo (2014).

2.2 FORMAT OF THE LITERATURE REVIEW

The structure and format of the literature review was developed in line with the framework and guidance put forward by Crombie (2003). As such, a number of fundamental sections are systematically incorporated into the review and they include a synopsis of a data search strategy, a tabular overview of reviewed sources as well as the appropriate review of associated literary sources. The arrangement of the literature has been divided into sectional and/or thematic headings with an introduction

to each theme, in relation to the experiences of student nurses caring for HIV/AIDS patients, in order to facilitate a more significant literature appraisal

2.3 DATA SEARCH STRATEGY

According to Crombie (2003), conducting a literature review should be based on transparent processes that allow subsequent researchers the ability to reproduce the processes that have been followed. To this end, it is important that any review of literature have a clearly articulated data search strategy that specifies the processes followed, from the criteria that were used to identify the range of literary sources that were deemed relevant to understanding the discource, to the presentation of a summary of all the literary sources that were included in the review. The current review offers this as a precursor to the review-proper.

2.4 CRITERIA FOR INCLUSION AND EXCLUSION

In any literature review, inclusion and exclusion criteria serve an important function as they describe the boundaries and scope of the planned review of literature. In this study, the initial search, guided by the primary search terms, identified approximately two hundred sources which were down-sized to about 50 sources so as to be relevant to the main topic which is “Experiences of Nursing Students Regarding Management of HIV/AIDS Patients in a Selected Public Hospital in Kwazulu-Natal”.

2.4.1 Inclusion and Exclusion criteria

Inclusion criteria are features that the potential themes must possess in order to be included in the study. Inclusion criteria give researchers a set of inclusive standards to screen potential participants (Optimed, 2016).

In this research, the factors included and applied to the literature obtained for review are as listed below:

1. Literature sources should relate to the specific subject which, in this case, are second year students on the diploma of general nursing science (bridging student- R 683).

2. Literature focussing on the nursing students experiences of providing care. .
3. Descriptive and exploratory primary and secondary research related to experiences of nurses caring for HIV/AIDS patients.
4. Qualitative and Quantitative studies of challenges encountered by nurses managing HIV/AIDS patients.
5. Theoretical studies focussing on the history and pathophysiology of HIV/AIDS.
6. Research reflecting global statistics of HIV/AIDS regarding morbidity and mortality.
7. Research studies published in English.

2.5 APPRAISAL OF IDENTIFIED STUDIES FOR THE LITERATURE REVIEW

Table 2 below offers a precis overview of each of the primary and secondary sources that have been included and reviewed within the current literature review. The method of reviewing each of the literary sources was based on documented and validated models of critical appraisal, namely those offered by DePoy & Gitlin (2015) and Crombie (2003). The eclectic use of frameworks is in keeping with the guidance from Silverman (2014), who specifically argues that this allows the researcher to maximally benefit from the strengths of each approach or framework. Each appraisal structure lays emphasis on studying an assortment of primary and secondary sources that contributed to the body of knowledge. Essentially, the review of separate studies is based on the knowledge contribution made to the current understanding of HIV/AIDS and the student nurses experiences when caring for HIV/AIDS patients.

Moreover, the studies are assessed according to their precision, validity, trustworthiness, dependability and transferability to practise context (Polit & Beck, 2008). The table below highlights the studied literature.

Table 1. Synopsis of main research material.

Author/Date	Title of article/Aim of study	Key Findings
Abolfotouh, Al Saleh, Mahfouz, Abolfotouh & Fozan (2013)	Attitudes of Saudi nursing students on AIDS and predictors of willingness to provide care for patients in Central Saudi Arabia	The findings reveal that the negative attitudes towards people living with HIV/AIDS can interfere with the quality of nursing care and can cause stress to patients and nurses alike
Bam & Naidoo, (2014)	Nurses experiences in palliative care of terminally ill HIV patients in level 1 district hospital	The results reveal that overwhelming effects of AIDS are preventing quality palliative care of patients with HIV/AIDS. Another factor hindering quality palliative care is the conception that HIV is described as merely another condition. Findings reflected that nurses were fatigued in caring for and managing HIV/AIDS patients as they felt that the process had become monotonous, therefore affecting their ambition to be academically stimulated and developed, as there was a lack of diverse conditions for learning. Mortality and its acceptance as a reality of life was also one of the resultant factors where nurses had to cope with the reality of death and its consequences. Clinical recommendations were made for institutions or hospitals to review the staff shortages since nursing HIV/AIDS patients is intensive and specialised. Educational and professional recommendations were also made since nurses felt that caring for HIV/AIDS patients prevented their academic and

Author/Date	Title of article/Aim of study	Key Findings
		professional growth and development, due to only nursing chronic conditions like pneumonia and tuberculosis patients.
Berg & Nilsson (2015)	Nurses' experiences caring for patients with HIV/AIDS in Da es Salam	The study showed the importance of cooperation and teamwork among nurses in caring for patients with HIV/AIDS. Furthermore, the study briefly highlights the pathophysiology of HIV/AIDS.
Chandramohan (2014)	Spirituality and spiritual care amongst professional nurses at public hospitals in KwaZulu-Natal	This study explored the views of nurses at the public hospitals in KwaZulu-Natal regarding the role of spirituality and spiritual care in nursing practice in relation to HV/AIDS.
Chigwedere, Seage, Gruskin, Lee & Essex, (2008)	Estimating the Lost Benefits of Antiretroviral Drug Use in South Africa	Findings reveal that the denial of HIV/AIDS led to policies, in South Africa, which impeded the creation of effective programmes to curb the epidemic through antiretroviral drugs. However, other African countries such as Uganda, Zambia, Senegal and Botswana have begun intervention and educational measures to slow the spread of HIV. Results also uncovered that Uganda has succeeded in reducing its HIV infection rate.
Dehkordi & Tavakol (2011)	Experiences of nursing students in caring of patients in source isolation	The findings of this study include six main concept themes from participants: 1. Stressor agents of caring, 2. Response to stress, 3.

Author/Date	Title of article/Aim of study	Key Findings
		Care requirements, 4. Care provider performance, 5. Consequence of care and 6. Improper caring.
Enerholm & Fagrell (2012)	Registered Nurses' Experiences of Caring for Children with HIV/AIDS in South Africa	The results show an overview of the nurses' feelings of powerlessness and mental strength. The attributes that encouraged and maintained the mental strength of the participants are those of self-fulfilment, supportiveness, adaptability and the ability to be non-judgemental. Contrastingly, the participants' powerlessness was due to their sense of helplessness, sadness, loneliness, stress and frustration.
Erkki & Hedlund (2013)	Nurses' experiences and perceptions of caring for patients with HIV/AIDS in Uganda	The study divulged that at times nurses met patients that had been abandoned by their families because of the stigma. Additionally the nurses expressed the fear of contagion of the HIV infection and concern of the high mortality rate of patients.
Fact Sheet (2016)	The Global HIV/AIDS Epidemic	The report showed the current global snapshot of the HIV/AIDS epidemic.
Famaroti, Fernandes & Chima (2013)	Stigmatization of people living with HIV/AIDS by healthcare workers at a tertiary hospital in KwaZulu-Natal,	This study reflects the pathophysiology and prevalence of HIV/AIDS.

Author/Date	Title of article/Aim of study	Key Findings
	South Africa: a cross-sectional descriptive study	
Harrowing (2011)	Compassion Practice by Ugandan Nurses who provide HIV Care	The study found that the pandemic of HIV/AIDS for every nurse was overwhelming. Due to this a training initiative for nurses was implemented specifically for HIV/AIDS patients which addressed prevention, counselling, symptom management and treatment. Moreover the impact of HIV/AIDS introduced a variety of adversities like fear, stigma and escalating workloads for nurses which lead to poor quality of care.
Haoses-Gorases, Kartjie & Goraseb (2013)	HIV/AIDS related workplace stress and fear among nurses: experiences in Windhoek (Namibia)	The findings reflect that 98% of nurses felt that the daily observation of patients dying affected them emotionally. Additionally physical and emotional suffering of the patients caused stress and anxiety for the nurses. While caring for HIV infected paediatric patients nurses would be accidently bitten by the children therefore exposing them to contagion. Furthermore over exhaustion leads to unintentional negligence. Ninety-eight percent of nurses disclosed their inability to cope with caring for HIV/AIDS patients due to shortage of staff, patients needing high care, fear of contagion, fear of being pricked by contaminated needles and long hours of work.

Author/Date	Title of article/Aim of study	Key Findings
Human Sciences Resource Council (2014)	South African National HIV Prevalence, Incidence and Behaviour Survey, 2012	The study states that HIV incidence measures are important as they are the direct means of assessing the impact of HIV-prevention programmes that the country implemented.
Johansson & Wallén (2015)	The human being behind the disease: A qualitative study of nurses' view upon caring for patients with HIV in Colombia	The research presented a brief pathophysiology of HIV/AIDS and its prevalence in Columbia.
Khalil, Naeem, Zaman, Gul & Das (2014)	Stigma and Discrimination Experienced by People Living with HIV/AIDS at Health Care Facilities in Karachi, Pakistan	The study revealed that the most common reactions in receiving the test result were in disbelief (43%), followed by (22%), numbness (1%), shock (13%), fear (7%) and anger (1%). Furthermore, a large majority (89%) of the respondents perceived their experience with healthcare providers as discouraging or unsatisfactory. Only (11%) confirmed adequate treatment and advice. On the contrary, (35%) of health workers perceived to be negative towards HIV/AIDS patients.
Lengner (2014)	Nurses experiences of psychiatric patients with HIV	The study found that nursing psychiatric patients with HIV/AIDS was experienced as difficult and stressful and evoked strong emotions of fear and anxiety.

Author/Date	Title of article/Aim of study	Key Findings
		The experience of the stress in psychiatric HIV/AIDS care was strongly associated with the nature of work and the anxieties evoked by nursing patients with terminal, contagious disease.
Makhado (2016)	Knowledge and psychosocial well-being of nurses caring for people living with HIV/AIDS at a regional hospital in Vhembe district, Limpopo province	This study reflects on the global shortage of nurses being one of the greatest obstacles of dealing with the HIV/AIDS epidemic.
Mametja (2013)	Problems Experienced by Professional Nurses Caring for HIV/AIDS Patients in Public Hospitals in Polokwane Municipality, Limpopo Province	The study revealed that the issue of HIV/AIDS can be so demanding to even cause some frustration and emotional feelings to the professional nurses as they continuously provide care to the infected patients. Another adversity is the delayed commencement of treatment which is the main cause to increased mortality due to the HIV/AIDS pandemic. This is caused by a few factors such as non-disclosure of HIV/AIDS status, time of presentation to hospital, readiness to be tested and lack of confidentiality. These factors could mostly have been avoided, but because of different beliefs and fears, patients still decided to stay without treatment.

Author/Date	Title of article/Aim of study	Key Findings
Moran (2016)	Nursing Challenges of Caring for Patients with HIV –Related Malignancies	The results show that nurses faced challenges of patients being on multiple medications including alternative therapies, antiretroviral agents, prophylactic medications and medications to treat active infection related to opportunistic infections.
Morison (2016)	The global epidemiology of HIV/AIDS.	The study shows the global trends in the HIV pandemic.
Mubekapi (2015)	Workplace stress and coping strategies among nurses in HIV care: Geita District Hospital, Tanzania	This study revealed that the unparalleled increase in HIV and AIDS has trickled down to the already impoverished health sector, thus impacting health workers in various ways.
Nel, Mabude, Smit, Kotze, Arbuckle, Wu, van Niekerk & van de Wijgert (2012)	HIV Incidence Remains High in KwaZulu-Natal, South Africa: Evidence from Three Districts	The study reveals that the HIV prevalence and incidence continues to be high in sexually active women aged 18 – 35 years living in peri–urban areas in KwaZulu-Natal. Furthermore, the incidence rates of 6.3 to 14.8 per 100 PY suggest that HIV transmission is still rampant in KwaZulu-Natal.
Omer, Lovering & Shomrani (2012)	The lived experiences of living with HIV/AIDS in western region of Saudi Arabia	The research presented that data analysis revealed five main themes: disclosure, stigmatisation, religiosity, fear of vulnerability, and lack of psychological support from healthcare services.

Author/Date	Title of article/Aim of study	Key Findings
Ouzouni & Nakakis (2012)	HIV/AIDS knowledge, attitudes and behaviours of student nurses	Nursing students as a subgroup of health care professional exposed to an occupational risk of HIV infection due to direct contact with blood and bodily fluid during clinical practice, and have been reported to tend to negative attitudes towards PLHIV.
Pendukeni (2013)	The impact of HIV/AIDS on health care provision: Perceptions on nurses currently working in one regional hospital in Namibia	The study tells of the different countries in Southern Africa that have shown that health workers are affected and infected by HIV/AIDS, which has affected the provision of care rendered by nurses negatively.
Piculell & Wikander (2012)	Experiences of Registered Professional Nurses When Caring for Patients with HIV and AIDS at The Polokwane Hospital, Capricorn District, Limpopo Province, South Africa (SA)	The outcomes of the study presented that two main categories emerged in the analysis: Work-related concerns consisting of the need of safety routines, demanding care and the importance of support and appreciation; and emotional stress concerning the feelings of the sense of resignation and frustration of the professional nurses.
Ramathuba & Davhana-Maselesele (2013)	Nurses Perceptions of Support in Caring for People Living with HIV and AIDS (PLWHA) in Vhembe District, Limpopo Province	The research stated that the workplace environment should be supportive, create environment that are non-discriminatory to enhance the individual's positive self-concept, commitment and utilisation of voluntary counselling and testing services available.

Author/Date	Title of article/Aim of study	Key Findings
Rice (2012)	Theories of stress and its relationship to health	The study discusses the theory of response-oriented stress by describing the three stages of general adaptation syndrome (GAS) namely: the alarm stage, the stage of resistance and the exhaustion stage.
Sehume, Zungu & Hoque (2012)	Attitudes and willingness of nursing students towards caring for patients infected with HIV in South Africa	A study conducted in Lesotho, Malawi, South Africa, Swaziland and Tanzania on healthcare providers and on people living with HIV/AIDS found that healthcare providers were the source of stigma towards patients with HIV/AIDS (Holzemer, Uys, Makoae, Stewart, Phetlhu & Dlamini *et al*, 2007) cited in (Sehume *et al*, 2012). Furthermore, despite the level of stress and depression nurses still managed to form good relations with their patients and had feelings of responsibility to fight the scourge of HIV (Davhan-Maselesele & Igumbor, 2008) cited in (Sehume *et al*, 2012).
Sixaba (2015)	An exploration of undergraduate nursing students experiences of an HIV/AIDS support group and its activities	The consequences of HIV infection and complications of AIDS are a challenge that extends into the nursing profession and into the community of student nurses.

Author/Date	Title of article/Aim of study	Key Findings
Stavropoulou, Stroubouki, Lionaki, Bakogiorga & Zidianakis (2016)	Student nurses perceptions on caring for people with HIV	The research revealed the nurse students' attitudes towards HIV care and presented the education and communication with patients with HIV.
Tonges & Ray (2011)	Translating Caring Theory Into Practice	The study reveals that the caring in nursing resulted in five hierarchical levels as following: 1. Capacity for caring, 2. Concerns/commitments, 3. Conditions, 4. Caring actions, and 5. Caring consequences.
UNAIDS, (2014)	GAP Report	The report reflects on the epidemiology of HIV/AIDS in Sub-Saharan Africa by dissecting the issues of the HIV burden, AIDS-related deaths and new HIV infections.
Wagner (2010)	Core Concepts of Jean Watson's Theory of Human Caring/Caring Science	This study reflects on the core concepts of the theory of human caring/caring science which are: a relational caring for self and others; transpersonal caring relationship; caring occasion/caring moment; multiple ways of knowing; reflective/meditative approach; caring is inclusive, circular, and expansive; caring changes self, others and the culture of groups/environments; and Watson's 10 carative factors redefined as caritas processes.

Prior to embarking on the literature related to the research of the experiences of student nurses when caring for HIV/AIDS patients, it was important to provide a transitory review on the global epidemiology and pathophysiology of HIV/AIDS. In addition, it was essential to give some attention to this literature as it offers an opportunity to focus on the significance of the matter at hand which re-accentuates the high rates of morbidity and mortality related to HIV/AIDS and how it affects the healthcare setting in South Africa.

2.6 HISTORICAL BACKGROUND AND PATHOPHYSIOLOGY OF HIV/AIDS

Through predecessor research, it is a proven fact that HIV is a virus that causes progressive failure of the immune system by destroying specific lymphocytes (Enerholm & Fagrell, 2013). This virus has arguably become one of the most serious infectious diseases known to mankind. The Human Immunodeficiency Virus (HIV) is a retrovirus that attacks the cells of the immune system to either destroy or impair their function (Johansson & Wallén, 2015) cited in (WHO, 2015). Furthermore, as the infection evolves, the immune system gets weaker and the infected person becomes more vulnerable to a wide range of infectious diseases. Famoroti, Fernandes & Chima (2013) further assert that, the acquired immune deficiency syndrome (AIDS) was initially identified in the 1980's and has since been spread globally causing one of the most dreaded pandemics of modern times. In terms of its pathophysiology, the virus affects the CD4 cells that help in fighting against diseases and infections in humans. Humans therefore become prone to opportunistic infections as a result of a low immune system (Erriki & Hedlund, 2013). HIV can exist in all body fluids, and be transmitted vertically from mother to child during pregnancy, delivery, and breast feeding (Erriki & Hedlund, 2013). Moreover, HIV can be transmitted horizontally by exposure to contaminated blood or body fluids in humans (Erriki & Hedlund, 2013). However, efforts have been done about provision of knowledge regarding universal precautions in prevention of the HIV infection and spread of occupational injuries by means of policies made available for usage by health workers.

2.7 GLOBAL EPIDEMIOLOGY OF HIV/AIDS

2.7.1 Prevalence and Incidence

Omer, Lovering & Shomrani (2012) state that HIV/AIDS has occurred as a global public health interest demanding a multidimensional reaction.

Since the discovery of the disease in 1981, the World Health Organisation (WHO, 2011) reveals that 34 million individuals are living with HIV/AIDS with the majority of 30 million being adults (UNAIDS, 2016). Notably, in 2016 1.8 million people became infected while 1.0 million died of HIV/AIDS (UNAIDS, 2017). In continuation, Johansson & Wallén (2015) indicated that in 2014 there were 36.9 million people in the world living with HIV and 1.2 million people died from HIV related causes.

Presently, according to the UNAIDS Fact Sheet (2016) approximately 36.7 million of the world's population are currently living with the virus and tens of millions of people have died of AIDS-related causes since the occurrence of the epidemic.

Since the HIV/AIDS pandemic is comprised of many separate epidemics with their own individual origin in terms of the geography and population, it is only sensible to dissect the issue by continents and their relative countries. Commencing with the Caribbean Islands, there are an estimated 250000 [230000-280000] adults and children living with HIV (UNAIDS, 2016). The five countries responsible for 96% of all people living with HIV in the region are Cuba, the Dominican Republic, Haiti, Jamaica, and Trinidad and Tobago. Haiti alone is accountable for 55% of the population living with HIV in the Caribbean (WHO, 2016). Although the Caribbean consists of only 0.7% of the world's population of people living with HIV/AIDS, it remains as one of the regions with the highest per-capita infection rates. (UNAIDS, 2013).

Asia and the Pacific combined, on the other hand, have the second largest number of people living with HIV. At the end of 2016, there were an estimated 4.8 million [4. Million – 5.5 million] people living with HIV across the area, where China, India, Indonesia, Myanmar, Thailand and Viet Nam are the six countries accountable for more than 90% of the HIV infected population. The four countries responsible for 6% of people living with HIV in the region are Cambodia, Malaysia, Nepal and Pakistan. Furthermore, India has the third largest number of HIV infected people in the world. (UNAIDS, 2017).

In the Latin American region - consisting of Brazil, Colombia, Mexico, the Bolivian Republic of Venezuela and other Central American countries with a portion of the Latin American population - there were an estimated 1.6 million people living with HIV at the

end of 2016. 75% of the of the cases are spread among Brazil, Colombia, Mexico and the Bolivian Republic of Venezuela, with the regional HIV prevalence among the general adult population projected to be 0.4%. The Central American countries with a 7% population of Latin Americans, accounted for 9% of PLWHA in 2013. In the Latin American region, the epidemic is mostly concentrated in urban settings, commercial routes and trading ports. (UNAIDS, 2013). According to Johansson & Wallén (2015), UNAIDS (2014), am estimated 95,000 – 160,000 Colombian adults are living with HIV and unreported cases are expected to be over a hundred thousand.

The Western and Central Europe and the North American region showed that just over 2.3 million people were approximated to be living with HIV. The United States of America ranks as the country with the highest HIV burden in this region, resulting in a 56% portion of people living with HIV in this part of the world. Four countries in western Europe account for almost a quarter of the regional total number of people living with HIV, 8% in France, 6% in Spain, 5% in the Unite Kingdom of Great Britain and Northern Ireland and 5% in Italy. (UNAIDS, 2016).

In Eastern Europe and Central Asia there were an estimated 1.1 million HIV infected people, which accounts for 3% of the global number of people living with HIV. The HIV epidemic in this area continues to grow, including in the Russian Federation, Ukraine and Uzbekistan. The Russian Federation and Ukraine account for 8% of people living with HIV in the region. (UNAIDS, 2016).

UNAIDS (2016) found that the Middle East and North Africa are the regions with lowest HIV prevalence. This has notably been attributed to the restrictive sexual practices that exist within these regions. That said, the HIV burden continues to escalate proportionally to the rising number of AIDS-related deaths and new infections in several countries. Furthermore, in 2013 there were an estimated 230000 adults and children living with HIV in the region with Algeria, Islamic Republic of Iran, Morocco, Somalia and Sudan accounting for 88% with 30% belonging to the Islamic Republic of Iran and the Sudan represents 21% of the regional burden. (UNAIDS, 2013).

Finally, Sub-Saharan Africa has the most serious HIV and AIDS epidemic in the world (UNAIDS, 2014). Confirming this, Morison (2016) states that, of all regions in the world, the Sub-Saharan region remains the hardest hit by HIV. In this region, there are an approximately 24.7 million people living with HIV in sub-Saharan Africa, which is nearly 71% of the global total (UNAIDS, 2016). Ten countries that fall under this region, namely – Ethiopia, Kenya, Malawi, Mozambique, Nigeria, South Africa, Uganda, the

United Republic of Tanzania, Zambia and Zimbabwe – account for 81% of all people living with HIV. The HIV prevalence for the region is 4.7% however differs greatly between regions within the sub-Saharan Africa as well as individual countries. For instance, Southern Africa is the worst affected region and is generally considered as the 'epicentre' of the global HIV epidemic, with Swaziland having the highest prevalence of any country worldwide (24.7%) and South Africa owning the largest epidemic of any country and consists of 5.9 million people living with the virus (UNAIDS, 2016). By contrast, the West and East African regions are recorded to have a low to moderate prevalence of HIV ranging from 0.5% in Senegal to 6% in Kenya. (UNAIDS, 2014).

HIV incidence measures are important because they provide insights into the more recent dynamics of the country's HIV epidemic (Human Sciences Resource Council, 2014). In South Africa, the HIV incidence indicates that 469,000 new HIV infections occurred in the population 2 years and older during 2012, (Human Sciences Research Council, 2014). According to Nel et al (2012) the South African province of KwaZulu-Natal is experiencing one of the worst HIV epidemics worldwide. The epidemic has been described as hyper endemic, generalised and mature, with HIV prevalence rates in the general population being identified as exceeding 15%. Nel et al (2012) indicate that HIV prevalence and incidence continues to be high in sexually active women aged 18 – 35 years living in peri–urban areas in KwaZulu-Natal. Furthermore, the incidence rates of 6.3 to 14.8 per 100 PY suggest that HIV transmission is still extensive in KwaZulu-Natal.

2.7.2 Morbidity and Mortality in Sub-Saharan Africa

According to UNAIDS (2013), the number of AIDS-related deaths in sub-Saharan Africa fell by 39% between 2005 and 2013. The major decline in the AIDS-related mortality was observed in Rwanda with a 76% decline, Eritrea with a decline of 67%, Botswana with a 58% reduction, Burkina Faso also with a 58% decline, Ethiopia with a 63% decrease, Kenya with a reduction of 60%, Zimbabwe with a decline of 57%, the United Republic of Tanzania with a decrease of 44% and a significant decline of 48% seen in South Africa. UNAIDS (2013) affirms that this success is directly due to the rapid increase in the number of people on antiretroviral therapy. Furthermore, in 2012

1.7 million additional people living with HIV received antiretroviral therapy and South Africa having the highest number of people on HIV treatment of nearly 2.6 million.

2.7 EXPERIENCES OF STUDENT NURSES AS WELL AS NURSES CARING FOR HIV/AIDS PATIENTS

Since the emergence of the pandemic, nurses have become even more involved in the management of HIV/AIDS patients. Affirming this, Stavropoulou *et al* (2016) point out that, nurses are the health professionals who are mostly involved in HIV care. In general nurses and nurse students, as they become the practicing healthcare providers of the future, have the greatest direct contact with the blood and the bodily fluids of patients and hence exposed to an occupational risk of HIV infection. Furthermore, studies from Britain and the USA linked reluctance to care for people with HIV/AIDS to fear of contagion and high levels of homophobia among the participating nurse students (Stavropoulou *al*, 2016). Stavropoulou *et al* (2016) further suggest that, attitudes on caring for people with HIV, reported in the literature, are associated with stigma and discrimination. The study done Laverriere (2009), reveals that the ethical issues associated with HIV/AIDS were determined by nursing students in relation to testing, confidentiality, sero-status disclosure and the environment of care related to HIV/AIDS in South Africa and the United States of America. The results of Stavropoulou *et al* (2016) study showed that, in the United States of America, the attitudes toward those with HIV/AIDS, beliefs and practices of the nurse students surveyed, were not reflective of the ethical values and guidelines relevant to nursing practice with the majority of nurses expressing partially supportive or non-supportive views about caring for this patient group. Ouzouni & Nakakis (2012) explain that there are many factors related to negative PLHIV related attitudes, such as a low knowledge level and fear of unspecified threats.

In South Africa, public hospitals are heavily challenged (Bam & Naidoo, 2014). The previous chapter (Chapter One) highlighted that over 80% of the country's population have no medical aid cover and are forced to seek treatment in government clinics and hospitals (South Africa, 2009) cited in (Bam & Naidoo, 2014). In a shrinking health workforce, HIV/AIDS has created an extra demand and workload, emotional burden and stress among the health workers (Mubekapi, 2015). Furthermore, nurses

struggled with the issues of death and dying, feared occupational exposure and found it difficult to cope with nursing shortage, increased workload and inadequate training (Mubekapi, 2015). Sehume *et al* (2012), further emphasise that the outcry concerning shortage of nurses is a problem nationally, but in the already resource stricken areas, the shortage brings the worst out of our healthcare system, including the students who are faced with the same circumstances on a day to day basis. Therefore nurses lack the necessary information needed to adequately care for people living with HIV/AIDS (Makhado, 2016).

Haoses-Gorases *et al* (2013) further argue that, the epidemic is overwhelming the coping capacity of health workers throughout the globe. In continuation, nurses are coping with cumulative stressful patient care issues, increasing workloads, and suffering from symptoms of burnout which is all threatening to their well-being and morale. As a coping mechanism to dealing with exhaustion, nurses may distance themselves from patients. Burnout is associated with lack of concentration, depression and a fatigued state in which the nurse can easily neglect techniques known to reduce the threat of infection transmission, i.e. wearing gloves (Miller, 2002) cited in (Haoses-Gorases *et al*, 2013). However, the Sehume *et al* (2012) study revealed that nurses felt that they could not put blame on the patient for accidental exposure to HIV infected body fluids; they also felt that it is their responsibility to be more careful. Additionally, students felt that nurses had a duty to protect themselves from any threat of infection (Sehume *et al*, 2012). Consequently, such conditions lead to the decline in quality care of the HIV/AIDS patients. When combing this decline with the scarcity of medications and equipment the dilemma of inadequate healthcare for the HIV/AIDS patient worsens (Haoses-Gorases *et al*, 2013). Positively, nurses adopted strategies to cope with the stress of work overload by developing interpersonal relationships with the patients, through constant monitoring and unlimited contact with the patients (Harrowing, 2011).

Similarly, nurses rendering care to HIV infected psychiatric patients also experienced difficulties associated with the work environment and extended to the broader social influences of family and community life. The lack of effective support and recognition of these adversities has resulted in physical symptoms of burnout and implementation of singular and combined defences in the effort to cope with the considerable personal and professional challenges of their work (Legner, 2014). Another challenge was managing symptoms and providing psychosocial support (Moran, 2016).

Nurses gradually develop feelings of helplessness, fear of occupational injuries, fear of patients' relatives and workplace inconveniences imposed by staff shortages (Mametja, 2013). Another problematic aspect is the knowledge of HIV/AIDS where family members and the professional nurses need to have more information and knowledge so that they can cope with the circumstances. Professional nurses also experienced the lack in social support from the patients' immediate families and the hospital's management. The results also revealed the problem of different patients' presenting conditions (Mametja, 2013). Alternatively Khali *et al* (2014) exposed that a noteworthy proportion of the patients (35%) reported that discriminatory treatment at the hands of their healthcare providers. Pendukeni (2013) however, justifies that the high work load emanating from increased numbers of patients contributed to the situation of stress-related illnesses caused by many factors such as fear of contracting the HIV virus. Correspondingly low staff morale has also been observed among nurses. In defence of the nurses, Picullel & Wikander (2012) revealed that patients refusing counselling, not disclosing their status and not following instructions were reasons for nurses to feel a sense of resignation; because they could not give the adequate care that the patients with HIV and AIDS were in need of. Moreover, nurses experience lack of support from colleagues and managers in caring for people living with HIV and AIDS, the poor organisational support, poor provisioning of resources in advocating for quality care, lack of psychological/emotional support, lack of appreciation and recognition, poor interpersonal relations, poor educational support and monitoring, and lack of in-service training (Ramathuba & Davhana-Maselesele, 2013). Ideally, support groups can form an important part in educating nursing students about HIV and AIDS, as well as in supporting nursing students through counselling, testing and managing the physical as well as other impacts of this syndrome (Sixaba, 2015).

2.8 STRESS-VULNERABILITY AND CARING THEORY

According to Rice (2012), stress represents a significant precipitatory factors in wide ranging health problems and by changing the way the body functions, stress disrupts the natural balance and it is crucial for well-being. Rice (2012) further asserts that, years of life can be subtracted by speeding up the aging process, and in that regard,

stress should be seen as one of the most significant factors in lowering resistance and triggering the various mechanisms involved in the disease process.

Watson (2008) expresses that the caring science is a deep moral ethical context of infinite and cosmic love. As soon as one is more explicit about placing the human and caring within their science model, it automatically forces a relation unitary world view and makes explicit caring as a moral ideal to sustain humanity across time and space. Furthermore Watson (2008) further posits that, caring science as a model for nursing, allows nursing's caring and healing core to become both discipline specific and transdisciplinary. Thus, nursing's timeless, ancient enduring and most noble contributions come of age through a caring science orientation – scientifically, aesthetically, and ethically (Watson, 2008). Watson's theory consists of ten caritive factors which are demonstrated in tabular form below:

Table 2. Ten carative factors and caritas processes according to Watson (2008).

Carative factors	Caritas Processes
Humanistic – Alternatives.	Practicing loving-kindness and equanimity for self and other.
Instilling /enabling faith and hope.	Being authentically present to/enabling/sustaining/honouring deep belief system and subjective world of self/other.
Cultivation of sensitivity to oneself and other.	Cultivation of one's own spiritual practices; deepening self-awareness, going beyond "ego self".
Development of helping – trusting, human caring relationship.	Developing and sustaining a helping – trusting, authentic caring relationship.
Promotion and acceptance of expression of positive and negative feelings.	Being present to, and supportive of, the expression of positive and negative feelings as a connection with deeper spirit of self and one-being-cared-for.
Systematic use of scientific (creative) problem-solving caring process.	Creatively using presence of self and always of knowing/multiple ways of being/doing as part of the caring process; engaging in artistry of caring-healing practices.
Promotion of transpersonal teaching – learning.	Engaging in genuine teaching – learning experiences that attend to whole person, their meaning; attempting to stay within other's frame of reference.
Assistance with gratification of human needs.	Assisting with basic needs, with an intentional, caring consciousness of touching and working with embodied spirit of individual, honouring unity of being; allowing for spiritual emergence.
Allowance for existential-phenomenological spiritual dimensions.	Opening and attending to spiritual-mysterious, unknown existential dimensions of life-death; attending to soul care for self and one-being-cared-for.

Source: Watson (2008)

The carative factors are ordinarily seen as natural aspirations for those in the carimng professions but it is notable that the evidence on the care offered to those affected by HIV/AIDS suggests a reality in which the duty of care is replaced by fears, discrimination and other factors that impede the carative process. Even within this, other theorists propose other theories about the nature of caring in nursing . For example, Tonges & Ray (2011) reveal that the nature of caring in nursing constitutes five hierarchical levels namely:

I. Level 1: Capacity for caring: does the nurse have what it takes to be caring?
II. Level 2: Concerns/commitments: Is the nurses committed to relating in a caring manner?
III. Level 3: Conditions: Does the environment support capable, committed nurses to practice caring?
IV. Level 4: Caring actions: Does practice consist of actions that are based on knowing, being with, doing for, enabling, and maintaining belief in patients?
V. Level 5: Caring consequences: Does acting in a caring manner promote intended outcomes?

2.9 SUMMARY

This Chapter has provided a targeted review of the current discourse on the experiences of student nurses managing and caring for HIV/AIDS patients. The utilisation of different caring theories and a stress response theory is briefly outlined. Given the intended focus of the study, primal attention was given to African and South African literary sources with notable attention being afforded to international literature, so as to have a holistic view of the phenomenon.

CHAPTER 3

THEORETICAL AND CONCEPTUAL FRAMEWORK

3.1 INTRODUCTION

The preceding chapter, the literature review, presented a prudent analysis of fundamental theoretical impacts and exploratory testimony on experiences of student nurses including nurses caring for HIV/AIDS patients. The review afforded key insights into a variety of discussions and within that, it presented a systematic outlook of issues of agreement and disagreement in prevalent literature sources. The previous chapter also highlighted some important evidence based studies and offered instances from the literature of some of the official observations about the array of limitations when seeking the experiences of student nurses caring for HIV/AIDS patients. In addition to primary and secondary literature, theoretical contributions from key authors are useful in supporting the identification and expansion of the researcher's understanding of key concepts related to the topic under study. As such, it is important that key theories and theoretical frameworks be referred to, to better understand the range factors that may be key to understanding the phenomenon being studied.

According to Swanson (2013:12), a theoretical framework is

> *"the structure that can hold or support a theory of a research study and exists to explain, predict, and understand phenomena and, in many cases, to challenge and extend existing knowledge within the limits of critical bounding assumptions"* (Swanson 2013:12),

Brink *et al* (2012) further describe a theoretical framework as a development of the involved theory where the researcher familiarises themselves with the structural and functional components, in which the structural components include assumptions, concepts, constructs (ideas), variables and suggestions. The functional components, on the other hand, consist of domain concepts of the theory and the manner of addressing them i.e. description, explanation, prediction or control.

A conceptual framework is the theoretical structure of assumptions, principles and rules, which binds the ideas comprising of an extensive concept. Synonymously, a

conceptual framework is a matrix of concepts that provides generally described and methodically organised concepts to stipulate a core, a rationale and a means for integration and interpretation of information (Swanson, 2013).

In use of this guidance, the current chapter develops the core dissertations and concentrates on the theoretical and conceptual contexts of the experiences of student nurses when caring for HIV/AIDS patients. Similarly, Polit & Beck (2012) explain that a framework can be reviewed as a conceptual perception of the study which includes a rationale and a series of appropriate descriptions of crucial concepts. Polit & Beck (2013) suggest that, that in this section, the researcher forms a theoretical basis for the development the conceptual framework, asserting the view that the theoretical framework assists in guiding the identification of the study variables. In that respect, the Donabedian framework (Donabedian, 2003) makes key contributions that result from its focus on examining health services and evaluating quality of health care. According to the **model**, information about quality of care can be drawn from three categories: “structure,” “process,” and “outcomes."

Furthermore, the Donabedian framework supports the reliance on inductive and qualitative methodologies as it channels the investigation and comprehension of a variety of aspects associated with the experiences of student nurses managing and caring for HIV/AIDS patients.

3.2 THE DONABEDIAN THEORETICAL FRAMEWORK

The Donabedian model of care is a conceptual model that offers a structure for examining health services and assessing the quality of healthcare, (McDonald et al, 2007). Furthermore, the model reveals that the quality of healthcare can be systematically deduced into three categories: structure; process and outcome.

Since Avedis Donabedian founded the study of quality in health care and model outcomes research, Donabedian (2003) defines structure as part of the dimensions of care that comprises of all the dynamics that affect the milieu in which care is provided. This is inclusive of the facility, equipment, human resources and organisational features such as staff training and payment systems. In other words, potential patients

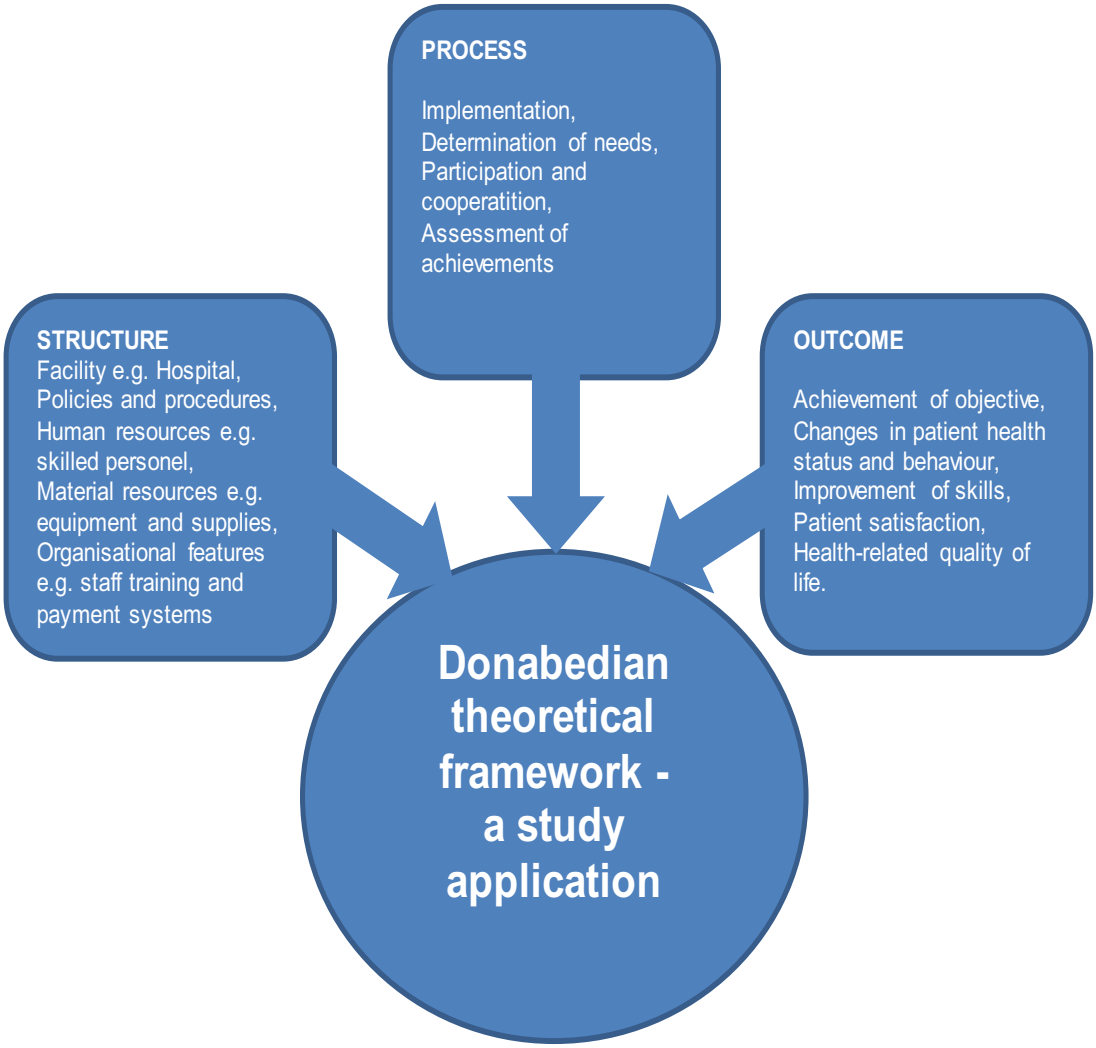
flock to public institutions for care mostly due to economic reasons as described by Bam & Naidoo (2014) referring to people without medical aid seeking for care and treatment from public hospitals. This therefore leads the saturation of public hospitals hence overcrowding and shortage in staff and resources. Donabedian (2003) further elaborates that these factors determine how the provider and patient in a healthcare establishment perform and hence are a form of measurement system that gauges the average quality of care within an establishment.

According to Donabedian (2003), the structure is often easy to observe and measure and may be the main cause of predicaments identified in the process. The process is the summation of all activities formed under healthcare, inclusive of diagnosis, treatment, preventative care, patient education and also actions taken by patients and their families (Donabedian, 1980). For instance, preventive measures are difficult to practice when supplies and protective equipment are short in supply, (Haoses-Gorases *et al*, 2013). Henceforth, the information about the process can be retrieved from medical records, dialogues with patients and healthcare providers, or direct observations of healthcare visits.

The outcome category refers to all the effects of healthcare on patients or populations, including changes to health status, behaviour, knowledge, patient satisfaction and health-related quality of life. Outcomes are often perceived as the most vital indicators of quality care since improving the patient's health status is priority, although accurately measuring outcomes proves to be difficult (Donabedian, 1980). Similarly, Haoses-Gorases *et al* (2013) emphasise that when the quality of HIV/AIDS care is low a poor outcome is expected.

Subsequently the present research seeks to explore and describe the experiences of student nurses caring for HIV/AIDS patients and therefore the Donabedian model is fitting since it delivers a structure for scrutinising health amenities along with the valuation of quality care. The figure below illustrates the Donabedian model of theoretical framework:

Figure 1. Donabedian Tripartite Framework (1981)



3.3 APPLICATION OF THEORECTICAL FRAMEWORK IN THE STUDY

The experiences of student nurses will be investigated primarily by analysing the process of the implementation of management and caring for HIV/AIDS patients in a particular public hospital in KwaZulu-Natal. There are policies put in place so as to protect the privacy and confidentiality of the patient. South Africans are not legally compelled to disclose their HIV status, (De Villiers & Ndou, 2008). Furthermore, the policies and procedures of the ethical and professional codes of practice guide professional nurses towards maintaining a trusting relationship and providing care that

promotes the well-being of the patient. Likewise, Ramathuba & Davhana-Maselesele (2013) assert that the workplace environment should be supportive and facilitate the creation of non-discriminatory environments that enhance the individual's positive self-concept, commit to and utilise VCT (voluntary counselling and testing) services. Haoses-Gorases *et al* (2013) further argue that, nurses are viewed as an integral part of the environment on the wards or units in which they work and that factors such as shortage of staff, lack of proper equipment and stress in the workplace create a negative atmosphere towards the individual affected by HIV/AIDS. Another factor inclusive in the structure is the organisational characteristics for example staff training, where Stavropoulou *et al* (2016) reveal that 65% of nursing students, in relation to the study, suggested that education is an important factor for improving communication between health professionals and patients. Additionally, according to Stavropoulou *et al* (2016), 25% of the student nurses responded that support of other healthcare workers is essential, along with 20% who suggested good working conditions as imperative.

According to Watson (2007), the carative factors/ caritas processes are not complete without acknowledging the world view and philosophical context which holds the concepts. Watson (2007) further elaborates that nurses who are sensitive to others are better able to learn about another's view of the world which, subsequently, increases concern for others' comfort, recovery and wellness. Moreover, nurses who recognise and use their sensitivity promote self-development and self-actualisation, and are able to encourage the same growth in others. In relation to this Berg &Nilsson (2015) assert that, the caring aspects include health, society, organisation, care philosophy, ethics, task and relationship, patient and family, care environment and carers and also care team are closely related and cannot be studied as individual aspects. Similarly, Haoses-Gorases *et al* (2013) state that each individual observes the world in a divergent context, therefore experiences of the nurse caring for an HIV patient are unique to that "world" and may be qualitatively dissimilar from anyone else partaking in the same experience. Previous research has concluded that the role of the nurse is to provide direct patient care in healthcare delivery systems (Haoses-Gorases *et al*, 2013). The nurse is also required to present and offer care to those who experience the consequences and distress of health problems (Harrowing, 2011). Furthermore because of this obligation to humanity the concept of compassion is

extremely relevant to nursing practice, therefore engaging in compassion practice requires the willingness and ability to be in a relationship with another person (Harrowing, 2011).

Berg & Nilsson (2015) reveal that good cooperation with patients encouraged progression in their situation. Additionally, acceptance of the patients' conditions by the nurse creates a steady platform to improve the relationship between the nurse and the patient. Furthermore Berg & Nilsson (2015) affirm that the heavy workloads endured by the nurses, the lack of material and the limited working environments lead to stress and frustration among nurses. Another outcome is that nurses experience feelings of stress and anxiety because they cannot provide quality care due to the shortage of staff in relation to overcrowding (Erkki & Hedlund, 2013). Nurses feel powerless to protect themselves and thus experience anxiety and fear of contagion as a result of extensive workload, (Haoses-Gorases *et al*, 2013). In continuation, stress and fear for nurses providing direct care to HIV/AIDS patients are major factors in decreasing quality of care. Ultimately, several issues in the working environment are perceived as putting both patients and nurses at risk due to shortage of resources (Erkki & Hedlund, 2013).

3.4 SUMMARY

This chapter demonstrated the relation between the literature and the theoretical framework, which is the Donabedian theoretical framework. The findings of this study are theoretically confirmed by the Donabedian model: structure, process and outcome. Importantly, the exploration of relevant theoretical perspectives has provided important insights which were integrated into the design and structure of the data collection processes that were used later in the study.

CHAPTER 4

RESEARCH DESIGN AND METHOD

4.1 INTRODUCTION

The previous chapter provided a broad overview of the theoretical and conceptual framework, particularly making reference to the Donabedian method and applying the relevant literature of the study to this model. In chapter four, however, focus is on the range of methodological processes that were utilised within the study. It is important to note that the chosen design was qualitative and as such, the choices and oprtions selected here are in keeping with naturalistic qualitative methods. This chapter identifies and articulates the research design, research methodology, sampling procedures, population, issues related to the establishment of trustworthiness during and after data collection, ethical considerations and finally data analysis.

4.2 RESEARCH DESIGN

According to Burns & Grove (2003), a research design is a blueprint for conducting a study with maximum control over factors that may interfere with the validity of the findings. Similarly, Parahoo (1997) describes a research design as a plan that describes how, when and where data are to be collected and analysed. Furthermore, Polit & Beck (2001) describe research design as the researcher's overall for answering the research question or testing the research hypothesis. The research process for this study is a narrative strategy (Chinn & Kramer, 1991). In other words, this study reflects on the experiences of student nurses caring for HIV/AIDS patients utilising the non-experimental, qualitative, exploratory, descriptive and contextual approach.

4.2.1 Non-experimental research

This type of research is used in studies meant for description and where it is scientifically unnecessary or unethical to manipulate the independent variable (Polit & Beck, 2001). Since this is a study related to nurses, it is important to consider ethics therefore avoiding any manipulations with the human participant due to their potential physical or mental disturbance, plus human characteristics are naturally not prone to

experimental manipulation of health views and feelings. In addition, Polit & Beck (2001) assert that, qualitative research does not affect the innate behaviour of the participants and therefore suitable for non-experimental or naturalistic research.

4.2.2 Qualitative research

A Qualitative approach to research is one in which the inquirer often makes knowledge claims based on constructivist perspectives (i.e. the multiple meaning of individual experiences, meanings socially and historically constructed, with an intent of developing a theory or pattern) or advocacy/participatory perspectives (i.e. political, issue-oriented, collaborative, or change oriented) or both (Creswell, 2003). Furthermore, qualitative research also uses strategies of inquiry such as narratives, phenomenological studies, ethnographies, grounded theory studies or case studies (Creswell, 2003). Qualitative research involves the development of descriptions of social phenomena. It aims to help in the comprehension of the global issues. In other words, qualitative research is concerned with the finding of answers to complex questions. Furthermore, it is concerned with the opinions, experiences and emotions of individuals producing subjective data (Hancock, 2002). Simultaneously Denzin & Lincoln (2000), cited in Kuczinski & Daly (2003), state that the goal of qualitative research is to identify, describe, and understand phenomena by attending to the open-ended responses and spontaneous, unconstrained behaviours of research participants. It also involves the interpretive capacities of researchers in making sense of the data they collect. Creswell (2009) affirms that quality research is an enquiry process of understanding founded on definite methodological conducts of enquiry that pursue a communal or human dilemma, a researcher built complex, holistic picture, analyses of words, reports comprehensive views of informers and performs the study in an innate location. In addition, Botma et al (2010) cited in Brink *et al* (2012), states that qualitative methodology is used when little is known about a phenomenon, or when the nature, context and boundaries of the phenomenon are poorly understood and defined. The below table illustrates the qualitative research approaches:

Table 3. Research Approaches.

Type of Approach	Key Features
Phenomenology	• Examine human experience. • Deals with answering the questions e.g. "what is it like to experience this?" therefore reflecting on lived experiences. • The purpose is to describe the participants' experiences in regard to a certain phenomenon and how to interpret these experiences.
Ethnography	• Focuses on the social and cultural world of a particular group. • Defines the role of culture in shaping the experience of individuals. • i.e. oriented towards studying common meanings and traditions.
Grounded theory	• The theory that emerges from data grounded in the observation and interpretation of phenomena. • Identifies concepts and the relationship between them in an inductive manner. • The purpose is to build theory that is faithful to and illuminates the area under study.
Philosophical enquiry	• According to Hastings (1961) cited in Brink *et al* (2012) philosophy is the process and expression of rational reflection upon experience. • The purpose is to perform research using intellectual analysis to clarify meaning, make values manifest, identify ethics and study the nature of Knowledge (Burns & Grove, 2011) cited in (Brink *et al*, 2012).
Case studies	• The researcher explores in depth a program, an event, an activity, a process, or one or more individuals (Creswell, 2003).
Narrative research	• A form of inquiry in which the researcher studies the lives of individuals and asks one or more individuals to provide stories about their lives (Creswell, 2003). • A multiplicity of ways of collecting this information, including interviews, diaries, photographs and letters is used (Marshall & Rossman, 2011) cited in (Moriarty, 2011).

In elaboration of the narrative, Creswell (2003), states that the inquirer seeks to examine an issue related to oppression of individuals where their stories are told using a narrative approach. Additionally, individuals are interviewed at some length to determine how they have personally experienced oppression.

In this study, the researcher adopted the qualitative design using the narrative approach to explore the experiences of student nurses caring for HIV/AIDS patients. This design was pre-empted by the fact that, to date, very limited research that focusses on the encounters that student nurses face on a daily basis, when managing HIV/AIDS patients in South Africa.

4.2.3 Exploratory Research

Polit & Beck (2001) explain that, explorative research is undertaken when a new field is being investigated or when there's a lack of information about the area of interest. Furthermore, it is relevant to investigate the entire nature of the phenomenon and other aspects related to it. Correspondingly, according to Mouton & Marais, (1990) implementation of an exploratory approach aided the researcher to gather new information in areas where minimal or no former studies had been executed. In the first chapter of this study, the theoretical and pragmatic exploration began with a search of published researches (Cooper & Schindler, 2001). The data included the experiences of student nurses as well as nurses and their experiences when caring for HIV/AIDS patients, with an international and national perspective.

4.2.4 Descriptive research

Descriptive research is designed to provide a picture of a situation as it naturally occurs (Burns & Grove, 2003). In other words, descriptive research exposes the reality of the situation or scenario. For the purpose of this study, descriptive research was applied to acquire in-depth insights into the experiences of student nurses providing care to HIV/AIDS patients.

4.2.5 Contextual research

In reference to Holloway & Wheeler (2002), contextual research involves the environment and conditions of the area of study as well as the culture of the participants and location. In confirmation, Lincoln & Guba (1985), state that a

phenomenon must be studied in its natural setting because individuals take their meaning from themselves within their context. Therefore, in this particular study the enquiry phase is conducted in the participants' natural setting which is the nurses' work environment and /or any other venue that they deemed secured and adequately private.

4.3 REASONING STRATEGIES FOR THEORY CONSTRUCTION

Within the study, inductive reasoning, deductive reasoning, derivation, synthesis, analysis, retroduction and inference are applied respectively (Struebert & Carpenter, 1995; Chinn & Kramer, 1995; Walker & Avant, 1995; Burns & Grove, 2009). Firstly, reasoning strategies were enacted in order to allow the researcher to assess and arrange the data incrementally in line with theoretical and empirical priorities. Secondly reasoning strategies also enabled the exploration and description of participants' experiences relative to their experiences when caring for HIV/AIDS patients. Finally, the reasoning of strategies facilitated the description of conclusions and recommendations from conceptualisation of results, to data-analysis and finally, development of the model.

4.3.1 Inductive reasoning

Inductive theory refers to the initial collection of data prior to applying the theory. In substantiation, Mouton & Marais (1990) posit that, the inductive approach is used to collect data rather than begin an existing theory or hypothesis. The inductive reasoning technique is used during the enquiry process of data collection through interviews facilitated by the researcher until saturation of information. Interpretation and analysis of data then follows through the induction concept and generation (Chinn & Kramer, 1995). Therefore, the pragmatic findings were utilised to create core concepts and relational records for the model to explore and describe the experiences of student nurses caring for HIV/AIDS patients.

4.3.2 Deductive reasoning

This refers to the utilisation of existing theory which guides the researcher in the identification of relevant information regarding the phenomenon under study. In other words, it refers to the reduction of information from the specific to the general (Kolb,

2014). Deduction is taken as a point of departure in the process of extracting experience from existing theories derived from previous research. Thus, the deductive analysis is applied to this study to rollout the strategies for implementation of the model to explore and describe the experiences of student nurses caring for HIV/AIDS patients.

4.3.3 Derivation

Derivation is the contextual transfer of theory from one literature source to another. It provides means of theory building through shifting the terminology from one field to another (Walker & Avant, 1995). This particular study adopts the process for conducting concept derivation according to Walker & Avant (1995). Hence the researcher familiarised themselves with existing literature on the experiences of student nurses caring for HIV/AIDS patients.

4.3.4 Synthesis

Morse & Field (1996) explain that synthesis commences when the researcher has become familiarised with the setting. Moreover, through synthesis, the researcher reaches the level where the experiences of student nurses caring for HIV/AIDS patients are explored, described and understood. Within this synthesis was applied during the conceptualisation of findings.

4.3.5 Analysis

Analysis is the determination of a whole by means of fragmenting it into portions for the purposes of clarifying, refining or honing concepts, statements or theories and then scrutinising the relationship between each part to the whole (Walker & Avant, 1995). Analysis is used inductively and deductively in section one of the studies to explore and describe the experiences of student nurses caring for HIV/AIDS patients. Inductive and deductive reasoning are used interchangeably in the collection of empirical data to fit data significantly into a matrix context providing the participants about the experiences in caring for HIV/AIDS patients (Miles & Huberman, 1994). Data analysis for identification and classification of concepts for relationships between concepts and statements during conceptualisation stage and literature control is achieved through deductive and inductive reasoning.

4.3.6 Retrodution

A reasoning technique that consists of a rational conclusion, leading to the most appropriate explanation for perceived emergences (Mouton, 1996). The pragmatic and theoretical arguments are presented in justifiable and acceptable statements, premises or statements are relevant to the inference and provide the conclusion with sufficient support (Rossouw, 2003)

4.3.7 Inference

This refers to the process of reasoning from premises to conclusion. The valuation of inferential rationality relates to the relevance of the premises regarding the conclusion, rigour, reliability and precision (Mouton, 1996). In this dissertation the researcher utilised inference from the conceptualisation and description of the model with guidelines for implementation.

4.4 THEORY GENERATION DESIGN

The theory generation research method involves the progression and evaluation of the theory. Chinn & Krammer (1991), cited in Brink (2003) state that theory development requires a systematic process of enquiry which should comprise of a series of steps which include:

- Identifying, selecting and clarifying concepts;
- Identifying assumptions which form the grounding for the theory;
- Clarifying the context;
- Developing rational statements through the process of concept analysis, concept derivation or concept synthesis;
- Testing rationale statements and validating relationships.

The theory generation method incorporates a creative, directed and a meticulous framework of dominating concepts that present a tentative, purposeful and methodical view of phenomena (Chinn & Kramer, 1991), therefore a theory is formulated with an existing structure. The theory generation model entails a four-step system constituting the conduction of a concept analysis, the construction of relationship statements drawn from conceptualisation outcomes, the elucidation and valuation of the design

and the explanation of guidelines to implement the model (Chinn & Kramer, 1995). According to Brink (2003), the first step to developing a theory is to become familiar with the structural and functional components of the theory where structural components include assumptions, concepts, constructs and propositions and the functional concepts consist of the domain concepts of the theory and how they are used (describe, explain, predict or control). Brink (2003) further explains that when a concept is clarified so that it is potentially observable and in a form that is open to measurement, it is considered a construct.

Since Kuczinski & Daly (2003) stated that “qualitative” is a problematic term that deals with a vast matrix of disciplinary, orientations, epistemologies, theories, methods, and it is clear that qualitative research methods are well suited for theory generation. Meleis (1991) describes a theory as a prepared, lucid and orderly articulation of an array of statements related to significant questions in a discipline and which are conversed in a meaningful whole. Synonymously Chinn and Kramer (1991), cited in Brink (2003), define theory as a systematic abstraction of reality that serves some purpose. They describe that systematic implies a specific organisational pattern, abstraction means that it is the representation of reality and purpose includes description, explanation and prediction of phenomena and control of some reality. Theories have concepts that are related to the discipline’s phenomenon. These concepts relate to each other to form theoretical statements (Meleis, 1991). A theory is developed at different levels of difficulty, concepts, enquiries, and phenomena are the sources of ideas for theory generation (Meleis, 1991). Dickoff, James & Wiedenbach (1968) explain that theory generation consists of four levels: factor isolating, factor relating or situation depicting, situation-relating and situation-producing which refers to the description of the practice theory of any field.

4.4.1 Practice theory

Dedication to practice, in relation to rigorous consistent information, is fundamental to the professional and practice field. According to Walker & Avant (1995), cited in Miya (2014), theory provides a more complete picture for practice than factual knowledge alone. Miya (2014) states that the situation-producing level requires sufficient knowledge about how and why situations are related so that, using a theory as a guide, valid situations can be produced. The six fundamentals of the practice theory are as follows as according to Dickoff, James & Wiedenbach (1968): context, agent, recipient,

the dynamic, the process/procedure and the purpose. Therefore, the study technique is defined according to the four stages of the research, identified as:

- Phase 1: Exploration, description and problem analysis of student nurses' experiences when caring for HIV/AIDS patients;
- Phase 2: Conceptualisation of findings;
- Phase 3: the model application;
- Phase 4: evaluations and descriptions and guidelines to operationalise the model.

4.4.2 Phase 1: Exploration, description and problem analysis of student nurses' experiences when caring for HIV/AIDS patients

In phase one the experiences and adversities faced by the student nurses and nurses when caring for HIV/AIDS patients was explored and described accompanied by the analysis of the problems, on a global, continental and national perspective. The developing themes and categories from this phase were generated.

4.4.2.1 Research Method

The methods for data collection during phase one of the study are described in relation to the research approach adopted, the target population along with sampling procedures, the data collection processes, methods of analysis, and the procedures used to ensure rigor.

4.4.2.2 Piloting the Data Collection Tool

A pilot study was conducted to evaluate the utility of the interview guide. Pilot interviews were conducted on three participants to determine how well the data collection tool suited its intended use within the study. The pilot also gave the researcher the occasion to refine their questioning skills. The researcher utilised the unstructured interview approach so as to enable collection of the a wide range of viewpoints from the target population. The piloting process revealed that the intended data collection questions were clear, easily understood and prompted participants to discuss issues that were directly related to the study focus.

4.5 Data Investigation Methods

In qualitative research, the consideration of basic approaches to data collection is necessary. When in the process of obtaining data, it is imperative to utilise high quality data-collection techniques so as to avoid any challenges upon conclusion of the research (Brink *et al*, 2012). There are various techniques utilised to attain data such as focus groups however, according to Brink, van der Walt and van Rensburg (2012) the most frequently used techniques by healthcare professionals are observation, self-report and physiological methods. The process of determining the most appropriate data collection process was entered into systematically. According to Brink *et al* (2012), the process of planning for data collection in research is driven by five key enquiries:

a) What data will be collected?

The researcher must carefully assess what type of information is required to answer the research question (Brink *et al*, 2012). In the current study, data collection was focussed on eliciting the experiences of student nurses caring for HIV/AIDS patients and would involve the collation of in-depth qualitative data.

b) How will the data be collected?

In the case of this research, data was collected at two distinct phases of the empirical journey. Firstly, through secondary data sources such as previous research, and forms of data that can be collected from the library. This serves as the basis for accessing relevant information and access to alternative sources such as books and journals (Cormack, 2006); through electronic medium. Secondly, data was collected through face to face interviews of the student nurses through probing techniques which will be audio recorded, due to the sensitivity of the topic.

c) Who will collect the data?

The data -collected for this specific research was specifically collected by the researcher. This ensured the prevention of errors and irregularities in data collector reliability that may exist when multiple researchers attain data.

d) Where will the data be collected?

Brink *et al* (2012) states that the setting for data collection must be carefully determined. In the case of the research concerned, the designated place(s) where data was collected was any private location that the student participants deemed to be safe, accessible. For the most part, participants agreed to be met in a private room in the nurses' residences at the hospital. This setting allowed for confidentiality. The setting also allowed for the comfort and confidence of the student to willingly respond to the interviewer (researcher).

e) When will the data be collected?

The researcher must decide exactly when the data are to be collected, as well as how long the process will last, Brink *et al* (2012). Since theoretical information of the topic in question was attained through a range of online resources, there was no physical limit placed on the researcher. In contrast, the data collected throughout the interviews with the prospective student nurses was collected via a single 30-minute interview.

The five questions discussed above lead to the selection of data-collection techniques defined by Brink *et al* (2012) below:

4.5.1 The observation technique

On the word of Brink *et al* (2012), observation is a technique for collecting descriptive data on behaviour, events and situation. It is extremely essential for observations to be done under specifically distinct circumstances in a methodical and unprejudiced approach coupled with thorough record-keeping. In order to achieve this, all

observations must be examined and organised. Observations could be structured or unstructured, where a structured observation refers to the advanced specification of the precise mannerisms or proceedings that are to be observed, how they will be recorded, and the preparation of forms for record-keeping such as checklists. In conducting a structured observation, the researcher simply observes and records certain aspects of the participants' behaviours. This method is generally used in quantitative studies, (Creswell, 2009). However, Brink *et al* (2012) goes on to define an unstructured observation to entail the collection of descriptive information that is analysed qualitatively rather than quantitatively. In this type of observation, the researcher seeks to describe events or behaviours as they transpire, with no predetermined concepts. This method was not opted for within the current study.

4.5.2 Physiological method

The method constitutes of scientific apparatus for measuring health related readings. According to Creswell (2009) many researchers use physiological measures since they are strongly connected to the clinical health sciences practice. These measures are also advantageous in the fact that they are accurate and precise. The research instruments used in this method are scientific tools used to measure blood pressure values, blood values or urine values, to name a few. This was also found to not be relevant to the current enquiry.

4.5.3 Self-report techniques

Self-reporting techniques involve the enquiry into the participants' perceptions, attitudes, beliefs, feelings, motives, plans, experiences, knowledge level and memories by means of verbal techniques such as interviews and written methods such as questionnaires (Parahoo, 2009). The two techniques have their advantages and disadvantages of which the researcher has to be aware of and take into account these facets when selecting the technique to apply. The below table illustrates the advantages and disadvantages of verbal and written techniques respectively. Face to face interviews were selected as the primary method of data collection within this study and ahead of their use, more in-depth exploration of their strengths and limitations are considered as indicated in Table 4 below:

Table 4. Benefits and Limitations of interviews and questionnaires. Brink et al (2012).

Interviews	Questionnaires
Advantages	
• The participant may be illiterate.	• Questionnaires are a quick way of obtaining answers.
• The answers can be attained from a varied range of participants.	• Questionnaires are less expensive in terms of time and money.
• The replies and retention role is high.	• Questionnaires are one of the easiest research instruments to test for reliability and validity.
• Gestures and mannerisms can be observed.	• A greater sense of anonymity is experienced by the participants hence more likely to provide candid responses.
• Questions may be explained if they are miscomprehended.	• The format of the questionnaire is standardised for all participants and is not reliant on the disposition of the interviewer.
• Detailed responses can be obtained.	
Disadvantages	
• Training programmes are required for interviewers.	• Paperwork and mailing of questionnaires may be expensive.
• Interviews are time-consuming and less cost effective.	• The response rate from participants may be low.
• Preparations for interviews may be challenging.	• The participants may provide socially accepted answers instead of responding honestly.
• Participants may be apprehensive due to the recording of answers.	• There is no chance to elucidate any misconstrued questions by the respondent.
• The interviewees may be influenced by the interviewer's characteristics.	• Participants must be literate.
• The interviewer may misread non-verbal behaviours.	• The respondents may not be representative of the intended population.
• Participants may provide socially acceptable responses.	• Participants may fail to respond to some of the questions.

When reflecting on the advantages and disadvantages of these two techniques, it is evident that each possess a noteworthy range of advantages and disadvantages. However, the number of advantages of the verbal technique overrides those of the written technique. Although the participants may be apprehensive when responding due to the recording of interviews, probing techniques may be used to encourage the interviewees to participate authentically and confidently – an intervention that can be effectively ensured on a one-on-one basis. Additionally, privacy must be of highest priority in order to motivate the participant. Prior to the selection of technique, the researcher analysed the pros and cons of each technique and opted to adopt the

verbal approach by the use of recorded interviews, with the confidentiality of the interviews taking precedence.

4.5.4 Interviews

Within the current study, audio-recorded face to face interviews were chosen as the primary data collection approach. An interview is a dialogue between individuals whether on a face-to-face basis, telephonically or even over the internet. Correspondingly, Parahoo (2009) expresses an interview to be a method of data collection in which an interviewer obtains responses from a participant in a face-to-face encounter, through a telephone call or by electronic means. Interviews provide a platform for acquiring the story behind the experiences of the interviewee. According to Moriarty (2011) interviews remain the most common data collection method in qualitative research and are a familiar and flexible way of asking people about their opinions and experiences. Moriarty (2011) further states that one attraction for researchers is that a considerable amount of data can be generated from an interview lasting one or two hours.

In qualitative research, data-collection interviews are largely categorised as either structured or unstructured. Interviews, however, may range between the two classifications therefore known as semi-structured interviews (Brink *et al*, 2012), i.e. interviews can be highly structured, semi structured or unstructured, Hancock (2002). Structured interviews are formalised so that all respondents hear the same questions in the same order and in the same manner. A tightly structured schedule of questions is used, very much like a questionnaire. The questions may even be phrased in such a way that a limited range of responses can be elicited (Hancock, 2002). Polit & Hugler (2012) further argue that, structured interviews are most appropriate when straightforward, factual information is desired. The research instrument used in this category is an interview schedule. A research instrument is a tool used to collect data, Parahoo (1997). He further defines an instrument as a tool designed to measure knowledge, attitude and skills.

Semi-structured interviews, also known as focused interviews, comprise of a series of open ended questions based on the topic areas the researcher wants to cover

(Hancock, 2002). Furthermore Hancock (2002) elaborates that the open-ended nature of the question defines the subject matter under enquiry but presents probabilities for both interviewer and candidate to discuss some topics more comprehensively. In the event that the participant finds difficulty in responding to some of the questions, the researcher can positively prompt or encourage the interviewee to attempt response. Unstructured interviews allow for more involved, detailed responses. Brink *et al* (2012), state that unstructured interviews are more like a normal conversation but with a purpose. These interviews are particularly appropriate for exploratory or qualitative research studies, in which the researcher does not possess enough knowledge about the topic to structure in advance of data collection. Similarly, Hancock (2002) defines unstructured interviews (sometimes referred to as "depth" or "in depth" interviews) to have very little structure at all. The interviewer enters into the interview with the objective of discoursing a scarce quantity of themes, sometimes as limited as one or two. Topics are however covered in great detail regardless of the scarcity. The interviewer may start the interview with a broad opening statement which allows for a descriptive and exploratory discussion. This type of interview format was selected for this study because of the best-fit nature of the approach with the intended process for data collation that was envisaged. In this study, the implemented unstructured interview format allowed for the accumulation of copious and in-depth information on the topic at hand. Probing techniques were used to encourage the participant to respond as candidly as possible. A limited number of questions are set, which are carefully designed to allow for a free-flowing discussion.

4.6 Quality Assurance measures integrated into the data collection process.

In anticipation of the data collection process for the study, a number of important quality assurance measures were integrated into the primary planning process for data collection and as a pre-cursor, each aspect was considered.

4.6.1 Trustworthiness

Struebert & Carpenter (1999), cited in Mkhabela (2007) describe trustworthiness as establishing reliability and validity of qualitative research. The trustworthiness of research findings occurs when the researcher can convince the consumer that the

results are worth paying attention to and worth taking account of (Lincoln & Guba, 1985) cited in Mkhabela (2007). Processes used in this study to ensure trustworthiness were described according to Lincoln & Guba (1995) which stated that trustworthiness is a method of establishing and ensuring rigour in qualitative research without sacrificing relevance. Method of trustworthiness involves four criteria namely credibility, transferability, dependability and conformability.

4.6.1.2 Credibility (internal validity):

According to Mkhabela (2007) the credibility criterion is important in the assessment of qualitative research. Mkhabela (2007) further explains that credibility is used to assess the extent to which findings are a true representation of lived experiences of participants, making reference to Lincoln & Guba (1985) who states that credibility aims at establishing confidence in the findings of the research. Furthermore Lincoln & Guba (1985), cited in Miya (2014) define credibility as the truth-value obtained from the discovery of human experiences as they are lived and perceived by the research participants. Credibility refers to the confidence in how well data and processes of analysis address the intended focus of the study. The results must make sense and be credible to the people studied and readers of it (Miles & Huberman, 1994), cited in Miya (2014). Hence the researcher, in this study, ensured trustworthiness and rigour when reporting on experiences of second year nursing students regarding HIV/AIDS management through:

- Audio-recorded interviews to ensure that the researcher did not misinterpret the participants own wording. Each interview lasted up to 30 minutes. Interviews were conducted in the students' natural campus environment to ensure comfort and relaxation.
- Notes written directly after each interview to ensure that no relevant information was lost or forgotten.
- Reporting the participant's own wording to exhibit the diversity of their responses and ideas about the phenomena under study.
- Proceeding with data collection until data saturation is reached.
- Analysing and discussing responses to ensure that the opinions of the respondent were reflected.
- Consulting with the researcher's supervisor to ensure that the processes and findings were reviewed.

- Comparing the findings and the current study with published studies and other literature.

4.6.1.3 Dependability (reliability):

Dependability is concerned with the consistency of the results and their ability to reproduce. In other words, the fundamental matter is whether the process of the study is consistent, reasonably stable over time and across researchers and methods i.e. quality control (Miles & Huberman, 1994). Lincoln & Guba (1985), cited in Mkhabela (2007) contend that when credibility in findings is determined, consistency or dependability is ensured. Furthermore Lincoln & Guba (1985) affirm that there can be no credibility without dependability. Similarly, the research must provide the same results when applied by others using the same research participants in a similar context (Krefting, 1991), cited in Mkhabela (2007). In continuation, Miya (2014) states that dependability seeks to take into account both factors of instability and phenomenal or design induced changes, that the degree to which data changes over time and the alterations made in the researcher's decisions during the analysis process. Therefore, in this study the researcher will give an explicit description of how research results shall be obtained. The description provides information as to how reproducible the study might be or how unique the situation is. In order to ensure dependability, the techniques of data collection, data analysis and interpretation are described.

4.6.1.4 Conformability (Objectivity):

This refers to how neutral the findings are in terms of whether they are reflective of the informants and the enquiry and not a product of the researcher's bias and prejudice. Cited in Mkhabela (2007), Morse & Field (1996) define neutrality as a freedom from bias in the research procedure and results such that there would be agreement between two or more independent people about the data's relevance or meaning. Furthermore, in qualitative research, neutrality should not be viewed on the characteristics of the researcher but on the neutrality of data (Polit & Hungler, 1999; Krefting, 2001). Miya (2014) confirms that objectivity is the criterion of neutrality and is achieved through rigour of methodology and through liability and validity are established. To adhere to the criterion of objectivity, the researcher will give a complete study report to two participants to read through and confirm the truthfulness of the study.

4.6.1.5 Transferability (Applicability):

Transferability refers to the generality of the study findings of other settings, population and contexts (Mkhabela, 2007). Synonymously focuses on the extent to which findings can be applied in other study situations (Babie & Mouton, 2001) cited in Mkhabela (2007). Cited in Miya (2014) Lincoln & Guba (1985) state that transferability is the strategy used to ensure applicability by ensuring a thick description of research context. Hence in this study, transferability is attained through purposive non-probability sampling, saturation of data and thick description of the research strategy and method of the study.

4.7 Phase 2: Conceptualisation of findings

4.7.1 Concept identification

The process of identifying a concept involves experiences, clinical practice or knowledge literature (Mkhabela, 2007). In this study, the concepts were identified through published literature of the experiences of student nurses and nurses managing HIV/AIDS patients and probing students through interviews on their experiences regarding HIV/AIDS patient management. Walker & Avant (1995), cited in Mkhabela (2007), states that the concept selected should be significant and important to further the research in the area of interest, such as the experiences of student nurses when caring for HIV/AIDS patients. Consequently, in this research caring is the domain concept to which stress and its manifestations will be explored. Bam & Naidoo (2012) discovered that there were five attributes which described the psycho-social range of meanings that participants attached to the concept of caring in the perspective of the nurse. These being:

- Caring as a personal value system

  This refers to characterizing the concept of caring as an attribute or a mechanism that enabled the nurses to provide quality care and improve the well-being of other.

- Caring stems from one's background

  Previous exposure to episodes of caring for family members with HIV/AIDS shaped and prepared the nurses in regard to palliative care.

- Caring is transforming

Nurses experienced the transformation of patients through the application of caring, where they understood that they were the agents of change by turning a negative experience into positive living and improved health outcomes.

- Caring requires sacrifice

  Nurses noted that caring for the terminally ill was a challenging aspect of a nursing career as the nature of taking care of terminal patients suffering from HIV/AIDS meant that they were sometimes compelled to make many sacrifices. The research further revealed that such sacrifices included both time and money in that participants often worked extra shifts and longer hours and by continuing to work in the palliative wards sometimes sacrificed more lucrative positions in other wards.

- Caring is holistic

  Nurses stated that they embraced a holistic approach and cared for terminally ill patients as human beings with bodies, minds, souls and spirit. Furthermore, since HIV/AIDS is a debilitating disease that threatens the lives of patients, their assessments and interventions are integrated within a multidisciplinary team of health care workers who attend to the needs of the patients.

  Moreover phase 2 of the research also revealed that stress yielded certain negative aspects which could affect quality of care by the nurses and students. These stress outcomes will be explored according to the participants' responses.

4.7.2 Concept analysis

According to Walker & Avant (1995), cited in Mkhabela (2007), concept analysis is a formal and linguistic procedure to determine the essential attributes of a concept. It is a technique or mental activity that requires approaches to uncover subtle elements of meaning (Mckena, 1997), cited in Mkhabela (2007). In other words, concept analysis is a process which involves the use of words to elucidate phenomena.

Phase 2 of the study unpacked and described the caring theory by looking at the principles applied by Watson (2007) of carative factors and caritas processes. Reference was also made to the five hierarchical methods involved in nurses caring for HIV/AIDS patients (Tonges & Ray, 2011). Therefore, in this study the analysis of the information gathered from the participants will be set against the literature

concerned with caring and integrated accordingly, with key words that will be used to describe the encounters that student nurses face when caring for HIV/AIDS patients.

4.7.3 Concept definition

Cited from Mkhabela (2007), Smith (1997) defines a concept as a general summary of the abstract aspects of life. Furthermore, Chin & Kramer (1995) describe concept as a complex mental formulation of experiences which depends on certain variables. Conceptualisation is referred to as both the clarification and analysis of the key concepts in a study and the way in which the research is integrated into the existing body of knowledge or existing theory and research (Mouton, 1996), cited in Miya (2014). Miya (2014) continues to state that conceptualisation involves embedding or incorporating one's research into the body of knowledge that is pertinent to the research problem being addressed. Therefore, the definition of caring and stress in this study will be formulated from dictionary definitions, attributes and expected outcomes.

4.8 Phase 3: Model application for the implementation of management and caring for HIV/AIDS patients

In phase three the application of the theoretical framework in the research was briefly highlighted, to which the decision of utilising the Donabedian Tripatite Framework was concluded. The procedure followed when using the Donabedian approach includes the structure; the process and the outcome respectively.

4.8.1 The structure

The structure refers to the policies and procedures relevant to caring for patients with HIV/AIDS, namely the occupational health and safety rules and regulations - that should be set in place by a formally appointed occupational health and safety committee of the facility - (needle stick injury policy), infection control policy, confidentiality policy, nurse-patient ratio policy, human resource policies etc.

The next vital aspect of the structure is the availability of resources. These resources include adequate staffing (skilled personnel), finances (adequate resources and funds), sufficient technical equipment and material for caring such as fresh linen, sufficient number of beds, readily available medication, blood-pressure machines etc.

The facility/building is also essential to the managing of patients where ample space is required, especially in public hospitals where the influx of HIV/AIDS patients is high.

A proper facility should be spacious to allow for adequate ventilation, privacy and cleanliness. A hospital building should also have a sufficient number of wards which can comfortably accommodate enough patients in order to avoid overcrowding. Ablutions/lavatories are of utmost importance to both patients and staff members and should be kept in an immaculate condition at all times for infection control.

Another critical aspect is the presence of an administrative system so as to coordinate processes accordingly and efficiently therefore promoting a free flowing systematic working environment.

4.8.2 The process

The process relates to the methods and procedures of caring for HIV/AIDS patients. This includes physical, emotional, spiritual, cultural and socio-economic features of care. Thus, caring requires a multi-disciplinary approach. In this study, the researcher will also conduct a needs analysis of the patients cared for by the student nurse and nurse, including the needs of the student nurses. The researcher will also explore on the nurse-patient relationship as part of the experiences of student nurses caring for HIV/AIDS patients. The researcher will also assess the challenges encountered and achievements thereof.

4.8.3 The outcome

The outcome relates to the end product of care, whether it's a positive or negative outcome. It refers to whether the objectives were attained and the manner of their attainment. The outcome will reveal solutions that need to be embarked upon in order to rectify the identified problems. Therefore, the researcher will be able to deduce from the results of the study better solutions of rectifying potential problems.

4.9 Phase 4: Evaluation and description of guidelines to operationalise the model.

Deductive reasoning and inductive reasoning was utilised to operationalise the model which in this study is the Donabedian tripartite framework.

4.5 SUMMARY

The chapter provided an overview of the methodological processes that were considered and opted for within the study. An overview of the interviews is provided, including information about the range of interventions that were integrated into planning to maximize the quality of data collected. This serves as an apt precursor to the presentation of findings that were elicited from the in-depth interview process.

CHAPTER 5

PRESENTATION, ANALYSIS AND INTERPRETATION OF EMERGENT DATA FROM THE RESULTS

5.1 INTRODUCTION

The previous chapter offered an outline of the research design and the approaches that were applied in the data collection. Chapter five presents the, analysis and interpretation of the main findings of the study.

As mentioned in the previous chapters, detailed interviews were conducted amongst the target population with the aim of exploring the meanings they attached to the concept and experiences of caring for HIV/AIDS patients. Subsequent to exploring the experiences of student nurses when caring for HIV/AIDS patients, emergent findings were subsequently analysed.

According to Brink *et al* (2012), analysis of data in qualitative studies involves an examination of narrative data instead of numbers. Brink *et al* (2012) continue to state that, data analysis is generally not a distinct step in qualitative research studies, but is done concurrently with data collection. Moreover, many qualitative researchers use a series of common steps for analysing their data which begins at the start of the data collection phase (Brink *et al*, 2012). Typically, the steps to analysis include; reading the data; data reduction; coding for themes and categories; making memos about the context and variations in the phenomenon under study; verifying the selected themes through reflection on the data and discussion with other researchers or experts in the field; refining the categories; recording of support data for categories; and the identification of propositions (Brink *et al*, 2012). The process of analysis was aligned closely to clarifying if the emergent data related to the issues and priorities identified within the objectives which were: -

1. Exploring and describing the experiences of second year nursing students regarding management of HIV/AIDS patients.
2. Designing the guidelines to assist nursing students regarding management of HIV/AIDS.

5.2 METHOD OF DATA ANALYSIS

Data analysis refers to the organising, structuring and extracting meaning of a particular topic of study. Polit *et al* (2008) states that analysis of qualitative data is an active and interactive process. Correspondingly, data analysis involves a systematic application of process or processes of bringing order, structure and meaning to the mass of data collection (Miya, 2014). Furthermore, Brink (2003) defines qualitative data analysis as the analysis of non-numerical data and states that it is usually in the form of written words or videotapes, audiotapes and photographs. Therefore, analysis of data in qualitative studies involves the examination of words rather than numbers and is generally not a distinct step in qualitative research studies, but is done concurrently with data collection (Brink, 2003). Brink (2003) continues to describe the common steps used by qualitative researchers to analyse data, as follows:

- Step 1: coding for themes and categories;
- Step 2: making memos about the context and variations in the phenomenon under study;
- Step 3: verifying the selected themes through reflection on the data and discussion with other researchers or experts in the field;
- Step 4: refining the categories;
- Step 5: recording of support data for categories;
- Step 6: the identification of propositions.

Similarly, Tesch's method involves the identification of themes, verifying the selected themes through reflection on data, discussion with other researchers or experts in the area, categorising in the themes and recording of support data (Tesch, 1990). The narrative descriptions of the student nurses caring for HIV/AIDS patients were analysed applying Brink's steps of data analysis (Brink, 2003).

5.2.1 The researcher's application of Brink's method of qualitative data analysis

5.2.1.1 Coding for themes and categories:

Coding and categorising are generally initiated as soon as data collection begins (Brink, 2003). Furthermore, coding was used to organise data collected during the interviews and from documentary evidence (Brink, 2003).

- In this study, after recording the interviews conducted on the second-year student nurses, the researcher transcribed the audio data and carefully read through all the records of each interview in order to acquire a clear comprehensive understanding.
- The researcher categorised similar responses and assigned these categories by themes and sub-themes, which were coded according to concepts related to the study. Due to the confidentiality and sensitivity of the topic, participants were anonymised.

5.2.1.2 Making memos about the context and variations in the phenomenon under study:

According to Brink (2003), manual analysis involves thorough review of all recorded information that the researcher has obtained during the course of data collection.

- In relation to this study, the researcher annotated ideas and thoughts on a separate sheet of paper while scrutinising each interview.
- The researcher also noted relevant points through probing.
- Subsequently the researcher compiled memorandums that included the most specific responses related to the study and combined responses that were similar, separating them from the responses that varied.

5.2.1.3 Verifying the selected themes through reflection on the data and discussion with other researchers or experts in the field:

- In this study, the researcher revised the various themes and sub-themes available and confirmed if new categories or themes appeared.
- The researcher verified the coded data collected with experienced professional nurses.

5.2.1.4 Refining the categories:

- As mentioned above, the researcher refined the categories by means of grouping all the similar responses into the same category according to a theme related to the topic.
- The topics were altered into explanatory categories.
- The researcher then selected the ultimate codes for categories and gathered the associated data in a systematic chronological order.
- Furthermore, recognised themes were utilised to enhance probing questions in subsequent interviews therefore allowing for the inundation of themes to emerge.

5.2.1.5 Recording of support data for categories:

- The researcher recorded existing data where applicable and completed a primary analysis.
- The existing data was documented in the narrative.

5.2.1.6 The identification of propositions:

- The themes and sub-themes which occurred from the collected and analysed data are discoursed in the ensuing section.
- The conceptualisation of the core terms, which were caring and stress, were identified according to Donabedian's theoretical framework of structure, process and outcome. Therefore, the occurring themes were categorised in accordance with their relation to structure, process or outcome. However, themes that did not fall within this framework were organised separately and described.
- The presentation of the data collected is in the form of themes and sub-themes, then ultimately providing a summative overview of themes in their totality.

5.3 BIOGRAPHICAL INFORMATION

Biographical information refers to the personal information of the participants, however confidentiality taking precedence. A total of 20 student nurses participated in one-on-one interviews with the researcher as the interviewer. Table 5 below, provides an illustrative synopsis of the participants' demographic information.

Table 5. Biographical data of second year general nursing diploma students (R683).

Respondent No.	Marital Status	Age	Gender	Work experience as an enrolled nurse
1	Single	26	Female	2 years
2	Single	29	Female	3 years
3	Married	30	Female	5 years
4	Single	24	Female	2 years
5	Single	27	Female	3 years
6	Single	25	Female	2 years
7	Single	24	Female	2 years
8	Single	28	Female	4 years
9	Married	35	Female	6 years
10	Single	26	Female	4 years
11	Single	29	Female	3 years
12	Married	45	Female	8 years
13	Single	30	Female	5 years
14	Single	40	Female	2 years
15	Married	32	Female	4 years
16	Single	31	Male	2 years
17	Single	35	Male	4 years
18	Single	33	Male	2 years
19	Single	36	Male	3 years
20	Single	34	Male	3 years

Table 5 above, offers a summative overview of key demographic characteristics of the participants. As per inclusion criteria, all the participants were second year general nursing (bridging course) students who were involved in providing direct care to individuals affected by HIV/AIDS. Participants' ages varied from 24-45 years old and were comprised of 14 females and 6 males. The sample was purposively selected and the disproportionate representation by gender was typical of the nursing profession which has a significantly higher representation of females that it does males. This gender inclusive approach offered the potential for more diverse insights from a broader spectrum group. Each of the nursing students had previous experience as enrolled nurses and this ranged from 2 years to 8 years.

5.4 RESEARCH FINDNGS ACCORDING TO CATEGORIES, THEMES AND SUB-THEMES

A theme represents a level of patterned response of meaning from data that is related to the research questions at hand (Virginia, Victoria & Clarke, 2006). The dictionary definition of the word theme is that it refers to the subject of discourse, discussion, mediation or composition of the topic. Therefore, a theme is the core of the topic. Lo-Biondo-Wood & Haber (2010), cited in Miya (2014) state that, themes represent a way of describing large quantities of data in a condensed format. Furthermore, themes are patterns across data sets that are important to the description of a phenomenon (Daly, Kelleher & Gliksman, 1997). Consequently, these themes can be developed into categories of analysis.

In this study, the researcher identified the reoccurring responses by the interviewees from which a number of themes were elicited. These themes were then subsequently divided into sub-themes respectively. Therefore, in this chapter the researcher reflects on the data collected and from that, the themes and sub-themes are described. As part of the process of ensuring that valid representations of participant views are made, verbatim quotations from the participants are provided in cases where the asserted interpretations would benefit from further support.

Unstructured interviews were conducted during which, participants were asked questions relevant to the research topic. Within this, a probing technique was applied in order to encourage the students to impart more information to the interviewer.

5.4.1 Category 1: Conceptualisation of the core terms

5.4.1.1 Conceptualisation of caring

Each student was asked two primary questions, which served as a springboard for further probing questions as was deemed necessary by the researcher. The two primary questions asked were:

“Please may you share the range of experiences you had in nursing patients infected with HIV?”

and

"What do you think should be done to assist student nurses to cope with care of HIV positive patients?"

Based on the preliminary questions, the responses of the participants were related to the structure, the process and the outcomes of caring for patients infected with HIV. After scrutinising the data collected, the researcher found five attributes describing care in the nursing context. These emerged perceptions were notably similar to the caring concepts found in Tonges & Ray (2011). These included: -

a) Hierarchical levels of caring, namely; the capacity of caring by the student nurses,

b) the commitment of student nurses in relation to caring for HIV/AIDS patients,

c) the conditions of the environment, the caring actions and the caring consequences.

In relation to factors related to 'structure' as conceptualised by Donabedian (2003), the student nurses' responses were largely similar with rare variances in some regard. For example, respondents made mention to "the pressures associated with overcrowding as contributing to shortages of space, staff and resources. In turn, these were viewed as compromising their ability to care for the HIV/AIDS patient. In support of this notion, one of the participants answered:

> *"The workload is overwhelming over the shoulders of the students because there is a shortage of registered nurses." (Participant 7).*

The same participant proceeded by saying,

> *"…we don't have enough registered nurses who are able to supervise us. Sometimes we are required to do jobs over our scope of practice." (Participant 7).*

The above response reflects that overcrowding is seen as a key contributing factor in result staff shortages and was seen as a key cause of excessive workloads which ultimately compromised quality care to the patients. Others expressed that the facility did not have sufficient room to separate HIV/AIDS patients from patients suffering from

other critical contagious infections and this posed a threat to the well-being of the HIV/AIDS patients. One participant raised their concern with regard to this by saying:

> *"…Other patients that are in the ward with a tuberculosis (TB) infected patient or other opportunistic infections, are not protected and contract the opportunistic infections in the hospital since they do not wear masks and their immune systems are low. Patients with TB and TB-MDR are not quarantined and therefore pose a threat to other patients." (Participant 12)*

Similarly, another participant commented that,

> *"…You find an MDR patient in the ward and this is due to the shortage of space in the isolation section, because you find that in a ward there will only be one isolation section which does not have sufficient room space to carry the increasing numbers of MDR patients who have not started their TB treatment. This is a problem because the TB patients result in the infection of the HIV/AIDS patients. Patients will come to the hospital not having TB but then leave infected with TB that they obviously contracted in the hospital." (Participant 17).*

Another participant expressed that,

> *"The other problem is that you find TB patients mixed up with other patients who do not have TB, which in my opinion is wrong. Like for patients who are HIV positive have low resistance, therefore are prone to contracting TB from the TB patients they are admitted with in the ward." (Participant 3)*

In terms of the lack of resources one student emphasised this by saying,

> *"We are not well-supervised because there is a shortage of staff, lack of equipment for nursing patients and lack of space due to overcrowding…" (Participant 9).*

On closer analysis, the sub-theme that emerged from the above issues was “caring in relation to the conditions of the environment”. This theme is an important contributing influence that relates to how different nursing students articulated their experiences.
The process of caring is as important as the structure because if the structure is not conducive for care, quality care will be compromised. The researcher observed, from the responses, that the process of care involves the implementation of caring for HIV/AIDS patients, the determination of the needs of the patients and the range of experiences associated with the development of the nurse/patient relationship.
The researcher found that the shortage of staff affected the process of facilitation and supervision to the student nurses, where the participants indicated that the college/ university staff did not accompany and supervise the student nurses while they were conducting their practical. The lack of ready access to fully qualified professional nurses also hindered the process of supervision, to extents where the students felt that they could not offer quality care to the HIV/AIDS in their care. This dilemma is well captured by some of the participant responses:

> *“…However, the student is usually forced to self-learn since there is a lack of supervision. In fact, no one can supervise the student.” (Participant 16).*
>
> *And*
>
> *“…Most of the staff are students to which some come from the college and therefore they do not understand the procedures involved when treating an HIV/AIDS patient and the side effects related to it.” (Participant 20).*
>
> *And*
>
> *“Honestly no, we don’t have enough registered nurses who are able to supervise us. Sometimes we are required to do jobs over our scope of practice.” (Participant 5).*

One of the participants mentioned being requested to take part in a procedure that they viewed as being beyond their scope of practice and more in line with the expectations of practice associated with registered nurses. This procedure is known as the insertion of an IV line.

“…we put in IV lines and then we get into contact with blood and urine.” (Participant 2).

Additional viewpoints that the researcher elicited from the data collected included a recurrently expressed need for education for both the students and the patients, the need for conducive facilities for caring for HIV/AIDS patients, the need for protection against discrimination of the patient, the need for proper policies supporting care of HIV/AIDS patients and the need for compassion, empathy and sympathy. In support of the above, some citations from some of the responses were noted:

> *"…as we are in college they need to tell us about the mode of transportation of HIV so that every nurse is aware of it so as to protect themselves." (Participant 2).*
>
> *And*
>
> *"I think us as nurses can also go to the community and give healthcare education on how to prevent this." (Participant 11)*
>
> *And*
>
> *"…So, I think it's very important to provide more education to the newly diagnosed HIV patients." (Participant 5)*

The above-expressed viewpoints supported the notion that the students felt that they needed to be trained more about HIV/AIDS so they could better offer support to the patients in their care.

> *And*
>
> *"…Therefore, I feel that it is also important to continue HIV counselling, even to those who have known their status for long, so that they can be encouraged to continue with their treatment." (Participant 3).*
>
> *And*
>
> *"…For example: a person will need to take medication in the morning but they can't because they first have to get a piece job so that they can have money to buy food that they need to eat before they take their medication. Therefore it depends on the level of development in the communities." (Participant 3)*

The sub-themes that emerged in relation to the above-mentioned comments were:

a) The capacity of caring by the student nurses;
b) The commitment of student nurses in relation to caring for the HIV/AIDS patients;
c) The caring actions of the student nurses when managing HIV/AIDS patients.

5.4.1.2 Conceptualisation of stress

The data revealed some elements that occurred as result of stress. Factors such as burnout and fatigue, anxiety, loss of focus, frustration and a sense of hopelessness emerged. Most of the participants expressed the fear of contagion referring to needle stick injuries which they believed to be worsened by work overload, leading to the loss of concentration. Confirmation of the above viewpoints is aptly captured in the following quotes; -

> "…*it's the fear of getting needle stick injuries. We work closely with needles and therefore it's so easy for us to just prick ourselves with needles which are infected and after that we have to go through a lot of counselling and the process to prevent ourselves from getting infected." (Participant 7)*

> *"And then fear of getting HIV tested after seeing the stages that the patient has gone through and the pain they have gone through." (Participant 3)*

Some participants expressed particular concerns about the conditions of their work and in particular, they spoke about "nearly starving" and "being tired to the bone" due to the long hours that they had to work, barely taking intervals to take care of their own basic physiological needs. They expressed that this dilemma made them prone to infections of opportunistic diseases since their immune systems were compromised. These asserted views were expressed in a range of ways, some of which are captured in the verbatim accounts below:-

"…it's getting opportunistic diseases such as tuberculosis because most of the time we go to work early, we don't have time to eat and work on an empty stomach. So, there is a greater risk of getting TB." (Participant 12).

Similarly, another respondent said,

"There are some dangers because we go to work early, and therefore do not have time for breakfast. There is also no time for a break or lunches, so you end up working in an exhausted and hungry state, hence increasing your chances of exposure to opportunistic diseases like TB or even HIV." (Participant 4).

One participant revealed their sense of hopelessness due to the lack of supervision by the registered nurses, saying…*"They don't, we are on our own with all the stresses of nursing these critically ill patients." (Participant 12).*

Another participant further expressed concerns about his/her lack of specialist training and posited that…

"*I sometimes feel guilty when I see the patient lying on the bed and feel like I'm not qualified to give enough care, plus I work unsupervised. I feel it's better for HIV/AIDS patients to be cared for in specialised healthcare centres and hospices where they can get more concentrated, better and personal care. HIV patients have a low immune system and are therefore prone to opportunistic diseases therefore it is better to have isolated facilities that only deal with HIV/AIDS care. I feel like I've chosen the wrong profession, and therefore I feel bad that HIV/AIDS patients are dying, when something can be done about it." (Participant 3).*

Another respondent expressed their frustration and anger towards mothers who bore HIV/AIDS babies, saying

"I blame the mother...why they don't check their HIV status when they are pregnant, because there are ways to prevent the child from becoming infected

during pregnancy. So, I develop feelings of anger toward the parent for putting an innocent child at risk." (Participant 4)

5.4.2 Category 2: Interventions

When exploring the experiences of student nurses caring for HIV/AIDS patients, the majority of the participants felt that there was a need for interventions that promoted potential solutions. Most of the responses were outcome-based and therefore related more closely the "outcome" dimension of the Donabedian framework. The participants established that a number of key concepts needed to be considered and these included education; psychological care and specialised facilities.

5.4.2.1 Education

Emerging from the data, participants recognised that in order to apply effective care to HIV/AIDS patients in their care, a broader and more educative approach was required. The theme was therefore segregated into sub-themes expressed as education to the community, education to the patient and education to the nurse. To support these concepts, below is a set of quotes from the participants:
The first participant emphasised the need for the nurses to go out into the communities and conduct awareness campaigns and educate the communities about HIV/AIDS…

"*Student nurses should also go to the communities and teach about HIV."* (Participant 7)

A participant suggested that the patients be inducted and briefed prior to commencing treatment:

"Some do and some don't. I think whenever treatment is rendered to the patient we have to tell them about the side effects, because some of them don't even know the side effects of the particular treatment. Some even stop treatment at the sight of side effects and therefore end up defaulting because they have no knowledge of them. Maybe before a patient commences on treatment they need to be made aware of the side effects." (Participant 5).

Another quote highlighting the need for educating the patient is…

> "*The other problem is that people who are newly diagnosed don't want to get treatment at that same time instead they want to wait and consult with their partners. So, I think it's very important to provide more education to the newly diagnosed HIV patients. Those who know their HIV/AIDS status and have started on treatment stop taking the treatment once they feel that they are better and feel that they are gaining weight and appear healthy. Therefore I feel that is also important to continue with HIV counselling, even to those who have known their status for long, so that they can be encouraged to continue with their treatment."* (Participant 3).

Participants felt that is was essential for the student nurses to be facilitated and supervised right through their care-experiences by the college as they performed their practical tasks:

> *"The students need to have the college staff constantly present when doing their practical's in order to facilitate and supervise the students, instead of only coming for assessments and evaluations."* (Participant 13).

One participant emphasised the need for pre-education on HIV/AIDS prior to commencing the nursing curriculum, saying…

> "*Before starting the formal training for nurses, potential students should have an education of HIV/AIDS, with experiences in HIV/AIDS hospices and healthcare centres where patients of the communities are taken care of."* (Participant 6)

5.4.2.2 Psychosocial care

Psychosocial care involves the social and psychological approach to caring. This includes the involvement of family, friends, significant others and the wider community as a whole. The environment and societal background plays an important role in the

psychological wellbeing of an individual towards illness. The sub-themes that emerged from this concept were mutual support and stigma eradication.
A participant expressed the importance of supporting the patient by means of encouragement:

> *"It's hard to speak to them, but we have to tell the patient first and encourage them not to be ashamed of their status, however to accept their situation. We also encourage the patient not to fear telling their relatives."* (Participant 14).

Another participant voiced their perspective on psychosocial caring as the ability to strive toward showing compassion to the patient at all times, saying…

> *"I try by all means to approach the patient as a human being and like family and not as a nurse. I treat the patient as I would treat my mother or brother and work hard to give the patient nursing care. The nurses have little compassion for HIV/AIDS patients nowadays. They are just working for the sake of working."* (Participant 5).

Participants revealed the reality of stigma when it comes to HIV/AIDS, with one participant in particular having responded that…

> "*Yes, I think there is still a stigma attached, however it varies from society to society, because in other societies HIV and AIDS is taken as any other disease. In some other communities like rural areas there is still a stigma when it comes to HIV/AIDS, and poverty is the main cause."* (Participant 7)

Another participant made mention to the discrimination some patients were faced with, which is directly linked to stigma…

> *"Some of the issues that I came across is that most of the patients' relatives believe that when a person is HIV positive they are ready to die. Through my experience I also found that most of the patients' families are not accepting to the patients' infection of HIV. Therefore, the patient is afraid to tell the family of their status."* (Participant 11).

5.4.2.3 Specialised facilities

The sub-themes that emerged from this major theme related to "infrastructure and superstructure" within the context of caring for HIV/AIDS patients. These concepts were analysed and assessed in the context of 'structure' as described within the Donabedian framework. Infrastructure refers to the environment and capacity of the buildings in proportion to the quantity of patients. It also referred to the availability of resources such as linen, medication, equipment and materials. Superstructure was viewed as being about the governance of the facility and the personnel in proportion to the number of patients i.e. the management structure (organogram) and the decentralisation of care. The consideration of superstructure also related to the policies, procedures and protocols regulating the facility. In support of these concepts, some of the participants expressed their concerns with the lack of compliance when it came to certain policies and procedures such as infection control…

> *"Infection control principals are not followed because there is no infection control officer."* (Participant 11).

Notably, some participants asserted their confidence about the fact that there were some policies such as, "The Needle-stick Injury Policy" (NIP) that were successfully ingrained amongst student nurses. One participant captured this sentiment in his/her statement.

> *"Once you have detected that you have been pricked by a needle you go and rinse your finger in running water then you take your hibitane spray and apply it on the needle stick where you got your prick. After that you take the patients name and diagnosis and then go to the infection control sister and they take you through the steps."* (Participant 12).

Participants voiced their experienced challenges with complying with some of the confidentiality and non-disclosure policy expectations that restricted disclosure of the patients information, unless the patient agreed to disclose…

"Firstly, relatives are a problem, they want to force nurses to give the diagnoses of the patient". (Participant 6).

Despite the acknowledgement of the challenges related to non-disclosure, one patient highlighted the importance of privacy…

"In terms of confidentiality, as a nurse you must try to keep patient privacy. If the family comes and asks the nurse about the patient's status the nurse should refer the patient's family to the doctor and tell the family that a nurse is not at liberty to do so." (Participant 8).

In terms of infrastructure, participants revealed the lack of space and shortage of equipment and staff due to overcrowding…

"No, the patients are not isolated. You find an MDR patient in the ward and this is due to a shortage of space in the isolation section, because you find that in a ward there will only be one isolation section which does not have sufficient room space to carry the increasing numbers of MDR patients who have not started their TB treatment. This is a problem because the TB patients result in the infection of the HIV/AIDS patients. Patients will come to the hospital not having TB but then leave infected with TB that they obviously contracted in the hospital." (Participant 11).

Each of the above themes represented a collation of the different experiences participants reported. Table 6 below, provides a summative overview of key emergent themes that relate to the experiences of the student nurses as they related to their responsibility of caring for an HIV/AIDS patient.

Table 6. Emergent themes from the experiences of student nurses caring for HIV/AIDS patients.

IDENTIFIED THEMES	EMERGING SUB-THEMES	RELATIVITY TO THE DONABEDIAN FRAMEWORK	CITATIONS FROM PARTICIPANTS
CATEGORY 1: CONCEPTUALISATION OF CORE TERMS			
Conceptualising caring	• Capacity of caring by student nurses • Commitment of students caring for HIV/AIDS patients • The caring actions	Process	*"…However the student is usually forced to self-learn since there is a lack of supervision. In fact no one can supervise the student."* *"…Most of the staff are students to which some come from the college and therefore they do not understand the procedures involved when treating an HIV/AIDS patient and the side effects related to it."* *"Honestly no, we don't have enough registered nurses who are able to supervise us. Sometimes we are required to do jobs over our scope of practice."*
	• Caring consequences	Outcome	*"As we are in college they need to tell us about the mode of transportation of HIV so that every nurse is aware of it so as to protect themselves."*

IDENTIFIED THEMES	EMERGING SUB-THEMES	RELATIVITY TO THE DONABEDIAN FRAMEWORK	CITATIONS FROM PARTICIPANTS
	• Conditions of the environment	Structure	*"…You find an MDR patient in the ward and this is due to the shortage of space in the isolation section, because you find that in a ward there will only be one isolation section which does not have sufficient room space to carry the increasing numbers of MDR patients who have not started their TB treatment. This is a problem because the TB patients result in the infection of the HIV/AIDS patients. Patients will come to the hospital not having TB but then leave infected with TB that they obviously contracted in the hospital."*
Conceptualising stress	• Burnout and fatigue • Anxiety • Loss of focus • Frustration • Sense of hopelessness	Outcome	"…*it's the fear of getting needle stick injuries. We work closely with needles and therefore it's so easy for us to just prick ourselves with needles which are infected and after that we have to go through a lot of counselling and the process to prevent ourselves from getting infected."* *"And then fear of getting HIV tested after seeing the stages that the patient has gone through and the pain they have gone through."*

IDENTIFIED THEMES	EMERGING SUB-THEMES	RELATIVITY TO THE DONABEDIAN FRAMEWORK	CITATIONS FROM PARTICIPANTS
			"…it's getting opportunistic diseases such as tuberculosis because most of the time we go to work early, we don't have time to eat and work on an empty stomach. So there is a greater risk of getting TB." *… "I sometimes feel guilty when I see the patient lying on the bed and feel like I'm not qualified to give enough care. Plus I work unsupervised. I feel it's better for HIV/AIDS patients to be cared for in specialised healthcare centres and hospices where they can get more concentrated, better and personal care. HIV patients have a low immune system and are therefore prone to opportunistic diseases therefore it is better to have isolated facilities that only deal with HIV/AIDS care. I feel like I've chosen the wrong profession. And therefore I feel bad that HIV/AIDS patients are dying, when something can be done about it."* *…"I blame the mother why they don't check their HIV status when they are pregnant, because there are ways to prevent the child from becoming infected during*

IDENTIFIED THEMES	EMERGING SUB-THEMES	RELATIVITY TO THE DONABEDIAN FRAMEWORK	CITATIONS FROM PARTICIPANTS
			pregnancy. So I develop feelings of anger toward the parent for putting an innocent child at risk."
CATEGORY 2: INTERVENTIONS			
Education	• Education to the community • Education to the patient	Outcome	"*Student nurses should also go to the communities and teach about HIV."* *"Some do and some don't. I think whenever treatment is rendered to the patient we have to tell them about the side effects, because some of them don't even know the side effects of the particular treatment. Some even stop treatment at the sight of side effects and therefore end up defaulting because they have no knowledge of them. Maybe before a patient commences on treatment they need to be made aware of the side effects."*
	• Education to the nurse	Structure	"*Before starting the formal training for nurses, potential students should have an education of HIV/AIDS, with experiences in HIV/AIDS hospices and healthcare centres where patients of the communities are taken care of."*

IDENTIFIED THEMES	EMERGING SUB-THEMES	RELATIVITY TO THE DONABEDIAN FRAMEWORK	CITATIONS FROM PARTICIPANTS
Psychosocial care	• Mutual support • Stigma eradication	Process	*"I try by all means to approach the patient as a human being and like family and not as a nurse. I treat the patient as I would treat my mother or brother and work hard to give the patient nursing care. The nurses have little compassion for HIV/AIDS patients nowadays. They are just working for the sake of working."* "*Yes I think there is still a stigma attached, however it varies from society to society, because in other societies HIV and AIDS is taken as any other disease. In some other communities like rural areas there is still a stigma when it comes to HIV/AIDS, and poverty is the main cause."*
Specialised facilities	• Infrastructure • superstructure	Structure	*"No, the patients are not isolated. You find an MDR patient in the ward and this is due to a shortage of space in the isolation section, because you find that in a ward there will only be one isolation section which does not have sufficient room space to carry the increasing numbers of MDR patients who have not started their TB treatment.*

IDENTIFIED THEMES	EMERGING SUB-THEMES	RELATIVITY TO THE DONABEDIAN FRAMEWORK	CITATIONS FROM PARTICIPANTS
			This is a problem because the TB patients result in the infection of the HIV/AIDS patients. Patients will come to the hospital not having TB but then leave infected with TB that they obviously contracted in the hospital." *"In terms of confidentiality, as a nurse you must try to keep patient privacy. If the family comes and asks the nurse about the patient's status the nurse should refer the patient's family to the doctor and tell the family that a nurse is not at liberty to do so."*

As reflected in Table 6 above, there are five major thematic sections that were depicted as relevant to the experiences encountered by the student nurses when managing HIV/AIDS patients.

5.5 SUMMARY

The present chapter was in reference to the organisation of the field data of the particular study. The information was formulated from student nurses caring for HIV/AIDS patients. The arrangement of the data obtained was done according to Brink (2003) steps of data analysis, in order to maintain the quality of data controlling. The information collected was then sectioned accordingly into a conceptual narrative in relation to the Donabedian theoretical framework.

CHAPTER 6

CONCLUSION, DISCUSSION AND RECOMMENDATIONS

6.1. INTRODUCTION

This chapter offers a summative and critical overview of the research on the experiences of student nurses caring for HIV/AIDS patients in a selected public hospital in KwaZulu-Natal. In this chapter, the researcher describes the recommendations for future research and the inferences attained during the study process. The researcher noticed that there were limited studies pertaining to the care of HIV/AIDS patients by student nurses and therefore found the need to explore this phenomenon intensively. The chapter discusses the main findings of the study which were presented in chapter five, where the researcher adopted and applied Donabedian's theory (Donabedian, 1980) as the dominant investigative structure for the exploration of the topic of study. This chapter also discusses the contributions that the present study will make to the body of scientific knowledge and the strengths and limitations of the study.

In relation to the exploratory aspect of this research, reviewed literature is included in the discussion to position the findings within the global context of primary and secondary evidence. The literature review of this study offered a critical exploration of pertinent concepts, research and theoretical contributions from related published writings.

The primary aim of this study was to explore and describe the experiences of second year nursing students regarding management of HIV/AIDS patients. Second to that, the study is focussed on the development of guidelines to assist nursing students regarding management of HIV/AIDS in a public hospital in KwaZulu-Natal. These objectives were attained via a systematic process for responding to the main questions of the present study. These questions were relayed to the participants on an interview platform where each participant was interviewed independently in order to explore the student nurses' experiences when caring for HIV/AIDS patients.

6.2. OVERVIEW OF THE STUDY

The study was conducted in an area in Durban, KwaZulu-Natal, South Africa, where the collection of data was done by means of face-to-face interviews which were audibly recorded so as to reliably preserve the information divulged by the participants. Each interview lasted a maximum of 30 minutes per participant and data collection lasted over a duration of 4 months.

The primary source of data was second year general nursing diploma students caring for HIV/AIDS patients. The sample size of twenty participants was determined by data saturation which was reached initially after the 14th participant. To ensure that a comprehensive insight into experiences was elicited, the researcher continued with interviews up to the 20th participant in order to confirm saturation. The study was initially presented with an overview of the purpose and objectives, and the significance of the study was introduced in relation to the objectives. Thematic analysis was effected through a process of coding in six steps which were familiarisation with data, generating of initial codes, searching for themes among codes, reviewing themes, defining and naming themes and producing the final report. Data analysis and interpretation was achieved by transcribing the raw data from audio taped material. Data was analysed from the first to the last participant. Trustworthiness of the transcripts was ensured by requesting an experienced colleague to reread the records. Data was inductively coded. The researcher developed categories through coding and the categories were translated into holistic thematic positions. The purpose of the study was to explore and describe the experiences of nursing students regarding management of HIV/AIDS patients in a particular public hospital in KZN, in order to further improve the management of HIV/AIDS patients and thereafter design guidelines to assist nursing students.

6.3. FINDINGS

In facilitating the enquiry, participants were asked two main questions:

1. Please tell me more about your experiences of nursing a patient infected with HIV?

2. What do you think should be done to assist student nurses to cope with the care of HIV positive patients?

The questions guided the conversations from the general to more specific and enabled the collation of contextual responses. The participants' ages ranged from 24 years old to 45 years old and they had a mixed gender profile. Research questions were collated and thematically organised in keeping with the process utilised (Tesch, 2008).

This section of the chapter is a discussion of the findings of the study according to the two categories and their associated themes and sub-themes that emerged during the data analysis process:

- Category 1: The conceptualisation of core terms - caring and stress
- Category 2: Intervention

6.3.1. The conceptualisation of core terms: caring and stress

According to the findings, the participants conceptualised the terms caring and stress in terms of various aspects. The themes and sub-themes that emerged from the data analysis related to the concepts discussed below.

6.3.1.1. Conceptualising caring

Caring was conceptualised as five attributes that described the characteristics of caring and revealed the psychosocial dimensions of divergent meanings the participants applied to the concept. The conceptualisation of caring was in relation to Tonges & Ray (2011), hierarchical levels of caring. Therefore, the sub-themes described caring as: 1) the conditions of the environment; 2) the commitment of student nurses in relation to caring for HIV/AIDS patients; 3) the capacity of caring by student nurses; 4) the caring actions; and 5) the caring consequences.

6.3.1.1.1 The conditions of the environment:

Environmental conditions, in the context of nursing care, pertain to the external surroundings of an individual which influence the health of a patient. In other words it is essential to preserve favourable conditions in the healthcare facility in order to promote the speedy recovery of a patient, in this case a HIV/AIDS patient. American Nurses Association (2017) states that your work environment plays a large role in the

ability to provide quality care. The atmosphere of a facility is critically important. It impacts everything from the safety of patients and their caregivers to job satisfaction. Studies consistently show how work environment issues, such as nurse staffing, are linked with patient outcomes, length of stay, and chance of death (AMA, 2017).

It can be argued from the findings presented in chapter five that, the student nurses felt that there were variables inhibiting them from maintaining a conducive caring environment for their patients. Some participants complained about the scarcity of space in the facility emphasising overcrowding as the cause. It was researched that overcrowding in public hospitals, in the context of HIV/AIDS, is an ongoing challenge on an inter-continental scale. Duly, this meant there was a shortage of rooms, as all the wards were packed to capacity at all times and hence the lack of isolation wards which, housed the highly infectious patients. This was a problem to the health of the HIV/AIDS patients who have low immune systems as they were openly exposed to infection. HIV targets the immune system and weakens peoples' defence systems against infections (Berg & Nilsson, 2015).. Another factor that contributed to the unfavourable conditions of HIV/AIDS patients was the of the lack of resources such as equipment, medical supplies and materials. Geyser, Mogotlane & Young (2009) state that a great many environmental factors may be experienced as disturbing by a patient such as noise, lights, ventilation, disturbing sights or the behaviour of other patients. These factors contribute to irritability, restlessness and emotional tension (Geyer *et al*, 2009).

6.3.1.1.2 The commitment of student nurses in relation to caring for HIV/AIDS patients:

The commitment of student nurses in relation to caring for HIV/AIDS patients refers to their concern for the patients' well-being. Some participants emphasised the importance of student nurses reaching out to the wider community for the care of HIV/AIDS patients by means of educating the various communities about the virus and administering care to those infected and affected by the epidemic. Another respondent made mention to the poverty of some communities which lack basic resources such as food which is essential for maintaining compliance to treatment. Geyser *et al* (2009) notes that a nurse's role is that of a case manager giving direct care to the patient, information and guidance to the relative. Furthermore, nurses should be responsible

for making the first visit to the patient's home to make the initial assessment before a discharge plan is drawn. The nurse must also obtain information about the community in relation to resources available specific to the care and support of this patient (Geyser *et al*, 2009).

Participants made reference to the need to follow and abide by the policies and procedures set by the institution. Most participants' concerns related to infection control and they indicated that even though there were set policies and procedures in place they were not facilitated accordingly due to the nurses being swamped with other duties and not finding the time to assist the students. Another issue that emerged was that of confidentiality. Participants stressed the importance of confidentiality in the nurse/patient relationship, however they often faced challenges posed by the families and relatives of the patients who demanded disclosure of their diagnosis. Nevertheless, the student nurses were committed to abiding by the policy that regulated confidentiality of the nurse/patient relationship.

Some participants found that there was a need for compassion, sympathy and empathy towards the patients and their families.

6.3.1.1.3 The capacity of caring by student nurses:

Firstly, the participants described caring as an important and fundamental aspect in the nursing profession that makes the well-being of HIV/AIDS patients possible by providing them with quality care. Similarly, when the priority for provision of quality health care to HIV patients is low then a poor outcome can be expected (Haoses-Gorases *et al*, 2013).

Additionally, the participants expressed their concerns in terms of insufficient staff presence which affected their learning process due to the lack of supervision. This in turn affected their ability to efficiently care for the HIV/AIDS patients.

Moreover, due to the dilemma of overcrowding, the participants conveyed their feelings of being overwhelmed with the excessive workload they were eventually subjected to. Bam & Naidoo (2014) suggested that there were multiple barriers that hindered the nurses' ability to provide quality care for terminally ill patients with HIV/AIDS such as the overwhelming effects of AIDS and HIV being described as just another condition. In addition, the student nurses felt less confident with their performance at work since they were, after all, mere students. The participants also

criticised the deficit of mentors to assist them in the actual care of HIV/AIDS patients and found themselves having to self-learn. In support of this, the participants expressed that the nursing college lecturers were not consistent with accompanying students to the hospital due to the excessive workload that the lecturers were subjected to. The shortage of staff adversely affected the students as they found themselves having to act beyond their scope of practice.

Furthermore, some participants found the policies regarding the administration of antiretroviral drugs rigid. In illustrating this, one participant described an experience in which a patient who had forgotten their medication could not continue with their HIV treatment in hospital after leaving the pills at home because of the stringent protocols of medical supply and control. This led to the patient defaulting treatment which, in medical terms is considered risky and repercussive. Due to the need to preserve confidentiality, the patient could not send someone else to collect their treatment at their place of employment because of the fear of stigmatisation, should the employer discover their status. Therefore, some participants felt that some policies created a barrier, preventing them from providing quality care to the HIV/AIDS patients.

Other participants expressed their concerns about the declining financial status of the hospital to the degree that even the most basic requirements were diminishing, such as food supplies, linen, bathing soap and everyday cleaning detergents. These and other related challenges made it increasingly difficult to ensure the comfort and cleanliness of the patients.

6.3.1.1.4 The caring actions:

The caring process is an essential practice as it greatly assists in the patients' recovery process. Nurses should be able to identify the needs of the HIV/AIDS patients when caring for them (Bam & Naidoo, 2014). In this study chapter five revealed that the participants identified the needs for continuous counselling of all HIV positive patients, educating the newly diagnosed patients, protection from infectious and opportunistic diseases of patients, non-disclosure of the patients' statuses to their respective relatives or anybody else. Furthermore, the participants felt that they also had needs of their own namely: the need for adequate personal protective clothing and equipment, the need for quality supervision, the need for counselling facilities, the

need for medical support, the need for further education and training on HIV/AIDS and the need for rest and availability of adequate nutrition.

Continually, Rafferty & Griffin (2004) cited in Bam & Naidoo (2014) states that supportive leadership and personal recognition recommend supportive strategies which advocate for individualised consideration by encouraging behaviours that facilitate other peoples' needs and preferences such as showing concern for their welfare, thus creating friendly, supportive and therapeutic environments. Participants felt they had to have interpersonal relationships with the patients by facilitating the bio-psycho social care of patients and encouraging treatment compliance of the patient. One of the participants empathised with those who were born HIV positive, only having discovered later in life about their own status because of non-disclosure by the parent, causing the patient to start treatment at a later stage when they were diagnosed with full blown AIDS. The participant felt that these types of patients did not get a fair chance to a quality life. Other participants highlighted the importance of educating the patient and the relatives about a wholesome nutritious diet. Another participant made mention to patients who are still in denial of their status and needed extra specialised care that was support-intensive. Other HIV patients felt like they were entitled to priority care over other patients.

Participants raised their concerns regarding the lack of staff in terms of the absence of psychologists and social workers whose role it is to attend to the social and psychological problems that the patients may face. Therefore, this forced the student nurses to take on the role of holistic supportive care to the patients.

6.3.1.1.5 The caring consequences:

This section considers the resulting impacts of the different ways in which students exhibited their caring attributes. In other words, the environmental situation, the ability, the commitment and the process to care determine the quality of care. In support of this, students felt that the risk of mortality for patients declined due to the facilitation of quality care by ensuring that the patients complied with the treatment process. However, other participants were concerned about the infection of patients by TB due to a non-conducive environment and incorrect caring processes. Shortage of staff hindered the participants' ability to administer quality care to the patient's due to poor supervision and insufficient HIV/AIDS training. Participants mentioned that some

patients' families insisted on caring for the patients themselves without knowing the proper processes to follow, therefore exposing themselves to the risk of infection. One of the participants emphasised that compassion, dedication and empathy are the key concepts of caring. Furthermore, the participant perceived nursing as a calling and that commitment to caring for the patient, regardless of the limitations, was more important.

6.3.1.2. Conceptualising stress

Stress was classified into five features that described the characteristics of stress and showed the various pressures and challenges that the participants and the patients were exposed to. Factors such as burnout and fatigue, anxiety, loss of focus, frustration and a sense of hopelessness were the constituents of stress.

6.3.1.2.1 Burnout and fatigue:

Burnout is a prolonged response to chronic emotional and interpersonal stressors on the job (Haoses-Gorases et al, 2013). Furthermore, the nurse feels overwhelmed and helpless and may be at a greater risk of mental or physical illness (Haoses-Gorases *et al*, 2013). In correlation to this the participants in this study voiced their discomfort in terms of burnout and fatigue and made reference to them not having enough time to rest and refuel themselves in order to continue to work safely. Subsequent to this dilemma is that stress and fear for nurses providing direct care to HIV/AIDS patients are major factors in decreasing the quality of care and initiating the downward spiral leading to depression and burnout (Haoses-Gorases *et al*, 2013).

One participant indicated that they felt bored, unstimulated to work and learn since the cases they were exposed to, were opportunistic infections related to HIV/AIDS. Bam & Naidoo (2014) also present evidence that indicates that nurses had progressively develop a type of compassion-fatigue in caring for and managing HIV/AIDS patients. They described feeling that the care process had become monotonous, therefore affecting their ambition to be academically stimulated and developed, as there was a lack of diverse conditions for learning. Likewise, nurses felt that caring for HIV patients prevented their academic and professional growth and development (Bam & Naidoo, 2014).

6.3.1.2.1 Anxiety:

Erikki & Hedlund (2013) found that nurses are experiencing immense workloads on the ward which causes stress and anxiety. The respondents in this study expressed their fears of contagion due to exposure to bodily fluids, needle stick injuries and opportunistic infectious diseases. In support of this Haoses-Gorases *et al* (2013) states that the fear may be related to anxiety and fear of contagion. Furthermore, the fear may be related to a lack of clear understanding of the mode of infection and method of prevention, as well as the social stigma attached to HIV/AIDS (Haoses-Gorases, 2013). In this study student nurses expressed their insufficient knowledge of HIV/AIDS emphasising that they were afraid of HIV/AIDS and the stigma attached to it. Most participants, in this study, felt anxious at the reality of death of the patient. In agreement with this Erikki & Hedlund (2013) expressed the nurses feared a high mortality rate at the ward, where suffering was seen as an inevitable part of healthcare work and something they had to face and accept.

6.3.1.2.3 Loss of focus:

The workloads often exhausted the participants where they physically felt threatened by the possibility of contracting an infectious disease due to their resultant low immune systems and unintended negligence. In agreement to this Haoses-Gorases *et al* (2013) found that nurses unintentionally became negligent and exposed themselves to infections due to exhaustion.

6.3.1.2.4 Frustration:

Participants felt extremely overwhelmed with the workloads they were subjected to due to overcrowding. In support of this Berg & Nilsson (2015) state that a heavy workload creates stress and frustration among nurses.

One participant was particularly frustrated and upset about the mothers that were negligent during pregnancy and did not take the initiative to get tested for HIV so as to get immediate treatment should they have been diagnosed positive, therefore leading in the HIV positive status of the child. Some participants expressed their frustration in terms of patients refusing to comply with treatment. In support of this UNAIDS (2014) found that individuals simply refuse treatment despite being eligible.

6.3.1.2.5 Sense of hopelessness:

Some participants felt a sense of defeat since they felt that the training they received was not adequate because of a lack of supervision and therefore felt like it was a lost cause. One participant felt a sense of despair at the sight of a dying patient, where they were distraught at the fact that they could not do anything for the patient at that time. In agreement to this view is Bam & Naidoo (2014). Furthermore, death occurred on a daily basis and was thus experienced as a reality of life to which they had to adjust and which had to be faced head on in order to allow them to continue caring for patients with AIDS (Bam & Naidoo, 2014).

6.3.2. Interventions

This section was based on the responses of the second main question where participants were asked what they thought should be done in order to assist student nurses in coping with the care of HIV/AIDS patients. What emerged in the findings was the need for interventions that would make possible the rectification of many issues that hinder or affect the quality of care to the HIV/AIDS patient as a whole. It is clear from the findings analysed in chapter five that there were three themes that emerged with each of them raising subthemes respectively. The respective themes that emerged were education, psychosocial care and specialised facilities.

6.3.2.1. Education

In the analysis of the findings the educational concept was subdivided into the education of the community, education of the patient and the education of the nurse. The participants felt that the education aspect had to be approached holistically where focus was not only on the health professionals or caregivers, but also on the importance of spreading awareness to the communities and educating and counselling the patients that were in the hospitals and those that came for regular check-ups and treatment.

6.3.2.2 Education to the communities:

Many participants felt that it was vital and necessary to take the education of HIV/AIDS out of the hospital setting into the community. One student expressed that outreach programmes were an efficient way of getting the community involved in HIV/AIDS awareness and educating the community about the virus.

6.3.2.3 Education to the nurse:

According to Stravapoulou *et al* (2016), lack of education is identified as one of the major causes of fear, negative attitudes and reluctance to care for people with HIV/AIDS. On the other hand, it is reported that knowledge about the disease and understanding the patients' needs, can result in more positive attitudes towards caring for people with HIV, increase non-judgemental quality of these patients, reduce the level of anxiety of nurse students about caring for people with HIV and enhance professional behaviour, attitudes and the delivery of compassionate care by nurses (Stravapoulou *et al*, 2016). In this study participants voiced their concern for the lack of knowledge that they possessed when it came to HIV/AIDS. A participant suggested that there should be HIV/AIDS training prior to commencing formal nurses training. Some respondents felt that the college staff had to be constantly present when performing their practical work so as to facilitate and supervise the students, instead of only coming for assessments and evaluations. In agreement to this Dehkordi & Tavakol (2011) found that students felt more confident accompanied by an instructor or mentor, when rendering care to the patient. Another student recommended that students must form a support group that focuses on the knowledge and information on HIV and AIDS holistically. Therefore, medical and nursing education must include updated information on HIV and AIDS related issues. Hence, the knowledge and attitudes of students towards caring for people with HIV or AIDS is of vital importance, since they will develop into future professionals (Lipiäinen, 2013).

6.3.2.4 Education to the patient:

Participants felt that the training and education of the patient should be integrated into the HIV/AIDS counselling sessions. They felt that more emphasis must be made on

the mode of transportation of the virus and the prevention measures. One student mentioned that some patients feel that prevention measures jeopardise their relationships since they feel that the matter of trust is disregarded, and therefore they would rather not protect themselves. Similarly, Berg & Nilsson (2015) states that the best way to decrease the spread of HIV infection is to limit exposure. To limit exposure, the patient might be aware of the usage of a condom, ART, testing and counselling for HIV and STD (WHO, 2014) cited in Berg & Nilsson (2015). The student emphasised that unfortunately the HIV virus does not know any such thing as trust. Therefore, this participant felt that people needed to be trained more intensively in order to understand the virus. Berg & Nilsson (2015) found that nurses were willing to educate patients with HIV/AIDS about the disease. Furthermore, the nurses explained the importance of improving the patient's knowledge in order to help them understand their own situation. In continuation, nurses explained that teaching the patient is an important instrument in caring and that by counselling about HIV, transmissions, hygiene, drugs and nutrition, the patients respond positively in the process. Berg & Nilsson (2015) highlighted that when patients understood the advice provided to them, they took measures to improve their health and began to take good care of themselves.

6.3.2.5. Psychosocial care

In chapter five of this study the psychosocial care was defined as the social and psychological perspective to caring. Psychological pertains to an individual's emotional aspect as influenced by the impact of the disease affecting the patient. In turn, the burdens of the patients are absorbed by the nurse and therefore nurses are equally affected psychologically, which in turn compromises the student nurses ability to render quality care. In support of this Berg & Nilsson (2015) states that when nurses absorb patients' problems they become psychologically affected. In the analysis of the finding the sub-themes that were prevalent were mutual support and stigma eradication.

6.3.2.6 Mutual support:

Chapter five revealed that participants found the need for a multi-disciplinary approach in caring for HIV/AIDS patients in order to minimise the workload of student nurses and nurses who have to attend to the physical needs as well as psychosocial needs

of the patient. Bam & Naidoo (2014) states that multidisciplinary teams function as supportive structures that enhance work flow, create harmony and help staff members relieve workload tension.

6.3.2.7 Stigma eradication:

Participants felt that stigma was a result of the way HIV was introduced to communities, by requesting people to do voluntary testing and counselling. Meaning that they should be tested only through their own informed consent. Therefore, HIV should be treated as any other disease in order to eradicate stigma. According to Zungu, Sehume & Hoque (2012) the majority of students felt that it was wrong to isolate HIV/AIDS patients for no particular reason since isolating patients was associated with rejection, stigma and discrimination, and had a negative psychological effect on patients. Simultaneously Nicholas et al (2015) state that, social support is known to be important for coping with and living with HIV/AIDS. Nicholas *et al* (2015) continues to suggest that a low social support brings about stigma.

6.3.2.8 Specialised facilities

Specialised facilities pertain to the creation of ergonomic conditions for the hospital personnel to function optimally and safely – controlling the medico legal hazards effectively. The researcher divided the specialised facilities into two sub-themes, namely the infrastructure and superstructure.

The infrastructure refers to the physical building and the compartments available, relevant to a hospital setting, for example the availability of isolation wards for infectious communicable diseases, the availability of a sufficient number of wards since public hospitals have become over-burdened with the influx of patients and the provision of bathing spaces and lavatories. Infrastructure also refers to the delivery of basic needs such as water, electricity and ventilation for hygiene purposes. Students felt that there was insufficient space to accommodate the growing numbers of HIV/AIDS patients being admitted.

Superstructure, on the other hand, pertains to all managerial processes that include personnel utilisation, material resources such as supplies and equipment, institutional policies, procedure manuals and protocols. Due to overcrowding, many participants felt that this had an impact on the day to day running of the hospital. Participants voiced

their concerns of a shortage of staff, lack of resources and exposure to infectious diseases due to being over-burdened and overwhelmed with the workload they were subjected to. In the absence of adequate supplies of personal protective equipment, nurses are constantly exposed to the transmission hazards inherent in the work environment (Harrowing, 2011).

The adverse conditions compromised the learning process of the student nurses, since they felt that the element of supervision was inadequate. However, participants understood the nature of these shortcomings, and were aware of the stringent conditions that the professional nurses were faced with, therefore they attempted to self-learn and orientate. The respondents also revealed that they were not well versed with the HIV/AIDS genre and therefore identified the need for further education and training in this sector. Ramathuba *et al* (2013) stated that most of the participants experienced lack of educational support when caring for people with HIV/AIDS. Furthermore, they expressed the need for mentoring and empowerment, as there was no structure in place to educate them.

6.4. CRITICAL EVALUATION OF THE RESEARCHER'S ROLE IN THE RESEARCH PROCESS

The role of the researcher was to explore and describe the experiences of student nurses when caring for HIV/AIDS patients. The information collected was done through the eye of the selected participants so as to attain sound and reliable evidence. The researcher acted as the main tool of research since the researcher individually accumulated the entire data for the study, constructed and applied the interview processes with the contributors. It was therefore crucial to assess the researcher's effect on attributes of the research process, throughout the duration the research. The researcher's part in the study is best reflected in the data collection process of the research.

The researcher opted to use the explorative and descriptive approach in order to gain more knowledge about the experiences of the particular participants and not the researchers view's. The participants were therefore given a platform whereby they were granted the opportunity to express themselves in relation to the topic in study.

This was done in the form of interviews set up by the researcher where each participant was interviewed individually.

6.5. RECOMMENDATIONS

A number of key recommendations emerged from the study. These recommendations were: infection control recommendations; managerial recommendations; education recommendations; and research recommendations.

6.5.1. Infection control recommendations

Infection control, in this case, is the procedure designed to prevent and control infection. In this study, it emerged that the use of protective clothing was important in order to prevent exposure to infectious bodily fluids, airborne diseases and needle stick injuries. The protective clothing in discussion are masks, gloves, goggles, aprons and boots etc. This also includes the hygiene aspect of the unit where a number of factors must be considered such as the cleanliness of the facility, equipment and staff. Furthermore, ventilation and adherence to surgically clean procedures is essential. A clinical investigation of common pathogens in the unit should be conducted by means of taking laboratory swabs for testing at least every three months, since the hospital is bombarded with overcrowding. Although these procedures have been implemented in the past, they have not been religiously followed and therefore the researcher found it essential to emphasise the importance of infection control based on the findings.

6.5.2. Managerial recommendations

Every health care facility requires a sound managerial structure in order for it to run smoothly and effectively. Moreover, in order for the student nurse to perform their caring duties, it is essential to provide the student with a supporting structure. Stravapoulou *et al* (2016) stated that systematic education, information giving, administrative and psychological support are the important needs for nurse students caring for HIV/AIDS patients. The participants in this study emphasised the importance of quality care in health sectors. To achieve quality health care in health sectors, good leadership at all levels from the basic categories to the policy formulating professionals, are critical in facilitating and directing the education and training of nurses. Furthermore, strengthening the professionalism of nurses and the provision

practice related resources are the key drivers that support the needs of the dynamic health care system at its micro and macro-systematic levels (Nursing Strategy for SA, 2008) cited in Bam & Naidoo (2014). Most participants in this study lacked the knowledge of management protocols since they felt that they were inadequately supervised. Pillay (2010) reveals that lack of management skills has been identified as one of the key barriers to achieving the health-related goals, and in order to address this deficiency people management; self-management competencies; and task-related skills are vital requirements for both private and public hospitals.

Factors such as nurse shortages, lack of proper equipment and stress in the workplace create a negative atmosphere towards the HIV/AIDS patients (Haoses-Gorases *et al*, 2013). Therefore, the researcher recommends that human resource departments need to be more involved in hospital matters, and need to recruit more professional nurses in order to bring out equilibrium in the patient/nurse ratio, therefore alleviating some of the pressures felt by student nurses when caring for HIV/AIDS patients. Correspondingly, many health institutions depend on supplementary staff working overtime, creating a situation in which nurses are reassigned to various patient care units, hence such situations may cause nurses to work with patients whose requirements for care may be unfamiliar therefore resulting in stress related to patient safety concerns and working with unfamiliar nursing staff (Haoses-Gorases *et al*, 2013). Furthermore, the availability of proper equipment and equipment as a whole is essential when rendering care to the HIV/AIDS patients. The researcher points out that a hospital with adequate basic essentials helps satisfy the needs of the nurse, ultimately resulting in the administration of quality care.

Another aspect of management is treatment control, which according to the participants in this study, is a challenge. Previous studies have reported practices which included denying of treatment, HIV testing without consent, lack of confidentiality and denial of hospital facilities and medicines for people living with HIV/AIDS (Khalil *et al*, 2015). The findings of this study revealed that one of the participants experienced a case where a patient's treatment was delayed due to the rigid treatment policies of the facility, which ultimately put the patient in danger of noncompliance. In light of this, the researcher recommends the flexibility of treatment policies in order to improve compliance and avoid default to treatment.

According to South African National AIDS Council (2011) cited in Bam & Naidoo (2014), South African public hospitals are heavily challenged. Over 80% of the

country's population have no medical aid cover and are forced to seek treatment in government clinics and hospitals. If such a major proportion of the country's population is resorting to public health facilities, it is clear that these institutions are subjected to overcrowding. The participants in this research expressed their concerns with overcrowding especially when it came to the care of HIV/AIDS patients, since there was not enough space to hospitalise these patients comfortably and safely. Therefore, space management should also be a priority in the management of hospitals, so as to have sufficient space to isolate HIV/AIDS patients from those patients with opportunistic diseases. One participant suggested the shifting of care to HIV/AIDS patients from the hospital setting to specialised health care facilities dealing with the care of immune-compromised patients.

6.5.3. Education recommendations

Judging from the participants responses, the researcher recommends that there should be an incorporated education system where the training of HIV/AIDS is established in the early stages of the nurses formal training, and continued throughout the entire training process so as to be relevant with changes. In literature support of this, Ramathuba *et al* (2013) suggests that including HIV/AIDS within curricular for nurse training or health personnel, such inclusion or document will respond to personnel and staff needs to respond positively to people living with HIV/AIDS. Furthermore, extra-curricular sessions with health professionals will improve knowledge and attitude on HIV/AIDS. One of the participants in this study spoke about the need for focus groups where information was shared, therefore the researcher recommends the continuation of education of HIV/AIDS by means of workshops and informative seminars or conferences. Ramathuba *et al* (2013) emphasises the importance of promoting awareness, disclosure and acceptance of HIV/AIDS through attendance of workshops, seminars and educational sessions by nurses. Similarly, Khalil *et al* (2015) highlights the essentiality of continuing education for health care workers which include, not only knowledge of HIV/AIDS, but also emphasise the importance of ethics and understanding human rights.

6.5.4. Research recommendations

The researcher recommends that the following research would be beneficial to the nursing profession:

1. De-stigmatisation of HIV/AIDS by the heath care sector through provision of education programmes which will create awareness to the community at large.
2. Toning down the hype around HIV/AIDS to eradicate the taboo.
3. An exploratory study to identify the needs of the student nurses regarding the care of HIV/AIDS patients.
4. Explore the availability of counselling facilities for student nurses caring for HIV/AIDS patients.
5. Descriptive study to explore the benefits of specialised HIV/AIDS caring centres in comparison to care rendered in general public hospitals.
6. The study of the advantages of the utilisation of community health workers caring for HIV/AIDS patients in the community.
7. The importance of family involvement and education regarding the caring of HIV/AIDS patients.
8. Exposure of student nurses to community nursing in regards to HIV/AIDS.

6.6. THE NOTEOWRTHY CONTRIBUTION MADE TO THE RESEARCH AREA

The researcher found relevance in conducting this study since there are few studies pertaining to the experiences of student nurses caring for HIV/AIDS patients in a public hospital in KwaZulu-Natal. The researcher felt that the student nurses were the forgotten neophytes of the nursing profession and therefore found it crucial to explore the student nurses' views of nursing HIV/AIDS patients. The constructive issues that emerged from this study were:

- The compromise of the quality care of patients due to the overwhelming workloads as a result of overcrowding.
- The inadequacy of student education residing from lack of supervision because of the shortage of staff.
- The knowledge deficit regarding care and treatment of HIV patients.

- Nosocomial infections as a result of overcrowding and lack of isolation facilities.

Having identified these aspects, problem solving strategies can now be applied to relinquish the adversities, and ultimately aid the student nurses in learning how to render quality care to HIV/AIDS patients.

6.7. CONCLUDING REMARKS

Exploring experiences of student nurses caring for HIV/AIDS patients highlighted situations like overwhelming workloads, a shortage of staff, inadequate supervision of students, the stress of fear, the stress of anger and poor-quality care. Furthermore, lack of space for nursing the patients compromised hygiene and led to the spread of communicable infectious diseases to immune-compromised HIV/AIDS patients.

Knowledge deficit among nurses and student nurses regarding care and treatment of HIV patients was identified and therefore a need for continuous education for all nurses including student nurses should be prioritised. Equipment and material resources used to support care of patients was inadequate and therefore that exposed nurses and student nurses to occupational risks of infection. Policies pertaining to care of HIV/AIDS were also not followed properly and some policies like treatment protocols were identified to be rigid so much that compliance was affected. Another matter of concern was the curriculum of nurses which, lacked HIV/AIDS content. Therefore in the future nursing curricula should include HIV content. Prevention of HIV/AIDS should involve a multidisciplinary approach which includes the patient, family and health workers training in a specialised way. Notably, students felt that the learning institutions did not offer support within the clinical setting as promised and that this compromised their ability to maximise the theory –practice linkage

Nursing HIV patients in health care centres rather than general hospitals where they become exposed to all infectious diseases, which may put them at risk of nosocomial infections, should be considered. Student nurses in this study identified the importance of holistic care of the patients by considering psychological needs as well social needs. A need for social workers and psychologists was also identified to support caring for patients. Counselling for patients and carers equally was seen to be a priority. Additionally, the nutritional needs of students should be subsidised in order to keep them healthy as they are exposed to various infectious conditions.

Future research is necessary to further explore the experiences of student nurses in order to find out which challenges can be rectified and which ones are still outstanding and need more research. HIV should be considered as any other disease so that the stigma attached to it can be eradicated and in that way people who are infected may be able to start treatment early and prevent frequent admissions in hospitals, and that would release student nurses and nurses from the overload of work and overcrowding of hospitals. Students and community health workers can play a vital role in home visits for those HIV/AIDS patients cared for in their own homes. Lastly, the results of this study reflected the need for a better approach in facilitating and mentoring the student nurses, for the future of the nursing profession as a whole. In the researchers view, a well-groomed student nurse adds quality value to the nursing profession.

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Annexure 1: (a) University ethics clearance certificate.

UNIVERSITY OF ZULULAND
RESEARCH ETHICS COMMITTEE
(Reg No: UZREC 171110-030)

RESEARCH & INNOVATION
Website: http://www.unizulu.ac.za
Private Bag X1001
KwaDlangezwa 3886
Tel: 035 902 6887
Fax: 035 902 6222
Email: ManqeleS@unizulu.ac.za

ETHICAL CLEARANCE CERTIFICATE

Certificate Number	**UZREC 171110-030 PGM 2017/377**							
Project Title	**Experiences of Nursing Students Regarding Management of HIV/AIDS Patients in a Selected Public Hospital in KwaZulu-Natal, South Africa**							
Principal Researcher/ Investigator	ME Mncadi							
Supervisor and Co-supervisor	Dr RM Miya		Mr ST Madlala					
Department	Nursing Science							
Faculty	Science and Agriculture							
Type of Risk	Medium – Human health							
Nature of Project	Honours/4th Year		Master's	x	Doctoral		Departmental	

The University of Zululand's Research Ethics Committee (UZREC) hereby gives ethical approval in respect of the undertakings contained in the above-mentioned project. The Researcher may therefore commence with data collection as from the date of this Certificate, using the certificate number indicated above.

Special conditions:

(1) This certificate is valid for 2 years from the date of issue.
(2) Principal researcher must provide an annual report to the UZREC in the prescribed format [due date-30 April 2018]
(3) Principal researcher must submit a report at the end of project in respect of ethical compliance.
(4) The UZREC must be informed immediately of any material change in the conditions or undertakings mentioned in the documents that were presented to the meeting.

The UZREC wishes the researcher well in conducting research.

Professor Gideon De Wet
Chairperson: University Research Ethics Committee
Deputy Vice-Chancellor: Research & Innovation
11 April 2017

CHAIRPERSON
UNIVERSITY OF ZULULAND RESEARCH ETHICS COMMITTEE (UZREC)
REG NO: UZREC 171110-30
11 -04- 2017
RESEARCH & INNOVATION OFFICE

1. **Annexure 2: (a) Permission letter to Chief Executive Officer of St. Mary's Hospital**

Faculty of Science and Agriculture
Department of Nursing Science

31 October 2016
Reference number: 20024823

To : CEO: Mariannhill Hospital
Chief Executive Officer
From : Ms ME Mncadi
Researcher
Subject : Request to conduct a research study

Dear CEO,

I am hereby requesting a permission to conduct a study on **Experiences of nursing students regarding management of HIV/AIDS patients in a selected public hospital in KwaZulu-Natal.**

The aim of the study is to explore and describe experiences of nursing students regarding management of HIV/AIDS patients, with hope to assist with necessary recommendations if there are any challenges.

The study shall be conducted at the nursing college. For your information refer to the attached proposal.

This is a qualitative study, participation is voluntary, and informed consent will be obtained from all participants.

Yours faithfully

Ms ME Mncadi

Annexure 2b: Approval letter from CEO of St. Mary's Hospital

ST. MARY'S HOSPITAL
MARIANNHILL

Practice No.: 5706386

Office of the Chief Executive Officer

Private Bag X16; Ashwood; KwaZulu Natal; South Africa; 3605
Tel: 27 31 717 1184; Fax: 27 31 700 3375; E-mail: drbtbuthelezi@stmarys.co.za

TO	:	MRS. M.E. MNCADI: MASTER'S DEGREE STUDENT: UNIVERSITY OF ZULULAND
FROM	:	DR B.T. BUTHELEZI: CHIEF EXECUTIVE OFFICER: ST. MARY'S HOSPITAL MARIANNHILL
DATE	:	23 NOVEMBER 2016
RE	:	APPROVAL OF RESEARCH PROPOSAL TITLED 'EXPERIENCES OF NURSING STUDENTS REGARDING MANAGEMENT OF HIV/AIDS PATIENTS IN A SELECTED HOSPITAL IN KWAZULU-NATAL'

Dear Madam

Your e-mail dated 22 November 2016 anent the above-cited matter has reference.

Following receipt of the Ethical Clearance from the University of Zululand Research Ethics Committee, your request for conducting research in our hospital is hereby approved.

Your final report must be posted or hand-delivered to: Office of the CEO; St. Mary's Hospital; Private Bag X 16; ASHWOOD; 3605 and an electronic copy should be forwarded via e-mail to: drbtbuthelezi@stmarys.co.za

Kind regards

DR B.T. BUTHELEZI
CHIEF EXECUTIVE OFFICER
ST. MARY'S HOSPITAL MARIANNHILL

ST. MARY'S HOSPITAL
OFFICE OF THE CEO
2016 -11- 23
OFFICIAL
PBAG X16 ASHWOOD 3605 TEL: (031) 717 1026

2. Annexure 3: Letter of information

UNIVERSITY OF ZULULAND

RESTRUCTURED FOR RELEVANCE

INSTITUTIONAL RESEARCH ETHICS COMMITTEE (IREC)

LETTER OF INFORMATION

Title of the Research Study: on **Experiences of nursing students regarding management of HIV/AIDS patients in a selected public hospital in KwaZulu-Natal.**

Principal Investigator/s/researcher: ME Mncadi

Supervisor : Dr RM Miya (D.Litt. *et* PHIL)

Brief Introduction and Purpose of the Study: Since the discovery of HIV/AIDS nurses have been in forefront of managing the disease. The nurses' insight about the disease and its management add value in the comprehensive management of the disease and hopefully the disease shall be curbed with through research intervention. The purpose of the study is to explore and describe Experiences of nursing students regarding management of HIV/AIDS patients in a selected public hospital in KwaZulu-Natal.

Outline of the Procedure: A semi structured interview schedule shall be used in one on one interview for 30 minutes until data is saturated.

Risks or Discomforts to the Participant: None

Benefits:

- Positive aspects of the study will be highlighted and gaps will be identified
- Recommendations will be to improve coping mechanisms for student nurses involved in HIV/AIDS care.

Reason/s why the Participant May Be Withdrawn from the Study- None.

Remuneration: None

Costs of the Study: None

Confidentiality: No names of participants will be written on the research documents. Participants will be assigned codes.

Research-related Injury: Nil

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

Researcher: ME Mncadi 20024823 (Master's Degree student) KwaDlangezwa Campus 072 443 0632

Research supervisor: Dr RM Miya (D.Lit. *et* PHIL) KwaDlangezwa Campus-0837103551

3. Annexure 4: (a) Consent form

UNIVERSITY OF ZULULAND

RESTRUCTURED FOR RELEVANCE

INSTITUTIONAL RESEARCH ETHICS COMMITTEE (IREC)

CONSENT

Statement of Agreement to Participate in the Research Study:

- I hereby confirm that I have been informed by the researcher, _____ (name of researcher), about the nature, conduct, benefits and risks of this study - Research Ethics Clearance Number: _____,
- 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.
- **Inclusion criteria:** all student nurses in their second year of the bridging course will be included in the study.
- **Exclusion criteria:** non second year nursing students will be excluded from the study

_____	_____	_____	_____
Full Name of Participant	**Date**	**Time**	**Signature / Right Thumbprint**

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

_____	_____	_____
Full Name of Researcher	**Date**	**Signature**
_____	_____	_____
Full Name of Witness (If applicable)	**Date**	**Signature**
_____	_____	_____
Full Name of Legal Guardian (If applicable)	**Date**	**Signature**

4. Annexure 4: (b) Consent for audio taping

I hereby give permission to the researcher for audio taping of me to be captured and used in printed and electronic media, including teaching and research purposes. I understand that some recordings may be selected as permanent or partial preservation in the study as a record and will be used for research.

Signature:……
Print Name:…….....
Date:…….

5. Annexure 5: Schedule interview

1. Please tell more about your experiences of nursing a patient infected with HIV?

2. What do you think should be done to assist student nurses to cope with care of HIV positive patients?

NB: these questions can be restructured at any time during probing to obtain rich data

6. Annexure 6: Example of an interview transcript

Interview 1:

Respondent no. 1

Question 1:

"Please tell me more about your experiences of nursing a patient infected with HIV?"

Answer 1:

"First of all it's the fear of getting needle stick injuries. We work closely with needles and therefore it's so easy for us to just prick ourselves with needles which are infected and after that we have to go through a lot of counselling and the process to prevent ourselves from getting infected.

Secondly, it's getting opportunistic diseases such as tuberculosis because most of the time we go to work early, we don't have time to eat and we work on an empty stomach. So there is a greater risk of getting TB.

Thirdly, getting into contact with bodily fluids because we bath patients, we dress them, we put in IV lines and then we get into contact with blood and urine.

And then the fear of getting HIV tested after seeing the stages that the patient has gone through and the pain they have gone through.

And then there is also a lot of discrimination because there's a lot of stigma attached to it. Because HIV is acquired sexually, they consider it as a dirty disease."

The interviewer proceeded to probe the respondent in order to gain more information.

Supporting question 1:

"Are you clear about the mode of spread of HIV/AIDS besides getting in contact with the body fluids, what are the other ways?"

Answer to supporting question 1:

"*Another mode of transmission is through the mother."*

Supporting question 2:

"How do you feel, nursing patients/babies who have got HIV/AIDS?"

Answer to supporting question 2:

"*There are so many ways to prevent the child from getting the infection. So I feel like the mother didn't really care. However, in other cases you find that the mother lacked information or knowledge."*

Supporting question 3:
"What is the institution doing about such mothers or all the mothers in order to prevent the spread of HIV/AIDS?"

Answer to supporting question 3:
"I think us as nurses can also go to the community and give health education on how to prevent this."

Supporting question 4:
"Do you cope with nursing HIV/AIDS patients in the hospital, is there enough staffing?"

Answer to supporting question 4:
"No there is not enough staff, most of the time."

Supporting question 5:
"So do you have enough supervision by registered people, registered nurses as you are students or do you have to cope on your own nursing these patients?"
Answer to supporting question 5:
"We have to cope on our own most of the time because there is not enough staff to supervise us."

Question 2:
"So according to how the situation is, what do you think should be done to assist student nurses to cope with care of HIV/AIDS patients?"

Answer to question 2:
"First of all they have to just wear protective clothing like gloves and goggles to prevent the bodily fluids from getting into contact with them.
The correct disposal of needles should also be taught to student nurses for example the sharps containers should be available, and then to educate the students that they have to have a meal each day even if it's a fruit to prevent all these opportunistic infections from invading the immune system.

Student nurses should also form a support group where HIV is discussed and then people gain knowledge from it.

Student nurses should also go to the communities and teach about HIV."

Supporting question 1:

"So, you told me that you have got counselling sessions when you have been pricked by needles. Do you have professional counsellors in the hospital where you are practising, like a psychologist?"

Answer to supporting question 1:

"Yes, we do have."

Supporting question 2:

"When in the procedure of needle stick injury, when you have been pricked by a needle, just tell me what is done to save that nurse from being infected."

Answer to supporting question 2:

"Once you have detected that you have been pricked by a needle you go and rinse your finger in running water then you take your hibitane spray and apply it on the needle stick where you got your prick. After that you take the patients name and diagnosis and then go to the infection control sister and they take you through the steps."

Supporting question 3:

"Which are the steps, are given any preventative measure?"

Answer to probing question 3:

"Usually you go to the counsellor and they test you and then after that they counsel you and then they give you the relevant treatment."