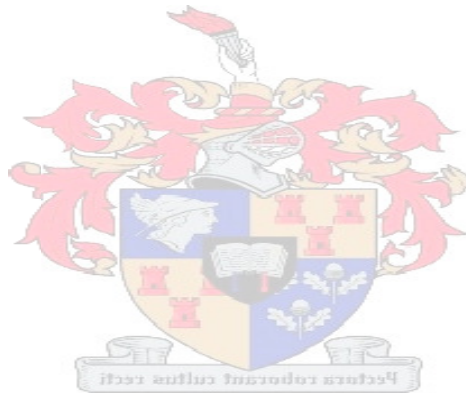


**KNOWLEDGE, ATTITUDES, PRACTICE AND BEHAVIOUR OF NURSES
CARING FOR HIV/AIDS PATIENTS AT PUBLIC HOSPITALS
IN THE TSHWANE METROPOLITAN AREA**

**by
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**Assignment presented in partial fulfilment of the requirements for the degree of MPhil
(HIV/AIDS Management) at the University of Stellenbosch**

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Declaration

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Date: 24 March 2011

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Dedication

I dedicate this study to the following people:

- My parents: Mr Mulandaga Jerome Makutubu (my father) and Mrs Sakina Edwine Adidi (my mother);
- My wife, Mwazime Ngoy and my children: Sakina Edwine Shabani, Elizabeth Kibundila Makutubu Shabani and Daniel Mukesa Shabani.
- All my family members and dearest friends. And
- To all those people who have died of HIV/AIDS in the world. May their souls rest in peace.

Keys concepts

The following key concepts were used for this study because of their relevance:

- HIV/AIDS
- Nurse
- Care/caring
- Nursing care
- HIV/AIDS Patient/Patient with HIV/AIDS
- Knowledge
- Attitudes
- Practice
- Behaviour

Abstract

This study was conducted with the aim to establish how knowledge, attitudes, practice and behaviour influence nurses' care for HIV/AIDS patients in public hospitals in the Tshwane Metropolitan area. This knowledge is necessary in order to provide suggestions to empower and upskill nurses to enable them and the relevant hospitals to take care of HIV/AIDS patients effectively and efficiently in the Tshwane Metropolitan area in particular, and in South Africa in general.

This study was motivated or informed by the fact that in South Africa a great majority of people living with HIV and AIDS (PLWHA) are treated in state hospitals (Shisana *et al*, 2005) as quoted by Dijkstra, *et al* (2007) where they are cared for by nurses, doctors and other health professionals. Moreover to date little is known about the practical use that medical staff make of the HIV/AIDS policy in state hospitals in South Africa, as well as their knowledge on HIV/AIDS, and relevant attitudes, practice and behaviour in general.

The research question was to establish or determine to what extent the nurses' knowledge, attitudes, practice and behaviour influence their care for HIV/AIDS patients at public hospitals in the Tshwane Metropolitan area.

To confirm or reject our assumptions relating to nurses' knowledge, attitudes, practice and behaviour, 83 male and females nurses, selected by means of census sampling from Steve Biko Academic Hospital, Dr George Mukari Hospital and Kalafong Hospital (all these hospitals are in the Tshwane Metropolitan Area), were asked to answer a questionnaire based on the variables of knowledge, attitudes, practice and behaviour.

The results of this study indicate that the majority of the nurses in the targeted hospitals are more experienced in caring for HIV/AIDS patients because they have been caring and treating HIV/AIDS patients for more than four years. They are aware of HIV/AIDS' existence, its transmission and prevention. The level of understanding of the content of the different training sessions on various aspects of HIV/AIDS care and management for those who attended in-service training sessions organised to prepare them for their job, appeared to be adequate and extensive. And as a result, they possess some in-depth knowledge about HIV/AIDS. They are happy because they are content with their jobs, as well as caring and treating HIV/AIDS patients. Most of them have very positive outlooks and because of this, they behave positively towards HIV/AIDS patients. Moreover, because of being aware of the risk involved in their job, as well as its implications, they practice universal precautions when caring for and treating their patients. They also enjoy support from their families and are not afraid of contracting HIV while carrying out their tasks.

However, there are still nurses in the targeted hospitals unaware or in denial of HIV/AIDS' existence, ignorant of its transmission, or prevention, who believe certain myths and hold

misconceptions on HIV/AIDS. Given the fact the majority of nurses at the targeted hospitals did not attend any in-service training sessions regarding the various aspects of HIV/AIDS care and management to prepare them for their job and responsibilities, they lack in-depth knowledge on HIV/AIDS, and are not practicing universal precautions when caring and treating their patients. Also possibly because the majority of these nurses are aged forty and older and hold only nursing certificates – even those who have attended some of the in-service training sessions – their level of understanding of the content of the training remains inadequate. These nurses are also not aware of the main mode of transmission of their patients. Because they are not satisfied with their job, are unhappy and hold negative attitudes their treatment of HIV/AIDS patients under their care is not up to standard.

Thus, nurses at the targeted hospitals with adequate and extensive knowledge of HIV/AIDS, who have positive attitudes resulting in similar behaviour, and who are contented and happy in the practice of their job, are more willing to care and treat the HIV/AIDS patients. This is in contrast to those without knowledge (or with insufficient knowledge) of HIV/AIDS, whose attitudes and behaviour are negative and who are dissatisfied with and unhappy in their jobs.

Opsomming

Die doel van die studie was om die kennis, houdings en gedrag van verpleegsters wat MIV/Vigs pasiente behandel in die Tswane Metropool te ondersoek.

Na 'n deeglike literatuurondersoek is 'n vraelys ontwikkel om die kennis, houdings en-praktyke van verpleegsters te beoordeel. Die vraelys is afgeneem by 83 manlike en vroulike verpleegters van die Steve Biko Akademiese Hospitaal, die Dr. George Mukari Hospitaal en die Kalefong Hospitaal afgeneem.

Resultate van die studie toon dat die oorgrote meerderheid van die verpleegsters besonder bekwaam was in die versorging van MIV/Vigs pasiente.

Daar is egter ook areas gevind waar verpleegsters nie aan die vereistes voldoen het nie en stappe ter verbetering van die situasie word in die werkstuk voorgestel.

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Abbreviations

HIV	-	Human Immune-deficiency Virus
AIDS	-	Acquired Immune Deficiency Syndrome
HSRC	-	Human Sciences Research Council
DOH	-	Department of Health
GDOH	-	Gauteng Department of Health
KAPB	-	Knowledge, Attitudes, Practises and Behaviour
D-		Disagree
U-		Undecided
A -		Agree
Ms -		Missing data into the system
NT-		No training attended
IN-		Inadequate
A -		Adequate
Ex-		Extensive

Outline of the study chapters

This study comprises the following chapters:

- **Introduction:** this chapter will discuss the aim and objectives of the study, the research problem, the research question, its significance and the definitions of key concepts.
- **Literature review:** this chapter will discuss the literature review that was undertaken. It will comprise some of the existing knowledge and findings on this topic.
- **Research design and method:** this chapter will discuss the research paradigm and design as well as the method, the target population, the sample size and sampling technique, the measuring instrument that was used to collect the data, assumptions of the study, some ethical consideration, limitation of the study and data collection and analysis.
- **Research results:** This chapter will present the results of the study and its analysis generated from the data obtained from the questionnaires completed by the respondents.
- **Conclusion and recommendations:** This chapter will present the conclusions and some recommendations that have been suggested in relation to the significance of the study for service improvement and further research.

Chapter 1: Introduction

1.1 Introduction

This chapter will discuss the aim and objectives of the study, the research problem, the research question, its significance, the definitions of key concepts, the assumptions and the limitations of the study.

1.2 The aim of the study

The main aim of this study was to establish how knowledge, attitudes, practice and behaviour influence nurses' care for HIV/AIDS patients in public hospitals in the Tshwane Metropolitan area. This knowledge is necessary in order to provide suggestions to empower and upskill nurses to enable them and the hospitals to take care of HIV/AIDS patients effectively and efficiently in the Tshwane Metropolitan area in particular, and in South Africa in general.

1.3 The objectives of the study

This study had four (5) objectives, namely:

- To establish the extent of nurses' HIV/AIDS knowledge and knowledge for caring for HIV/AIDS patients.
- To establish the nurses' attitudes towards HIV/AIDS patients.
- To establish the nurses' practice with regard to HIV/AIDS patients.
- To establish the nurses' behaviour towards HIV/AIDS patients.
- To establish how the nurses' knowledge, attitudes, practice and behaviour influence the care they show HIV/AIDS patients.

1.4 The research problem

The research problem that was discussed and analysed was:

What are the knowledge, attitudes, practice and behaviour of nurses caring for HIV/AIDS patients in public hospitals in the Tshwane Metropolitan area?

1.5 The research question

The research question was posed as follows: to what extent do the nurses' knowledge, attitudes, practice and behaviour influence their care for HIV/AIDS patients at public hospitals in the Tshwane Metropolitan area?

1.6 Significant of the study

This is a pilot study that could possibly open doors for further research in the very same field. However, its findings could be used to draw up new policies at national, provincial and local levels of government and to develop new training programmes for nurses. New intervention strategies could be set up to enable nurses not only caring for HIV/AIDS patients at public hospitals, but all nurses caring for HIV/AIDS patients to improve their knowledge, skills, practices and change their attitudes and behaviour towards HIV/AIDS patients in order for

them to offer effective and efficient care. This fact would make these patients feel special, loved and worthy. It would also restore in these patients a sense of belonging in the community.

1.7 Definitions of key concepts

This section will comprise the definitions of the concepts that were identified from the literature and upon which this study relies. Some of these key concepts are: HIV, AIDS, nurse, care, nursing care, patient care, knowledge, attitudes, practice and behaviour.

1.7.1 HIV/AIDS

Evian (2000), Van Dyk (2001) and Kaplan & Sadock (2003) agreed on AIDS as the acronym for Acquired Immune Deficiency Syndrome. The disease is said to be acquired because it is not inherited; it is caused by a virus known as "the Human Immunodeficiency (HIV) Virus" which enters the body from outside. Immunity refers to the body's natural inherent ability to defend itself against infections and diseases, while deficiency refers to the fact that the body's immune system is weakened so that it can no longer defend itself against passing infections. And a syndrome is a medical term which refers to a set, or collection of specific signs and symptoms that occur together and that are characteristic of a particular pathological condition.

1.7.2 Nurse

A nurse is a person educated and trained to care for the sick or disabled. It is also a woman employed to take care of a child (www.answers.com/2010/05/20). And according to Mumba (2004:11), nurses include qualified registered nurses, enrolled and nursing assistants who provide care for patients with HIV/AIDS regardless of any other qualifications they may have or positions they may hold.

1.7.3 Care/Caring

According to Leininger (1988:9) as quoted by Mumba (2004:9), within the scope of professional nursing, care refers to those cognitively learned humanistic and scientific modes of helping, or enabling an individual, family or community to receive personalized services through specific culturally defined or ascribed modes of processes, techniques and patterns to improve or maintain a favourable health condition for life. The emphasis by this author is on helpful and enabling activities which are culturally acceptable to the person being cared for.

According to Stanhope & Lancaster (2000:G3) as quoted by Mumba (2004:10), caring is a behaviour that is directed towards the perception and maintenance of the health and welfare of clients.

1.7.4 Nursing Care

Patient care is part of a [nurse's](#) role. Nurses use the nursing process to assess, plan, implement and evaluate patient care. Patient care is founded in critical thinking and caring in a holistic framework. Nursing care is increasingly framed in best practice, which is the application of

evidence-based concepts to patient problems in a particular setting. Nightingale is recognized as the first nurse researcher (www.answers.com/2010/05/20).

1.7.5 HIV/AIDS Patients or patients with HIV/AIDS

According to the researcher, HIV/AIDS patients or patients with HIV/AIDS refer to people who require nursing and/or medical care and/or treatment at either a public hospital, private hospital or at any other health facility after being diagnosed HIV-positive and suffering from any opportunistic disease or infection caused by HIV and with a CD4 count of less than 200.

1.7.6 Knowledge

Knowledge is defined by the Oxford dictionary as expertise, and skills acquired by a person through experience or education; the theoretical or practical understanding of a subject; what is known in a particular field or in total; facts and information; or awareness or familiarity gained by experience of a fact or situation.

1.7.7 Attitudes

Many authors and researchers have defined attitudes in their own various ways. But for the purpose of this study, the research has focused on the following definitions:

1. An attitude is a mental and natural state of readiness organized through experience exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related (www.usu.edu/psy350/attitudes.html. 17/05/2010).
2. An attitude is a learned predisposition to respond in a consistently favourable or unfavourable manner with respect to a given object.
3. The Oxford Paperback Dictionary defines an attitude as a way of thinking or behaving. Attitudes may encompass affective, behavioural and cognitive responses. Attitudes also involve people's feelings towards some objects or issues (G. Bohner & M. Wanke, 2003: 3). An attitude is a psychological tendency that is expressed by evaluating a particular entity with some degree of favour or disfavour (A. Dolores, J. Blair. T & Z. Mark. 2005: 4).

1.7.8 Practices

Practice can be understood as a way of doing, or performing something habitually or repeatedly; doing something repeatedly in order to acquire or polish a skill; or to work at a profession.

1.7.9 Behaviour

Behaviour can be defined as a set of actions or reactions of a person or animal in response to external or internal stimuli.

Behaviour also refers to the actions of an organism or system, usually in relation to its environment, which includes the other organisms or systems around, as well as the physical environment. It is the response of the organism or system to various stimuli or inputs,

whether internal or external, conscious or subconscious, overt or covert, and voluntary or involuntary (www.wikipedia.org/wiki/Behaviour/22/07/2010).

In humans, behaviour is believed to be controlled primarily by the endocrine system and the nervous system. Thus, it is most often believed that the complexity of the behaviour of an organism is related to the complexity of its nervous system. Generally organisms with complex nervous systems have a greater capacity to [learn](#) new responses and thus adjust their behaviour. Behaviours can be either innate or learned. However, current research in the [Human Microbiome Project](#) points towards a possibility that human behaviour may be controlled by the composition of the microbe population within a human body (www.wikipedia.org/wiki/Behaviour/22/07/2010).

More generally, behaviour can be regarded as any action of an organism that changes its relationship to its environment. Behaviour provides outputs from the organism to the environment. Human behaviour can be common, unusual, acceptable, or [unacceptable](#). Humans evaluate the [acceptability](#) of behaviour using [social norms](#) and regulate behaviour by means of [social control](#). In [sociology](#), behaviour is considered as having no meaning, being not directed at other people and thus is the most basic human [action](#), although it can play a part in diagnosis of disorders such as [autism](#). Animal behaviour is studied in [comparative psychology](#), [ethology](#), [behavioural ecology](#) and [socio-biology](#) (www.wikipedia.org/wiki/Behaviour/22/07/2010).

Behaviour became an important construct in early 20th century Psychology with the advent of the paradigm known subsequently as "[behaviourism](#)". Behaviourism was a reaction against "faculty" psychology which purported to see into or understand the mind without the benefit of scientific testing. Behaviourism insisted on working only with what can be seen or manipulated and in the early views of [John B. Watson](#), a founder of the field; nothing was inferred as to the nature of the entity that produced the behaviour. Subsequent modifications of Watson's perspective and that of "[classical conditioning](#)" (see under [Ivan Pavlov](#)) led to the rise of [operant conditioning](#) or "radical behaviourism," a theory advocated by [B.F. Skinner](#), which took over the academic establishment up through the 1950s and was synonymous with "behaviourism" for many (www.wikipedia.org/wiki/Behaviour/22/07/2010).

In this particular study, the focus is on the nurses' behaviour towards HIV/AIDS patients in the public hospitals.

1.8 Conclusion

This chapter has discussed the background and rationale of the study, its aim and objectives, the research problem and hypotheses, the research question, its significance, the definitions of key concepts, the assumptions and its limitations.

Chapter 2: Literature Review

2.1 Introduction

This chapter will discuss the literature review that was undertaken and which comprises some of the existing knowledge and findings on this topic.

2.2 Existing Knowledge and Findings

Little is known about the nurses' knowledge, attitudes, practice and behaviour with regard to their care for HIV/AIDS patients at public hospitals in the designated area, or research in particular, and in South Africa, in general.

The literature review has therefore focused on the nurses' care for HIV/AIDS patients; their knowledge, attitudes, practice and behaviour in general.

According to Lobiondo-Wood & Haber (2002:79); Sparks (1995:51) as quoted by Manena (2007), the purpose of the literature review is to develop a knowledge base for the conduct of research. The literature review therefore:

- Uncovers conceptual and data-based knowledge related to a particular subject, concept or clinical problem and is used in all aspects of the research process;
- Provides new knowledge that can lead to the development, validation, or reinforcement of theories;
- Reveals research questions for the discipline;
- Provides the latest knowledge for education;
- Uncovers research findings that support evidenced-based practice (Fitzpatrick, Stevenson and Polis (1998:167), as well as Lobiondo-Wood and Haber (2002:79) as quoted by Manena (2007)).

In his study on knowledge and attitude of nurses towards AIDS in the general hospital Ogoja, in Nigeria, conducted in 2004, Ebong found that nurses had little knowledge of AIDS matters but had negative attitudes towards the care of AIDS.

According to Michel (1994), a number of studies have been conducted on the attitudes of nurses towards AIDS patients and the following has come to the fore:

- Dubbert and Kemppainen (1994) sought to examine what they considered to be the greatest challenge facing health care providers and the care of AIDS patients. A short vignette (370 words) describing a male AIDS patient with pneumocystis pneumonia was given to twenty nurses. After reading the vignette, the nurses had to complete a Nurse Willingness Questionnaire (NWQ) specifically designed to measure nurses' resistance or willingness to carry out a variety of nursing activities on a HIV patient. The NWQ is a 13 item self report instrument using the Likert scale. The nurses were also asked to complete a Fear of AIDS Schedule (FAIDSS). This examined the association between responses in the NWQ and the fear of contracting AIDS associated with high risk sexual behaviour and through nonsexual contact and medical

procedures. The results showed no correlation between the FAIDSS and contracting AIDS via high risk sexual behaviour, but did correlate a fear of contracting AIDS via nonsexual interpersonal exposure and medical procedures. The four items of highest correlation were the changing of dressings and commencing intravenous fluid or a blood transfusion. This study had a coefficient alpha of .97% representing high internal consistency reliability. The vignette and NWQ lent credibility to the self report research style with minimum possibility for research bias. Despite the sample size of twenty, this study indicated that nurses had a fear of contracting AIDS. What is not known, however, is whether this affects their nursing practice or factors which influence the nurses' attitudes.

- Sherman (1996) performed a study aimed at examining the relationships between perceived social support for nurses, death anxiety and the nurses' willingness to care for AIDS patients. The descriptive correlation design concluded that there was a positive relationship between perceived social support and nurses' willingness to care. The study also found that the greater the nurses' death anxiety, the less willing they were to care for an AIDS patient.
- A study by Kemmpainen *et al* (1992) examines the attitudes of nurses in different areas of AIDS prevalence to determine if a relationship exists between AIDS prevalence and nurses' attitudes or willingness to care for an AIDS patient. This study revealed an exceedingly clear and consistent pattern. Nurses in hospitals with low and moderate AIDS prevalence were consistently more willing to provide care for the portrayed AIDS patient than nurses employed in a high prevalence hospital.
- Steele & Melby (1995) also performed a study examining attitudes of nurses in the community, hospital and hospice settings. The aim was to discover the fears and knowledge that nurses pose with regards to AIDS, and compare them to the different health care settings; hospital, community and hospice. The study revealed that the respondents gained most of their information on AIDS/HIV through the media, press and by reading journal articles. Although their knowledge was derived from a variety of sources, it was interesting to note that almost 50% incorrectly believed that being exposed to vomits by a HIV patient put them at risk of contracting HIV. Hospital nurses indicated a higher rate of oral hygiene practice and a much lower rate for body hygiene practice compared to the community and hospice settings. Thirty-eight percent of respondents felt that nursing an AIDS patient put them at a great risk of HIV contraction. This result is supported by Berry's (1990) study. An interesting result from this study suggests that 21.4% of the nursing sample indicated that they had all the information that was needed on AIDS/HIV. Almost half the respondents felt they had a right to refuse nursing an HIV patient and felt they should know if their client had HIV/AIDS. The most significant result of this study was the lack of knowledge which the sample nurses possessed with regards to AIDS. Having nurses with a general lack of knowledge about HIV/AIDS may inhibit the building of a successful nurse-patient relationship. If the patient does not trust or believe the nurse, then the effectiveness of the treatment and the professionalism of nursing could also be jeopardized.

- A further study by Baylor & McDaniel (1996) also examined the attitudes and factors that influence attitudes of nurses towards AIDS patients. The cross-sectional design investigated 138 nurses using an instrument developed by Scherer & Haughey (1989). Baylor & McDaniel (1996) concluded that knowledge alone does not decrease the fear of nursing patients with AIDS. Unlike Laschinger & Goldenberg (1993), Baylor & McDaniel (1996) concluded that educational background is not related to nurses' attitudes, that nurses with experience in caring for HIV patients have more positive attitudes and that nurses are knowledgeable concerning AIDS. These results are not consistent with Laschinger & Goldenberg (1993). Whether this is a correct causal effect or a result of a self-sectional study process cannot be inferred from this cross-sectional study. This study was also limited to a Midwestern American state and therefore cannot be generalised beyond this geographic area. This study did not measure the nurses' attitudes towards groups at high risk of contracting AIDS other than homosexuals, whereas a study by Jemmott *et al* (1992) discovered that homosexuality is a factor which influences care rendered by the nurse to an HIV patient. On the basis of these studies, the factors which influence nurses' attitudes cannot readily be defined or agreed upon.
- According to Mitchell (1994) as reported in the AEJNE, a number of studies previously mentioned suggest that negative attitudes towards caring for AIDS patients do exist. How to modify these attitudes have to be explored in an effort to improve patient care. Kemppainen *et al* (1996) performed a study in which two groups of nurses received different instructions on AIDS and AIDS care. In the first group, correct knowledge was reinforced and negative attitudes challenged in the context of peer group discussion. The second group worked individually with a nurse trainer to accomplish the same goals which they provide in direct care to hospitalised patients. Participants worked in all areas of the hospital setting including medicine, surgery, intensive care, psychiatry and geriatric. A randomized study found that none of the interventions had a significant impact on the nurses' attitude, either at post-intervention stage or during a six month follow-up. This is not the first intervention study which has failed to detect change in attitudes among direct patient care providers. Feit *et al* (1990) also found that 86% of the participants reported no change in willingness to care for patients with AIDS. Upon further analyses Kemppainen *et al* (1996) discovered that attitudes towards homosexual AIDS patients were a strong predictor of nursing willingness to care for the patient. This is consistent with previous research by Bennett *et al* (1993) who found homophobia significantly affected attitudes in a randomly selected survey. Cole & Slocumb (1993), Jemmott *et al* (1992) found that homosexuality affects attitudes of nurses when caring for AIDS patients, and Meisenhelder (1994) found that homophobia, lack of knowledge, lack of emotional involvement and fear accounted for 57% of the fear of contagion among the participants. Using a convenience sample, Cole & Slocumb (1993), found that nurses had a more positive attitude towards caring for a person with AIDS if the patient had acquired AIDS via a blood transfusion, while having more negative attitudes towards drug users. Wallack (1991) also found strong negative attitudes towards intravenous drug users.

In their study, Caring for patients living with AIDS: knowledge, attitude and global level of comfort, Adetoyeje Oyeyemi DHSc PT, Bashir Oyeyemi MBBS and Bello MBBS (2004) found that respondents demonstrated low levels of knowledge and poor attitudes towards people with acquired immune deficiency syndrome (AIDS). Attitudes appeared to be influenced by nurse's speciality, rank, prior education and experience with patients with AIDS. The responding nurses showed low levels of comfort in giving care to such patients. In conclusion, the findings suggest that Nigerian nurses would hesitate to care for patients with AIDS, and that there is potential for avoidance behaviour towards them.

In her study on the description of support services available for nurses who care for patients with HIV/AIDS in Pretoria urban public hospitals (2004), Mumba found that the support available for nurses is inadequate in both quality and coverage of nurses. Other significant findings include inadequate job preparation, shortage of nurses and that nurses prefer to receive support from both within and outside the hospital.

The HIV/AIDS pandemic has meant that an increasing number of chronically ill people need assistance with care and support. Currently these services are available, albeit to a limited degree, from both formal and informal caregivers. However, few studies have explored the role of different caregivers in meeting the needs of people living with HIV/AIDS (Florence, 2005: 30).

According to Searle *et al* (2004) as quoted by Florence (2005:31), in their study on exploring the role of family caregivers and home based care programmes in meeting the needs of people living with HIV/AIDS; they found that the needs of people living with HIV/AIDS included having someone to provide emotional or spiritual support or counselling. This was followed by someone to assist with physical care (bathing, eating, dressing, using the toilet) and nursing care (pain management, treating wounds, taking medication). Assistance with household chores such as cleaning, cooking, shopping, running errands or gardening and someone to provide information and education or skills training were also deemed important and cited by more than half the household.

2.3 Conclusion

This chapter has discussed the literature review that was undertaken and which comprised some existing knowledge and findings on this topic.

Chapter 3: Research Design and Method

3.1 Introduction

This chapter will discuss the research paradigm and design, as well as the method, the target population, the sample size and sampling technique, the measuring instrument that was used to collect the data, data collection and analysis, the assumptions of the study, limitations of the study and some ethical considerations that were appropriate for this study.

3.2 Research Design and Method

This is an explanatory and descriptive research that was based on a quantitative research paradigm and for this purpose a survey research design was used. A survey was used because it (a survey) is a method of collecting standardized information by interviewing a representative sample of some population. In other words, the survey represents a probe into a given state of affairs that exists at a given time; therefore, direct contact has to be made with the individuals whose characteristics, behaviours or attitudes are relevant to the investigation. Surveys utilize questionnaires and interviews to ask people to provide information about themselves, their attitudes and beliefs, demographics such as age, gender, income, marital status and other facts, and past and intended future behaviours. Surveys also provide us with a methodology for asking people to tell us about themselves (Cozby, 1997:115). And Christensen (2007, p: 51) defines survey as a widely used non-experimental technique. It is often defined as a method of collecting standardized information by interviewing a representative sample of some population.

3.3 Target Population

This study has focused on nurses (males and females) caring for HIV/AIDS patients at three public hospitals in the Tshwane Metropolitan area. And these hospitals are: Steve Biko Academic Hospital, Dr George Mukari Hospital and Kalafong Hospital.

3.4 Sample and Sampling Technique

Eighty three (83) male and female nurses caring for HIV/AIDS patients and selected by means of census sampling techniques from the targeted hospitals, took part in this study.

3.5 Data Collection

Data were collected by means of a self-administered questionnaire (designed to give satisfactory answers to the main research question of the study) using the Likert scale in order to obtain meaningful information.

The questionnaire comprised two parts:

- Part one comprised questions on the biographical information (age, gender, level of education and position/rank occupied, religion, race, marital status, number of children, duration caring for these patients, category of HIV/AIDS patients cared for and ethnic group).

- Part two comprised statements (on the Likert scale) to assess the target group's basic knowledge of HIV/AIDS on awareness, basic knowledge of HIV/AIDS on transmission, basic knowledge of HIV/AIDS on prevention, basic knowledge of HIV/AIDS on in-depth knowledge, in-service trainings attended, level of understanding of topics for trainings attended, problems experienced in the care of HIV/AIDS patients, attitudes towards HIV/AIDS patients, practice regarding caring for HIV/AIDS patients and their behaviour towards HIV/AIDS patients.

The questionnaires were handed to the respondents by the supervising nurse and one day time was given to complete them (questionnaire) and the researcher (the student researcher) personally collected the questionnaires from the supervising nurse who collected the questionnaires from the respondents on the second day.

3.6 Data Analysis

Data were analyzed by means of the SPSS and descriptive statistics such as frequencies and means, as well as percentages were calculated and conclusions were drawn.

3.7 Assumption of the Study

This study was based on two assumptions:

- Caring for the HIV/AIDS patients may well be positively influenced by the specified group's knowledge, attitudes, practice and behaviour.
- Caring for the HIV/AIDS patients may well be negatively influenced by the specified group's knowledge, attitudes, practice and behaviour.

3.8 Limitations of the Study

The only limitation of this study is that; given its nature and the size of the sample (due to the limited number of nurses caring for HIV/AIDS patients in the targeted hospitals), its findings may will neither be generalized, nor be generally available to other hospitals or provinces.

3.9 Ethical Considerations

Some of the ethical issues that were considered (by the researcher) during this study were:

The right of informed consent: The participants in the study were fully informed about the aim of the study and its investigation; they were told exactly what was involved, and what would happen to the data they have generated. The researcher did not enter into exhaustive details on any of these points, but he had to ensure that the reasons and the nature of the contribution to be made by each individual, were clearly understood. It was important that respondents' agreement to participate in research be sought only after they had been informed, and that they fully understood the nature of the research.

Permission: The researcher has sought permission (a letter of authorization from the Research Ethical Committee of the University) from Stellenbosch University which enabled him (the researcher) to conduct the study and collect data from the respondents. The

researcher also sought permission from the authorities and managements of the following hospital(s) taking part in the study and where data were collected: Dr George Mukari Hospital, Kalafong Hospital and Steve Biko Academic Hospital.

Voluntary participation and the right to withdraw at any time from the research: The researcher informed the respondents that participation in the study was voluntary and should anything happen during the administration of the questionnaire, they had the right to withdraw from the study at any time without stating reasons, retracting any data that they had contributed to the investigation up to that point, should they wish to do so. The respondents were informed of this right before the administration of the questionnaire commenced, and they were also informed that should they experience any physical or psychological discomfort or distress, they had the right to terminate their participation.

Confidentiality: The researcher has informed and assured the respondents that all the information they provided during the course of the study project will be treated in the utmost confidence; it will thus not be divulged to anyone, or published, unless the identity of the source has been disguised. This means that only numbers have been used on the questionnaire they were asked to complete and all the data gathered will be kept in a safe place by the researcher; a place only the researcher has access to.

Responsibility to seek advice: Whenever any doubt or uncertainty existed about the appropriateness, or possible consequences of a particular procedure, the researcher sought advice from his supervisor, lecturer in the Centre for HIV/AIDS Management, or from more experienced experts in the specified field.

Avoidance of harm to participants: the researcher has made every effort to prevent and avoid putting the respondent at any kind of risk be it physical, emotional, social, political, economical or psychological during the duration of the study. And as far as this study was concerned, there was no foreseen anticipated.

3.10 Conclusion

This chapter has discussed the research paradigm and design, as well as the method, the target population, the sample size and sampling technique, the measuring instrument that was used to collect the data, data collection and analysis, the assumptions of the study, limitations of the study and some ethical issues that the researcher has considered during this study.

Chapter 4: The Study Results

4.1 Introduction

This chapter will present the results of the study and its analysis generated from the data obtained from the questionnaires completed by the respondents.

4.2 Presentation of the Study Results

4.2.1 Demographic Characteristics of the respondents

Table 1: Distribution of the sample in terms of the different variables which formed the demographic information.

Variable	Frequencies	Percentage
Gender: Male	3	3.6%
Female	80	96.4%
Total	83	100%
Age: 18-29 yrs	15	18.1%
30-39 yrs	23	27.7%
Over 40 yrs	45	54.2%
Total	83	100%
Rank: Registered Nurse	35	42.2%
Enrolled Nurse	24	28.9%
Nursing Assistant	20	24.1%
Missing system	4	4.8%
Total	83	100%
Marital status: Married	37	44.6%
Divorced	6	7.2%
Widow	7	8.4%
Single	29	34.9%
Separated	1	1.2%
Missing system	3	3.6%
Total	100	100%
Number of children: 0	24	28.9%
1 - 2	29	34.9%
3 - 4	25	30.1%
5 - 6	4	4.8%
Missing system	1	1.2%
Total	83	100%
Race: Black	79	95.2%
White	1	1.2%
Coloured	2	2.4%
Missing system	1	1.2%
Total	83	100%
Highest level of nursing education: Certificate	43	51.8%
Diploma	26	31.3%
Bachelors degree	8	9.6%

	Honours degree	1	1.2%
	Missing system	5	6.0%
Total		83	100%
Religion: Christian		75	90.4%
African faith		2	2.4%
Other		6	7.2%
Total		83	100%
How long have you been caring for HIV/AIDS patients?: 0-3 years		18	21.7%
4 - 6 years		24	28.9%
7 - 9 years		10	12.0%
10 - 12 years		9	10.8%
13 - 15 years		5	6.0%
More than 15 years		12	14.5%
Missing system		5	6.0%
Total		83	100%
What category of HIV/AIDS patients do you care for?: Children		4	4.8%
Adult females		17	20.5%
Adult males		10	12.0%
Females and males		27	32.5%
Females and children		1	1.2%
All of them		21	25.3%
Missing system		3	3.6%
Total		83	100%
Ethnic group: Ndebele		7	8.4%
Pedi (N - Sotho)		26	31.1%
Sotho (S - Sotho)		5	6.0%
Tshwana		14	16.9%
Tsonga		10	12.0%
Venda		2	2.4%
Xhosa		4	4.8%
Zulu		5	6.0%
Other		5	6.0%
Missing system		5	6.0%
Total		83	100%

Table 1 indicates the following:

- 94.6% of the nurses caring for HIV/AIDS patients at the targeted hospitals were females, whereas males were only 3.6%. This implies that females are more interested in the nursing career/profession than their male counterparts.
- The majority of the nurses (54.2%) caring for HIV/AIDS patients in these hospitals are aged from 40 years and higher; 18.1% are aged between 18 and 29 years and the rest 27.7% of nurses are aged between 30 and 39 years.
- The majority (42.2%) of the respondents are registered nurses, 28.9% are enrolled nurses and 24.1% are nursing assistants.
- The majority (44.6%) of the respondents are married, 34.9% are single, 8.4% are widows, 7.2% are divorced and 1.2% are separated.

- 34.9% of the respondents have one or two children, 30.1% have three to four children, 28.9% have no children whereas 4.8% have large families of five to six children.
- The majority (95.2%) of the target group are blacks and 2.4% are coloured whereas 1.2% of the target group are white.
- The majority (51.8%) of the target group hold a nursing certificate, 31.3% hold a nursing diploma, 9.6% are in possession of a bachelors degree in nursing and only 9.6% have an honours degree in nursing.
- 90.4% of the target group are Christian, 2.4% are of the African faith and 7.2% are from other religious beliefs.
- 28.9% of the target group have been caring for HIV/AIDS patients for more than four years, 21.7% between zero and three years, 12.0% for more than 7 years, 14.5% for more than 15 years, 10.8% for more than 10 years and 6.0% for more than 13 years.
- 32.5% of the target group are caring for both male and female patients, 25.3% for children, male and female patients, 20.5% for only female adult patients, 12.0% for only male adult patients, 4.8% for only children patients and 1.2% for both female and children patients.
- The majority (31.1%) of the nurses caring for HIV/AIDS patients at the targeted hospitals are Pedi, 16.9% are Tshwana, 12.0% are Tsonga, 8.4% are Ndebele, Zulu and others are 6.0% each – 4.8% are Xhosa and 2.4% are Venda.

4.2. 2 Basic Knowledge of HIV/AIDS Awareness

Table 2: Distribution of the sample in terms of their basic knowledge of HIV/AIDS awareness

Variable		Frequency	Percentage
I am aware that HIV/AIDS exists:	D	6	7.2%
	U	2	2.4%
	A	69	83.1%
	Ms	6	7.2%
	Tot	83	100%
HIV/AIDS is a contagious disease:	D	28	33.7%
	U	2	2.4%
	A	49	59.0%
	Ms	4	4.8%
	Tot	83	100%
I know the sources of HIV/AIDS:	D	3	3.6%
	U	4	4.8%
	A	73	88.0%
	Ms	3	3.6%
	Tot	83	100%
AIDS stands for acquired immune deficiency syndrome: D	U	3	3.6%
	A	1	1.2%
	Ms	79	95.2%

	Tot	0 83	00% 100%
HIV stands for human immunodeficiency:	D	5	6.0%
	U	1	1.2%
	A	76	91.6%
	Ms	1	1.2%
	Tot	83	100%

Table 2 indicates the following:

- 83.1% (the majority) of the nurses caring for HIV/AIDS patients at the targeted hospital are aware that HIV/AIDS exists; whereas, 7.2% are not aware; while 2.4% are not sure whether HIV/AIDS does exist or not.
- 59.0% of the respondents are aware that HIV/AIDS is a contagious disease, while 33.7% are not and 2.4% are not sure whether HIV/AIDS is a contagious disease or not.
- The majority (88.0%) of the respondents know the sources of HIV/AIDS, while 3.6% do not know where HIV/AIDS originates from.
- The majority (95.2%) of the respondents know what AIDS stands for, whereas 3.6% do not agree with what AIDS stands for and 1.2% are not sure what AIDS stands for.
- 91.6% (the majority) of the respondents know what HIV stands for, whereas 6.0% do not agree with what HIV stands for while 1.2% are not sure what HIV stands for.

4.2.3 Basic Knowledge of HIV/AIDS on Transmission

Table 3: Distribution of the sample in terms of their basic knowledge of HIV/AIDS on transmission

Variable		Frequency	Percentage
HIV is transmitted...condom: Disagree:	D	0	0.0%
	U	3	3.6%
	A	78	94.0%
	Ms	2	2.4%
	Tot	83	100%
HIV is transmitted...drug users:	D	3	3.6%
	U	4	4.8%
	A	74	89.2%
	Ms	2	2.4%
	Tot	83	100%
HIV is transmitted through blood transfusion:	D	14	16.9%
	U	14	16.9%
	A	53	63.9%
	Ms	2	2.4%

	Tot	83	100%
HIV is transmitted through mother to child:	D	2	2.4%
	U	7	8.4%
	A	71	85.5%
	Ms	3	3.6%
	Tot	83	100%
HIV is transmitted... an infected person:	D	10	12.0%
	U	8	9.6%
	A	62	74.7%
	Ms	3	3.6%
	Tot	83	100%
HIV...shaking hands... an infected person:	D	30	36.1%
	U	2	2.4%
	A	51	61.4%
	Ms	4	4.8%
	Tot	83	100%
HIV is transmitted...mosquito bite:	D	26	31.3%
	U	2	2.4%
	A	51	61.4%
	Ms	4	4.8%
	Tot	83	100%
HIV is....sharing food...an infected person:	D	29	34.9%
	U	1	1.2%
	A	50	60.2%
	Ms	3	3.6%
	Tot	83	100%
HIV is not...sharing stools...person:	D	27	32.5%
	U	2	2.4%
	A	50	60.2%
	Ms	1	1.2%
	Tot	83	100%
HIV is not...public toilets....person:	D	25	30.1%
	U	5	6.0%
	A	52	62.7%
	Ms	1	1.2%
	Tot	83	100%

Table 3 indicates the following:

- 94.0% of the respondents know that HIV is transmitted through sexual intercourse without using a condom, while 3.6% of the respondents are not sure whether HIV is transmitted through sexual intercourse without using a condom.

- 89.2% of the respondents know that HIV is transmitted through sharing needles amongst drug users. 3.4% of the respondents are saying that HIV is not transmitted through sharing needles amongst drug users – 4.8% of the respondents are not sure whether HIV is transmitted through sharing needles amongst drug user or not.
- 63.9% of the respondents know that HIV is transmitted through blood transfusion whereas, 16.9% of the respondents are saying that HIV is not transmitted through blood transfusion. And 16.9% of the respondents are not sure whether HIV is transmitted through blood transfusion or not.
- 85.5% of the respondents know that HIV is transmitted through mother-to-child transmission while, 2.4% of the respondents are saying that HIV is not transmitted through mother-to-child transmission. And 8.4% of the respondents are not sure whether HIV is transmitted through mother-to-child transmission.
- 74.7% of the respondents know that HIV is transmitted through having oral sex with an infected person while 12.0% are saying that HIV is not transmitted through having oral sex with an infected person. And 9.6% of the respondents are not sure whether HIV is transmitted through having oral sex with an infected person or not.
- 61.4% of the respondents know that HIV is not transmitted through shaking hands with an infected person while 36.1% are saying that HIV is transmitted through shaking hands with an infected person. And 2.4% of the respondents are not sure whether HIV is transmitted through shaking hands with an infected person.
- 61.4% of the respondents know that HIV is not transmitted through mosquito bites while 31.3% of the respondents are saying that HIV is transmitted through mosquito bites. And 2.4% of the respondents are not sure whether HIV is transmitted through mosquito bites of not.
- 60.2% of the respondents know that HIV is not transmitted through sharing food with an infected person while, 34.9% of the respondents are saying that HIV is transmitted through sharing food with an infected person. And 1.2% of the respondents are not sure whether HIV is transmitted through sharing food with an infected person or not.
- 60.2% of the respondents know that HIV is not transmitted through sharing stools and official utensils with an infected person while 32.5% of the respondents are saying that HIV is transmitted through sharing stools and official utensils with an infected person. And 2.4% of the respondents are not sure whether HIV is transmitted through sharing stools and official utensils.
- 62.7% of the respondents know that HIV is not transmitted through sharing public toilets with an infected person while 30.1% are saying that HIV is transmitted through sharing public toilets with an infected person. And 6.0% of the respondents are not sure whether HIV is transmitted through sharing public toilets with an infected person.

4.2.4 Basic Knowledge of HIV/AIDS on Prevention

Table 4: Distribution of the sample in terms of their basic knowledge of HIV/AIDS on prevention

Variable		Frequency	Percentage
HIV is prevented by ABC:	D	15	18.1%
	U	6	7.2%
	A	54	65.1%
	Ms	8	9.6%
	Tot	83	100%
HIV is prevented by not sharing needles:	D	10	12.0%
	U	2	2.4%
	A	70	84.3%
	Ms	1	1.2%
	Tot	83	100%
HIV is prevented...transfusion and injection:	D	19	22.9%
	U	9	10.8%
	A	51	61.4%
	Ms	4	4.8%
	Tot	83	100%
HIV is prevented by using...sexual intercourse:	D	1	1.2%
	U	2	2.4%
	A	78	94.0%
	Ms	2	2.4%
	Tot	83	100%
HIV is prevented... prevention of mother-to-child:	D	7	8.4%
	U	7	8.4%
	A	68	81.9%
	Ms	1	1.2%
	Tot	83	100%

HIV is prevented by treatment STIs promptly:	14	16.9%
D	8	9.6%
U	59	71.1%
A	2	2.4%
Ms	83	100%
Tot		
HIV is prevented by not donating blood:	22	26.5%
D	4	4.8%
U	56	67.5%
A	1	1.2%
	83	100%

Ms			
Tot			
HIV is not...by avoiding mosquito bites:	37	44.6%	
D	2	2.4%	
	41	49.4%	
U	3	3.6%	
	83	100%	
A			
Ms			
Tot			
HIV is not prevented by...infected person:	25	30.1%	
D	8	9.6%	
	47	56.5%	
U	3	3.6%	
	83	100%	
A			
Ms			
Tot			
HIV is not...people with HIV or AIDS:	28	33.7%	
D	5	6.0%	
	48	57.8%	
U	2	2.4%	
	83	100%	
A			
Ms			
Tot			
HIV is not prevented...people with HIV or AIDS:	D	23	27.7%
	U	2	2.4%
	A	57	68.7%
	Ms	1	1.2%
	Tot	83	100%

Table 4 indicates the following:

- 65.1% of the respondents are aware that HIV is prevented by ABC while, 18.1% do not accept that HIV is prevented by ABC. And 7.2% are not sure whether HIV is prevented by ABC.
- 84.3% of the respondents are aware that HIV is prevented by not sharing needles

while 12.0% do not accept that and 2.4% are not sure whether HIV is prevented by not sharing needles.

- 61.4% of the respondents are aware that HIV is prevented by reducing unnecessary blood transfusions and injections while 12.0% do not accept that. And 2.4% are not sure whether HIV is prevented by avoiding unnecessary blood transfusions and injections.
- 94.0% of the respondents are aware that HIV is prevented by using a condom during sexual intercourse while, 1.2% do not accept that. And 2.4% are not sure whether HIV is prevented by using a condom during sexual intercourse.
- 81.9% of the respondents are aware that HIV is prevented through prevention of mother-to-child transmission while, 8.4% are not aware and 8.4% are not sure whether HIV is prevented through mother-to-child transmission.
- 71.1% of the respondents are aware that HIV is prevented by treating STIs promptly while 16.9% are not aware and 9.6% are not sure whether HIV is prevented by treating STIs promptly.
- 67.5% of the respondents are aware that HIV is prevented by not donating blood illegally while 26.5% do not accept that and 4.8% are not sure whether HIV is prevented by not donating blood illegally.
- 49.4% of the respondents are aware that HIV is not prevented by avoiding mosquito bites while 44.6% are not aware and 2.4% are not sure whether HIV is not prevented by avoiding mosquito bites.
- 56.5% of the respondents are aware that HIV is not prevented by not sharing public swimming pools with an infected person while 30.1% are not aware and 9.6% are not sure whether HIV is not prevented by not sharing public swimming pool and infected person.
- 57.8% of the respondents are aware that HIV is not prevented by not sharing food with people living with HIV/AIDS while 33.7% are not aware and 6.0% are not sure whether HIV is not prevented by not sharing food with people living with HIV/AIDS.
- 68.7% of the respondents are aware that HIV is not prevented by not isolating people living with HIV/AIDS while 27.7% are not aware and 2.4% are not sure whether HIV is not prevented by isolating people living with HIV/AIDS.

4.2.5 In-depth Knowledge of HIV/AIDS

Table 5: Distribution of the sample in terms of their in-depth knowledge of HIV/AIDS

Variable		Frequency	Percentage
HIV destroys...the body's immune system:	D	23	27.7%
	U	2	2.4%
	A	57	68.7%
	Ms	1	1.2%
	Tot	83	100%

The strength... ..the CD4 count:	D	3	3.6%
	U	3	3.6%
	A	75	90.4%
	Ms	2	2.4%
	Tot	83	100%
Over time... reverse relationship and injection:	D	6	7.2%
	U	9	10.8%
	A	60	72.3%
	Ms	8	9.6%
	Tot	83	100%
During the..... been infected with the virus:	D	28	33.7%
	U	6	7.2%
	A	47	56.6%
	Ms	2	2.4%
	Tot	83	100%
The CD4 of a HIV.....is between 700-1200:	D	7	8.4%
	U	8	9.6%
	A	67	80.7%
	Ms	1	1.2%
	Tot	83	100%
The person qualifies for...200 or lower:	D	11	13.3%
	U	4	4.8%
	A	65	78.3%
	Ms	3	3.6%
	Tot	83	100%
ARV don't cure HIV/AIDS but treats it:	D	13	15.7%
	U	5	6.0%
	A	60	72.3%
	Ms	5	6.0%
	Tot	83	100%
HIV/AIDS patients are.....test for HIV:	D	11	13.3%
	U	4	4.8%
	A	66	79.5%
	Ms	2	2.4%
	Tot	83	100%
HIV/AIDS patients are...signs and symptoms:	D	35	42.2%
	U	5	6.0%
	A	39	47.0%
	Ms	4	4.8%
	Tot	83	100%
HIV/AIDS patients are...signs and symptoms:	D	13	15.7%
	U	6	7.2%
	A	61	73.5%

Ms	3	3.6%
Tot	83	100%

Table 5 indicates the following:

- 68.7% of the respondents know that HIV destroys the CD4 cell of the body's immune system while, 15.7% do not know and 2.4% are not sure whether HIV destroys the CD4 cell of the body's immune system.
- 90.4% of the respondents know that the strength of the immune system is measured through the CD4 cell count while, 3.6% do not know and 3.6% are not sure whether the strength of the immune system is measured through the CD4 cell count.
- 72.3% of the respondents know that the viral load and the CD4 count have a reverse relationship while, 7.2% do not know and 10.8% are not sure whether the viral load and the CD 4 count have a reverse relationship.
- 56.6% of the respondents know that during the window period the person will test positive if s/he has been infected by the virus while 33.7% do not know and 7.2% are not sure whether the person will test positive being in the window period.
- 80.7% of the respondents know that the CD4 cell count of a HIV-negative person is between 700-1200 while, 8.4% do not know and 9.6% are not sure.
- 78.3% of the respondents know that the person qualifies for ARV when the CD4 cell count is 200 or lower while 13.3% do not know that and 4.8% are not sure.
- 72.3% of the respondents know that ARV do not cure HIV/AIDS but treat it while 15.7% do not know and 6.0% are not sure.
- 79.5% of the respondents know that HIV/AIDS patients are identified in the hospital by means of blood tests for HIV while 13.3% do not know that and 4.8% are not sure.
- 47.7% of the respondents know that HIV/AIDS patients are identified in the hospital by means of signs and symptoms while 42.2% do not know that and 6.0% are not sure.
- 73.5% of the respondents know that HIV/AIDS patients are identified in the hospital by means of blood test for HIV, signs and symptoms while, 15.7% do not know that and 7.2% are not sure.

4.2.6 In-Service Trainings Attended

Table 6: Distribution of the sample in terms of the in-service trainings attended

Variable		Frequency	Percentage
I have.....role for HIV/AIDS patients:	D	39	47.0%
	U	6	7.2%
	A	34	41.0%
	Ms	4	4.8%

	Tot	83	100%
I have attended in-service...Epidemiology:	D	54	65.1%
	U	11	13.3%
	A	12	14.5%
	Ms	6	7.2%
	Tot	83	100%
I have attended...CD4 count and viral load:	D	44	53.0%
	U	5	6.0%
	A	29	34.9%
	Ms	5	6.0%
	Tot	83	100%
I have attendedopportunistic infections:	D	51	61.4%
	U	3	3.6%
	A	23	27.7%
	Ms	6	7.2%
	Tot	83	100%
I have attended..... management of HIV/AIDS:	D	47	56.6%
	U	5	6.0%
	A	26	31.3%
	Ms	5	6.0%
	Tot	83	100%
I have attended in-service.....VCT (HCT):	D	51	61.4%
	U	4	4.8%
	A	22	26.5%
	Ms	6	7.2%
	Tot	83	100%
I have attended in-service.....bereavement:	D	52	54.2%
	U	3	3.6%
	A	24	28.9%
	Ms	4	4.8%
	Tot	83	100%
I have attended in-service...caring for care giver:	D	45	54.2%
	U	6	7.2%
	A	27	32.5%
	Ms	5	6.0%
	Tot	83	100%

I have attended... dealing with bereaved families:	D	46	55.4%
	U	7	8.4%
	A	19	22.9%
	Ms	11	13.3%
	Tot	83	100%
I have attended in-service... HIV/AIDS care:	D	59	71.1%
	U	7	8.4%
	A	12	14.5%
	Ms	5	6.0%
	Tot	83	100%
I have attended in-service..... staff support group:	D	58	69.9%
	U	6	7.2%
	A	14	16.9%
	Ms	5	6.0%
	Tot	83	100%
I have attended in-service....care for patients:	D	45	54.2%
	U	4	4.8%
	A	30	36.1%
	Ms	4	4.8%
	Tot	83	100%
I have attended in-service....issues in HIV/AIDS:	D	48	57.8%
	U	12	14.5%
	A	19	22.9%
	Ms	4	4.8%
	Tot	83	100%

Table 6 indicates the following:

- 41.0% of the respondents have attended in-service training to prepare them for care-giving for HIV/AIDS patients while 47.0% did not attend such training and 7.2% are not sure whether they have attended the training.
- 14.5% of the respondents have attended in-service training in Epidemiology while 65.1% did not attend that training and 13.3% are not sure.
- 34.9% of the respondents have attended in-service training in basic facts of HIV/AIDS while 53.0% did not attend such training and 6.0% are not sure.
- 27.7% of the respondents have attended in-service training in recognition and

management of opportunistic infections while 61.4% did not and 3.6% are not sure.

- 31.3% of the respondents have attended in-service training in ARV management of HIV/AIDS while 56.6% did not and 6.0% are not sure.
- 26.5% of the respondents have attended in-service training in VCT (HCT) while 61.4% did not and 4.8% are not sure.
- 28.9% of the respondents have attended in-service training in cultural and spiritual context of death and bereavement while 54.2% did not attend such training.
- 32.5% of the respondents have attended in-service training in caring for care-givers while 54.2% did not and 7.2% are not sure.
- 22.9% of the respondents have attended in-service training in dealing with bereaved families while 55.4% did not and 8.4% are not sure.
- 14.5% of the respondents have attended in-service training in recognition and management of stress and prevention of burnout in HIV/AIDS care while 71.1% did not and 8.4% are not sure.
- 16.9% of the respondents have attended in-service training in staff support group while 69.9% did not attend and 7.2% are not sure.
- 36.1% of the respondents have attended in-service training in home-based care for patients with HIV/AIDS while 54.2% did not and 4.8% are not sure.
- 22.9% of the respondents have attended in-service training in legal and ethical issues in HIV/AIDS while 57.8% did not attend and 14.5% are not sure.

4.2.7 The Level of Understanding of Topics of the trainings attended

Table 7: Distribution of the sample in terms of their level of understanding of topics of the training attended

Variable		Frequency	Percentage
Epidemiology:	NT	30	36.1%
	IN	10	12.0%
	A	19	22.9%
	Ex	16	19.3%
	Ms	8	9.6%
	Tot	83	100%
HIV transmission....diagnosis of HIV/AIDS:	NT	14	16.9%
	IN	12	14.5%
	A	20	24.1%
	Ex	25	30.1%
	Ms	12	14.5%
	Tot	83	100%
Monitoring.... CD4 count and viral load:	NT	20	24.1%
	IN	15	18.1%
	A	15	18.1%

	Ex	27	32.5%
	Ms	6	7.2%
	Tot	83	100%
Recognition... .of opportunistic infections:	NT	18	21.7%
	IN	13	15.7%
	A	13	15.7%
	Ex	26	31.3%
	Ms	13	15.7%
	Tot	83	100%
ARV management of HIV/AIDS:	NT	20	24.1%
	IN	14	16.9%
	A	12	14.5%
	Ex	31	37.3%
	Ms	6	7.2%
	Tot	83	100%
VCT (HCT):	NT	23	27.7%
	IN	10	12.0%
	A	15	18.1%
	Ex	27	32.5%
	Ms	8	9.6%
	Tot	83	100%
Cultural...context of death and bereavement:	NT	22	26.5%
	IN	12	14.5%
	A	23	27.7%
	Ex	20	24.1%
	Ms	6	7.2%
	Tot	83	100%
Emotional care of a dying patient:	NT	14	16.9%
	IN	5	6.0%
	A	22	26.5%
	Ex	39	47.6%
	Ms	3	3.6%
	Tot	83	100%
Caring for care-givers:	NT	17	20.5%
	IN	5	6.0%
	A	23	27.7%
	Ex	32	38.6%
	Ms	6	7.2%
	Tot	83	100%
Dealing with bereaved families:	NT	18	21.7%

	IN	11	13.3%
	A	22	26.5%
	Ex	29	34.9%
	Ms	3	3.6%
	Tot	83	100%
Recognition...burnout in HIV/AIDS care:	NT	19	22.9%
	IN	17	20.5%
	A	21	25.3%
	Ex	23	27.7%
	Ms	3	3.6%
	Tot	83	100%
Staff support group:	NT	25	30.1%
	IN	14	16.9%
	A	16	19.3%
	Ex	23	7.7%
	Ms	5	6.0%
	Tot	83	100%
Home-based care for HIV/AIDS patients:	NT	23	27.7%
	IN	14	16.9%
	A	15	18.1%
	Ex	28	33.1%
	Ms	3	3.6%
	Tot	83	100%
Legal and ethical issues in HIV/AIDS:	NT	20	24.1%
	IN	12	14.5%
	A	26	31.3%
	Ex	21	25.3%
	Ms	4	4.8%
	Tot	83	

Table 7 indicates the following:

- 36.1% of the respondents have reported no training attended in epidemiology whereas 12% of those who attended such training have indicated that their level of understanding of the content of the training is inadequate, 22.9% have indicated that their level of understanding is adequate and 19.3% have indicated that their level of understanding was extensive.
- 16.9% of the respondents have reported no training attended in HIV transmission, prevention, pathogenesis, clinical features and diagnosis of HIV/AIDS while 14.5% of those who have attended such training have indicated that their level of

understanding of the content of the training is inadequate, 24.1% have indicated that their level of understanding is adequate and 30.1% have indicated that their level of understanding was extensive.

- 24.1% of the respondents have reported no training attended in Monitoring HIV disease, CD4 cell count and viral load whereas 18.1% of those who have attended such training have indicated that their level of understanding of the content of the training is inadequate, 18.1% have indicated that their level of understanding is adequate and 32.5% have indicated that their level of understanding was extensive.
- 21.7% of the respondents have indicated no training in recognition and management of opportunistic infections whereas 15.7% of those who did attend such training indicated that their level of understanding of that particular training was inadequate, 15.7% indicated their level of understanding to be adequate and 31.3% indicated that their level of understanding was extensive.
- 24.1% of the respondents have indicated no training in ARV management of HIV/AIDS whereas 16.9% of those who did attend the training intended that their level of understanding was inadequate, 14.5% indicated their level of understanding to be adequate and 37.3% indicated that their level of understanding was extensive.
- 27.7% of the respondents indicated no training in VCT (HCT) whereas 12.0% who did have the training indicated that their level of understanding was inadequate, 18.1% indicated their level of understanding to be adequate and 32.5% indicated their level of understanding to be extensive.
- 26.5% of the respondents indicated no training in cultural and spiritual context of death and bereavement while 14.5% of those who did attend the training indicated that their level of understanding was inadequate, 27.7% indicated that their level of understanding was adequate and 24.1% indicated their level of understanding to be extensive.
- 16.9% of the respondents indicated no training in emotional care of a dying patient while 6.0% of those did have training indicated that their level of understanding was inadequate, 26.0% indicated that their level of understanding was adequate and 47.6% indicated that their level of understanding was extensive.
- 20.5% of the respondents indicated that they had no training in caring for caregivers while 6.0% of those who did attend indicated that their level of understanding was inadequate, 27.7% have indicated their level of understanding to be adequate and 38.6% have indicated their level of understanding to be extensive.
- 21.7% of the respondents have indicated no training in dealing with bereaved families while 13.3% who did attend that training indicated their level of understanding to be inadequate, 26.5% indicated their level of understanding to be adequate and 34.0% indicated their level of understanding to be extensive.
- 22.9% of the respondents have indicated that they had no training in recognition

and management of stress and prevention of burnout in HIV/AIDS care while 20.5% of those who did attend training indicated that their level of understanding was inadequate, 25.3% indicated their level of understanding to be adequate and 27.7% indicated their level of understanding to be extensive.

- 30.1% of the respondents indicated no training in staff support group while 16.9% of those who did attend training indicated their level of understanding to be inadequate, 19.3% indicated that their level of understanding was adequate and 7.7% indicated their level of understanding to be extensive.
- 27.7% of the respondents have indicated no training in home-based care for HIV/AIDS patients while 16.9% of those who did attend the training indicated their level of understanding to be inadequate, 18.1% indicated their level of understanding to be adequate and 33.1% indicated their level of understanding to be extensive.
- 24.1% of the respondents indicated that they had no training in legal and ethical issues concerning HIV/AIDS while 14.5% who had such training indicated their level of understanding to be inadequate, 31.3% indicated their level of understanding to be adequate and 25.3% indicated their level of understanding to be extensive.

4.2.8 Problems experienced in the care of HIV/AIDS patients

Table 8: Distribution of the sample in terms of the problems experienced concerning the care of HIV/AIDS patients

Variable		Frequency	Percentage
Caring for...working in other departments:	D	21	25.3%
	U	4	4.8%
	A	56	67.5%
	Ms	2	2.4%
	Tot	83	100%
In the hospital...nursed in separate wards:	D	68	81.9%
	U	2	2.4%
	A	11	13.3%
	Ms	2	2.4%
	Tot	83	100%
In the hospital...are nursed in mixed wards:	D	11	13.3%
	U	1	1.2%
	A	69	83.1%
	Ms	2	2.4%
	Tot	83	100%
The main mode...is intravenous drug use:	D	51	61.4%
	U	13	15.7%
	A	16	19.3%

	Ms	3	3.6%
	Tot	83	100%
The main mode...you nurse is heterosexual:	D	26	31.3%
	U	27	32.5%
	A	24	28.9%
	Ms	6	7.2%
	Tot	83	100%
The main mode...your nurse is homosexual:	D	34	40.1%
	U	28	33.7%
	A	19	22.9%
	Ms	2	2.4%
	Tot	83	100%
The main mode...nurse is blood transfusion:	D	51	61.4%
	U	17	20.5%
	A	13	15.7%
	Ms	2	2.4%
	Tot	83	100%
The main ...is mother-to-child transmission:	D	37	44.6%
	U	18	21.7%
	A	26	31.3%
	Ms	2	2.4%
	Tot	83	100%
The main mode...your nurse is unknown:	D	36	43.4%
	U	11	13.3%
	A	33	39.8%
	Ms	3	3.6%
	Tot	83	100%

Table 8 indicates the following:

- 25.3% of the respondents are saying that caring for HIV/AIDS patients is not more stressful than working in other departments while 4.8% are not sure and 67.5% of the respondents are saying that it is more stressful caring for HIV/AIDS patients than working with other departments.
- 81.9% of the respondents are saying that in the hospital, HIV/AIDS patients are not nursed in separate wards while 2.4% are not sure and 13.3% are saying that HIV/AIDS patients are nursed in separate wards.
- 83.1% of the respondents are saying that in the hospital, HIV/AIDS patients are not nursed in mixed wards together with other patients while 13.3% are saying that they are nursed in separate wards and 1.2% are not sure.

- 61.6% of the respondents are saying that the main mode of transmission for the majority of the patients being nursed is not intravenous drug use while 19.3% are saying that the main mode is intravenous drug use and 15.7% are not sure.
- 28.9% of the respondents are saying that the main mode of transmission for the majority of the patients being nursed is heterosexual while, 31.3% are saying that it is not and 32.5% are not sure.
- 22.9% of the respondents are saying that the main mode of transmission of the patients being nursed is homosexual while 401% are saying that it is not and 33.7% are not sure.
- 2.4% of the respondents are saying that the main mode of transmission of the patients being nursed is blood transfusion whereas 61.4% are saying that it is not and 20.5% are not sure.
- 31.3% of the respondents are saying that the main mode of transmission of the majority of patients being nursed is mother-to-child transmission while 44.6% are saying that it is not and 21.7% are not sure.
- 39.8% of the respondents are saying that the main mode of transmission for the majority of the patients being nursed is not known while 43.4% have said that the mode of transmission is known and 13.3% are not sure.

4.2.9 Attitudes of the nurses towards HIV/AIDS patients

Table 9: Distribution of the sample in terms of their attitudes towards HIV/AIDS patients

Variable		Frequency	Percentage
I am willing...HIV/AIDS in the community:	D	2	2.4%
	U	1	1.2%
	A	79	95.2%
	Ms	1	1.2%
	Tot	83	100%
I am comfortable...for HIV/AIDS patients:	D	4	4.8%
	U	3	3.6%
	A	75	90.4%
	Ms	1	1.2%
	Tot	83	100%
I am reluctant.....in the same community:	D	55	66.3%
	U	4	4.8%
	A	21	25.3%
	Ms	3	3.6%
	Tot	83	100%
I dislike having contact.....HIV/AIDS people:	D	69	83.1%
	U	3	3.6%
	A	9	10.6%
	Ms	2	2.4%
	Tot	83	100%

I feel empathetic towards living with HIV/AIDS:	D	24	28.9%
	U	8	9.6%
	A	49	59.0%
	Ms	2	2.4%
	Tot	83	100%
I avoid.... contact with an HIV/AIDS patients:	D	59	71.1%
	U	3	3.6%
	A	17	20.5%
	Ms	4	4.8%
	Tot	83	100%
I think... because God is punishing them:	D	77	92.8%
	U	1	1.2%
	A	4	4.8%
	Ms	1	1.2%
	Tot	83	100%
People with HIV/AIDS deserve to die:	D	76	91.6%
	U	1	1.2%
	A	5	6.0%
	Ms	1	1.2%
	Tot	83	100%
People... isolated from entire community:	D	74	89.2%
	U	1	1.2%
	A	7	8.4%
	Ms	1	1.2%
	Tot	83	100%
People....bringing shame to our community:	D	68	81.9%
	U	2	2.4%
	A	12	14.5%
	Ms	1	1.2%
	Tot	83	100%
I hate to work in the HIV/AIDS ward:	D	63	75.9%
	U	3	3.6%
	A	9	10.8%
	Ms	8	9.6%
	Tot	83	100%
I do not discriminate against HIV/AIDS patients:	D	3	3.6%
	U	0	0.0%
	A	77	92.8%
	Ms	3	3.6%
	Tot	83	100%

Table 9 indicates the following:

- 95.2% of the respondents are willing to live with people who have HIV/AIDS in the same community while 2.4% are not and 1.2% are not sure.
- 90.4% of the respondents are comfortable caring for HIV/AIDS patients while 4.8% are not and 3.6% are not sure.
- 66.3% of the respondents are not reluctant to live with people who have HIV/AIDS in the same community while 25.3% are reluctant and 4.8% are not sure.
- 83.1% of the respondents like having contact with HIV/AIDS people while 10.6% dislike having contact with them and 3.6% are not sure.
- 59.0% of the respondents feel empathetic towards people living with HIV/AIDS while 28.9% do not and 9.6% are not sure.
- 71.1% of the respondents do neither avoid, nor prevent any contact with HIV/AIDS patients while 20.5% avoid and prevent any contact with HIV/AIDS patients. And 3.6% are not sure.
- 92.8% of the respondents are against saying that HIV/AIDS patients are paying for their sins because God is punishing them while 4.8% are saying that HIV/AIDS patients are paying for their sins and God is punishing them and 1.2% are not sure.
- 91.6% of the respondents said that people with HIV/AIDS do not deserve to die while 6.5% said that people with HIV/AIDS deserve to die and 1.2% are not sure.
- 89.2% of the respondents said that people with HIV/AIDS do not deserve to be isolated from the entire community while, 8.4% have said that they deserve to be isolated and 1.2% are not sure.
- 81.9% of the respondents said that people with HIV/AIDS are not bringing any shame to our community while 14.5% have said that they are bringing shame and 2.4% are not sure.
- 75.9% of the respondents do not hate to work in the HIV/AIDS ward whereas 10.8% of the respondents hate working in the HIV/AIDS ward and 3.6% are not sure.
- 92.8% do not discriminate against HIV/AIDS patients whereas 3.6% do discriminate against HIV/AIDS patients.

4.2.10 Practice regarding caring for HIV/AIDS patients

Table 10: Distribution of the sample in terms of their practice regarding caring for HIV/AIDS patients

Variable		Frequency	Percentage
Caring.... patients gives me job satisfaction:	D	11	13.3%
	U	14	16.9%
	A	56	67.5%
	Ms	2	2.4%
	Tot	83	100%

Caring....AIDS patients makes me happy:	D	11	13.3%
	U	17	20.5%
	A	52	62.7%
	Ms	3	3.6%
	Tot	83	100%
My... resents me nursing HIV/AIDS patients:	D	52	62.7%
	U	8	9.6%
	A	15	18.1%
	Ms	8	9.6%
	Tot	83	100%
My... HIV when nursing HIV/AIDS patients:	D	58	69.9%
	U	6	7.2%
	A	17	20.5%
	Ms	2	2.4%
	Tot	83	100%
My.... result of me nursing HIV/AIDS patients:	D	61	73.5%
	U	5	6.0%
	A	14	16.9%
	Ms	3	3.6%
	Tot	83	100%
Caring... and loss of weight is more stressful:	D	24	28.9%
	U	11	13.3%
	A	45	54.2%
	Ms	3	3.6%
	Tot	83	100%
When..... risk of being infected is very high:	D	29	34.9%
	U	6	7.2%
	A	46	55.4%
	Ms	2	2.4%
	Tot	83	100%
When... risk of being infected is very low:	D	40	48.2%
	U	9	10.8%
	A	32	32.6%
	Ms	2	2.4%
	Tot	83	100%
When... being infected with HIV is very high:	D	45	54.2%
	U	3	3.6%
	A	33	39.8%
	Ms	2	2.4%
	Tot	83	100%
When..... risk of being infected is very low:	D	49	59.0%

	U	8	9.6%
	A	23	27.7%
	Ms	3	3.6%
	Tot	83	100%
I takeand treating the HIV/AIDS patients:	D	11	13.3%
	U	6	7.2%
	A	62	74.7%
	Ms	4	4.8%
	Tot	83	100%

Table 10 indicates the following:

- 67.5% of the respondents are satisfied caring for HIV/AIDS patients whereas 13.3% are not satisfied and 16.9% are not sure.
- 62.7% of the respondents are happy caring for HIV/AIDS patients whereas 13.3% are not happy and 20.5% are not sure.
- 62.7% of the respondents said that their families do not resent them nursing HIV/AIDS patients while 18.1% of the respondents said their families do resent them doing so and 9.6% are not sure.
- 69.9% of the respondents said their families do not fear they may become infected with HIV when nursing HIV/AIDS patients while 20.5% said that their families fear they may become infected with HIV and 7.2% are not sure.
- 73.5% of the respondents said that their families are not afraid that they may become infected as a result of the respondents nursing HIV/AIDS patients while 16.9% of the respondents have said that their families fear they may become infected with HIV as a result of the respondents nursing HIV/AIDS patients and 6.0% are not sure.
- 54.2% of the respondents said that caring for HIV/AIDS patients displaying some opportunistic diseases as such is more stressful while 24.9% have said that it is not and 13.3% are not sure.
- 55.4% of the respondents have said that when drawing blood from HIV/AIDS patients their risk of being infected is very high whereas 34.9% have said that their risk is not very high and 7.2% are not sure.
- 48.2% of the respondents said that when drawing blood from HIV/AIDS patients, their risk of being infected is not very low while 32.6 said that their risk is very low and 10.8% are not sure.
- 54.2% of the respondents said that their risk is not very high when giving an injection to an HIV/AIDS patient while 39.8% said their risk is very high and 3.6% are not sure.
- 59.0% of the respondents said their risk of being infected is very high when giving an injection to an HIV/AIDS patient while 27.7% said their risk is very low and 8.6% are not sure.

- 74.7% of the respondents do take universal precautions when caring and treating HIV/AIDS patients while 13.3% do not take such precautions and 7.2% are not sure.

4.2.11 Behaviour of the nurses towards HIV/AIDS patients

Table 11: Distribution of the sample in terms of their behaviour towards HIV/AIDS patients

Variable		Frequency	Percentage
I attend..... patients as quickly as possible:	D	12	14.5%
	U	9	10.8%
	A	60	72.3%
	Ms	2	2.4%
	Tot	83	100%
I attend.....they need my services:	D	3	3.6%
	U	4	4.8%
	A	74	89.2%
	Ms	2	2.4%
	Tot	83	
I attend... patients with love, care and passion:	D	3	3.6%
	U	0	0.0%
	A	78	94.0%
	Ms	2	2.4%
	Tot	83	100%
I talk...them the appropriate care and treatment:	D	2	2.4%
	U	2	2.4%
	A	77	92.8%
	Ms	2	2.4%
	Tot	83	100%
I seek..... and treating an HIV/AIDS patients:	D	10	12.0%
	U	6	7.2%
	A	65	78.3%
	Ms	2	2.4%
	Tot	83	100%
I treat.....same way I treat any other patient:	D	2	2.4%
	U	1	1.2%
	A	77	92.8%
	Ms	3	3.6%
	Tot	83	100%
I usually..... AIDS patients under my care:	D	8	9.6%
	U	2	2.4%
	A	70	84.3%
	Ms	3	3.6%
	Tot	83	100%

I assist..... theAIDS patients to the best of my ability:			
D		1	1.2%
U		1	1.2%
A		79	95.2%
Ms		2	2.4%
Tot		83	100%
I handle.....any discrimination or hatred:	D	2	2.4%
	U	0	0.0%
	A	79	95.2%
	Ms	2	2.4%
	Tot	83	100%

Table 11 indicates the following:

- 72.3% of the respondents said that they attend to HIV/AIDS patients as quickly as possible whereas 14.5% said that they do not do so and 10.8% are not sure.
- 89.2% of the respondents said that they attend to HIV/AIDS patients whenever they need their services while 3.6% do not so and 4.8% are not sure.
- 94.0% of the respondents said that they attend to HIV/AIDS patients with love, care and passion while 3.6% said they don't.
- 92.8% of the respondents said that they talk to HIV/AIDS patients to obtain more information in order to understand them and offer them the appropriate care and treatment while 2.4% said they don't and 2.4% are not sure.
- 78.3% of the respondents said that they seek help from colleagues and superiors when caring and treating an HIV/AIDS patient while 12.0% said they don't and 7.2% are not sure.
- 92.8% of the respondents said that they treat the HIV/AIDS patient the same way they treat any other patient while 2.4% said they don't and 1.2% are not sure.
- 84.3% of the respondents said that they usually counsel the HIV/AIDS patients under their care while 9.6% said they don't and 2.4% are not sure.
- 95.2% of the respondents said that they assist and help the HIV/AIDS patients to the best of their ability while 1.2% said they don't and 1.2% are not sure.
- 95.2% of the respondents said that they handle the HIV/AIDS patients without any discrimination or hatred while 2.4% said they don't.

4.3 Summary of the Research Results

The findings of the study indicate that:

- The majority of the respondents were married Pedi black female registered nurses, christians, aged between forty and higher, with more than one child and holding a nursing certificate who have been caring for HIV/AIDS for more than 4 years (with experience) and they care and treat both female and male HIV/AIDS

patients.

- The majority of the respondents (nurses caring for HIV/AIDS patients at the targeted hospital) are aware that HIV/AIDS exists, know what it stands for and know its sources. However, there are still some nurses who do not know whether HIV/AIDS is a contagious disease.
- The majority of the respondents (nurses caring for HIV/AIDS patients at the targeted hospitals) are aware of the transmission modes of HIV. However, there are still respondents (nurses caring for HIV/AIDS patients at the targeted hospitals) unaware and believing in myths and having misconceptions as far as the transmission of HIV is concerned
- The majority of the respondents are aware of the ways HIV is prevented and not prevented. However, there are still respondents who are not aware of the ways HIV is and is not prevented. And are still believing in myths and having misconceptions concerning the prevention of HIV.
- The majority of the respondents have in-depth knowledge and information on HIV/AIDS. However, there are still respondents who are lacking in-depth knowledge and information on HIV/AIDS.
- The majority of the respondents did not attend in-service trainings concerning various aspects of HIV/AIDS treatment, management, care and support to prepare them to treat and care for HIV/AIDS patients.
- It appears that the respondents' level of understanding of various aspects concerning HIV/AIDS care and management of HIV/AIDS patients covered during the in-service sessions was adequate and extensive. However, there are many respondents whose level of understanding remains inadequate.
- The majority of the respondents are not aware or do not know the main mode of transmission for the majority of the patients they are nursing, or stated otherwise, who are under their care. They also experience more stress when caring for HIV/AIDS patients than when they are working in other departments.
- The majority of the respondents have a very positive attitude towards HIV/AIDS patients. However, there are a few respondents with a negative attitude towards HIV/AIDS patients.
- The majority of the respondents are satisfied and happy in caring for HIV/AIDS patients. They are also aware of the risk involved in the practice of their job and that is why most of them take universal precaution when caring and treating HIV/AIDS patients. For most of them, their families have approved of them doing the job they are doing and there is no fear whatsoever of being infected with HIV, either for themselves or for their family members. However, there are still those who are careless, dissatisfied and unhappy about the fear of being infected with HIV.
- The behaviour of the large majority of the respondents towards HIV/AIDS patients is very positive. However, there is still a few who have a negative behaviour towards HIV/AIDS patients.

4.4 Discussion of the Study Results

The majority of the nurses in the targeted hospitals are more experienced in caring for HIV/AIDS patients because they have been caring and treating HIV/AIDS patients for more than four years. They are aware of the existence of HIV/AIDS and its transmission and prevention. The level of understanding of the content of the different training sessions on various aspects of HIV/AIDS care and management for those who have attended such in-service training sessions appeared to be adequate and extensive. And as a result, they possess some in-depth knowledge on HIV/AIDS. They are contented because they are satisfied with their job, as well as caring and treating HIV/AIDS patients. Most of them are experiencing positive attitudes and because of this, they behave positively towards HIV/AIDS patients. And because of being aware of the risk involved in their job, as well as the implications, they practice universal precautions when caring and treating their patients. They also have support from their families and are not afraid of contracting HIV during the execution of their job. Hence, they are willing and motivated to do their job properly.

However, there are still nurses in the targeted hospitals unaware or in denial of the existence of HIV/AIDS and ignorant of its transmission and prevention who believe myths and have misconceptions about HIV/AIDS. Given the fact that the majority of nurses at the targeted hospitals did not attend any in-service training sessions regarding the various aspects of HIV/AIDS care and management to prepare them for their job and responsibilities, they are lacking in-depth knowledge on HIV/AIDS and are not practicing universal precautions when caring and treating their patients. Also possibly because the majority of these nurses are aged forty and older and hold only nursing certificates – even those who have attended some of the in-service training sessions – their level of understanding of the content of the training remains inadequate. These nurses are also not aware of the main mode of transmission of their patients. Because they are not satisfied with their job, they are subsequently unhappy and hold negative attitudes, and also behave negatively towards HIV/AIDS patients under their care. Hence, they are neither willing nor motivated to do their job properly.

As stated earlier on, this study was mostly informed by the fact that to date little is known of the practical use that medical staff makes of the HIV/AIDS policy in state hospitals in South Africa, as well as about their knowledge on HIV/AIDS and relevant attitudes, practice and behaviour in general. According to the researcher's own observation, nurses caring for HIV/AIDS patients seem to have no or very little knowledge on how to care for these patients since caring of this nature requires special knowledge and skills; and there appears to be widespread measures of hesitation and avoidance behaviour towards such patients.

Contrary to the previous paragraph, the findings of this study has indicated that the majority of nurses caring for HIV/AIDS patients at the targeted hospitals do possess enough and appropriate knowledge on HIV/AIDS and they are positive about their job execution, they have a positive attitude and behave positively towards HIV/AIDS

patients – and they are satisfied, happy and willing to do their job.

Looking at the literature review, this study confirms and rejects some of the findings of certain studies done elsewhere outside South Africa.

The findings of this study have confirmed the study assumptions in that nurses at the targeted hospitals with adequate and extensive knowledge on HIV/AIDS, with positive attitudes and behaviours, satisfied and happy in the execution of their job, are more willing to care and treat the HIV/AIDS patients than those without knowledge (or with insufficient knowledge) on HIV/AIDS, who have negative attitudes and behaviours and are dissatisfied and unhappy in the execution of their job.

4.5 Conclusion

This chapter has presented the study results and analysis of the data generated from the questionnaires completed by the respondents.

Chapter 5: Conclusion and Recommendations

5.1 Introduction

This chapter will present the conclusions and some recommendations that have been suggested in relation to the significance of the study for service improvement and further research.

5.2 Conclusion of the Study

The results show that the majority of nurses caring for and treating HIV/AIDS patients at the targeted hospitals are experienced and possess adequate and extensive knowledge on HIV/AIDS. Moreover they have very positive attitudes and behaviour towards these patients and are satisfied and happy with the execution of their job – hence they are willing to care and treat these patients with love and passion. However, there are still nurses with inadequate or no knowledge at all, with negative attitudes and behaviour towards these patients, who are dissatisfied and unhappy to do their job, and therefore not willing to care and treat these patients. And this especially at a time where it is expected that most of the health professionals in general and nurses and doctors, in particular, should possess enough, adequate, extensive and in-depth knowledge on HIV/AIDS given the unnumbered programmes and interventions by the government, NGOs and CBOs. Truly this observation leaves much to be desired.

Knowing that in South Africa a great majority of people living with HIV and AIDS (PLWHA) are treated in state hospitals (Shisana *et al*, 2005) as quoted by Dijkstra, *et al* (2007) where they are cared for by nurses, doctors and other health professionals; and given the state of affairs as revealed by the findings of the study, it is about time that the information and education programmes and interventions be reviewed, changed and adjusted to the new trends of the epidemic in order to empower those with the duty and responsibilities of caring and treating those infected and affected by HIV/AIDS. Hence, some recommendations below.

5.3 Recommendations

Considering the findings of the study, the following suggestions were formulated to improve dealing with the situation, the services offered and staff moral:

- A similar study to this be conducted throughout the country to either confirm or reject the findings of this study to ascertain the level of the problem;
- The National, Provincial Departments of Health and public hospitals together should advocate for the inclusion of HIV/AIDS as core module in the curriculum of nurses;
- There is a need of regular and frequent update, in-service training and short courses to educate and empower nurses in order to enable them to render good care and treat HIV/AIDS patients properly;
- Care and treatment of HIV/AIDS patients should be the entire hospital's concern,

including the management and not only the nurses;

- Nurses caring for and treating HIV/AIDS patients should receive adequate and proper support from colleagues and the management of the hospital. This includes psychological, emotional, moral and physical support; and finally
- To increase and build the capacity as far as nurses are concerned with regard to care and treatment of HIV/AIDS patients.

5.4 Conclusion

This chapter has presented the conclusions and some recommendations that have been put forward in relation to the significance of the study for service improvement and further research.

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Venter.

7 Annexure A: Application for Permission to Hospitals

Omari Shabani (st no.15603636)

PO Box 11055,

The Tramshed,

Pretoria,

0126

Tel (work): 011 715 2000

Fax (work): 011 715 2001

Cell: 082 410 8734

omarishabani@hotmail.com

The Chief Executive Officer

.... Hospital

PO BOX/P/BAG...

Pretoria 0001

Dear Sir/Madam,

2010/10/...

Re: PERMISSION TO CONDUCT RESEARCH AT ... HOSPITAL

I am writing to request authority/permission to undertake research at ... Hospital. The research topic is: **“Knowledge, Attitudes, Practice and Behaviour of Nurses Caring for HIV/AIDS Patients at Public Hospitals in the Tshwane Metropolitan Area”**.

I am a Masters student at the University of Stellenbosch in the Africa Centre for HIV/AIDS Management. This research study is conducted as partial fulfilment of the requirements for the degree of Master of Philosophy (HIV/AIDS Management) at Stellenbosch University. I believe that this research will be beneficial in bringing to light the needs of nurses involved in the care of HIV/AIDS patients and how to meet and address those needs. This will also help to improve the quality of care to patients with HIV/AIDS in the hospital, Tshwane and in South Africa as a whole. My research supervisor is Professor Johan Augustyn and his contact details are: jcda@sun.ac.za, tel: 083 626 3081.

As per your request, I have attached the following documents:

1. The university research ethic committee approval letter;
2. Research approval letter by the university;
3. The research proposal;
4. The informed consent form; and

5. The research questionnaire.

I wish to start collecting data (administering the questionnaire) as soon as you give me the permission to do so. I hope that my request will be considered favourably. And I also want to assure the management of Kalafong Hospital that the research will be conducted with no cost to the hospital.

Yours faithfully,

Omari Shabani

8 Annexure B: Letters of permission to conduct research and collect data from the 3 Hospitals



**GAUTENG DEPARTMENT OF HEALTH
&
SOCIAL DEVELOPMENT
STEVE BIKO ACADEMIC HOSPITAL**

Tel: 012-354-2222

Fax: 012-354-1548

Enquiries: Dr M E Kenoshi

E-mail: ErnestKe@gpg.gov.za

Mr Omari Shabani
PO Box 11055
The Trampshed
PRETORIA
0126
Fax: 011 715 2001

Dear Mr Shabani

**RE: PERMISSION TO CONDUCT RESEARCH AT STEVE BIKO
ACADEMIC HOSPITAL ON KNOWLEDGE ATTITUDES, PRACTICE AND
BEHAVIOUR OF NURSES CARING FOR HIV AND AIDS PATIENTS.**

Your letter dated 3rd October 2010 on this matter is acknowledged. The Executive Committee of the hospital hereby gives you approval to involve nurses of Steve Biko Academic Hospital in your research study as proposed.

Yours sincerely,

**DR ERNEST KENOSHI
CHIEF EXECUTIVE OFFICER**

Dr MP MATHEBULA
DEPUTY CEO
STEVE BIKO
ACADEMIC HOSP

DATE: 26.10.2010

CC: DR SJ MARAIS : HEAD OF NURSING



DEPARTMENT OF HEALTH
Lefapha la Maphelo
Departement van Gesondheid
Umyango wezempilo

KALAFONG HOSPITAL
PRIVATE BAG X396
PRETORIA
0001

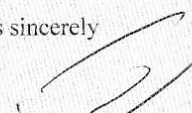
ENQUIRIES : DR K M HTWE
TEL NO : (012) 318 6502
FAX NO : (012) 318 6791

OMAR SHABANI
P O BOX 11055
THE TRAMSHED
PRETORIA
0126

**"KNOWLEDGE, ATTITUDES, PRACTICE AND BEHAVIOUR OF
NURSES CARING FOR HIV/ AIDS PATIENTS AT PUBLIC
HOSPITALS IN THE TSHWANE IN THE TSHWANE
METROPOLITAN AREA" (KALAFONG HOSPITAL)**

Permission is hereby granted for you to do research in Kalafong Hospital for the above mentioned research.

Yours sincerely



DR K M HTWE
CINICAL MANAGER

DATE: 11/10/2010





**DR GEORGE MUKHARI HOSPITAL
OFFICE OF THE CLINICAL DIRECTOR**

Enquiries: Dr. P. Shembe
Tel: +27 12 529 3880
cell: +27 12 529 3851

TO: HOD

Date : 23/09/2010

RE : PERMISSION TO CONDUCT RESEARCH.

The Dr. George Mukhari Hospital hereby grants you permission to conduct research on : **Knowledge, Attitudes, Practice and Behaviour of Nurses Caring for HIV/AIDS Patients at Public Hospitals in Tshwane Metropolitan Areas**.....

This permission is granted subject to following conditions:

- That you obtain Ethical Clearance from the Human Research Ethics Committee of the relevant University.
- That the Hospital incurs no cost in the course of your research.
- That access to the staff and patients at the Dr. George Mukhari Hospital will not interrupt the daily provision of services.
- That prior to conducting the research you will liaise with the supervisors of the relevant sections in introduce yourself (with this letter) and to make arrangements with them in a manner that is convenient to the sections.

Yours sincerely

**DR. P. SHEMBE
DIRECTOR: CLINICAL SERVICES**

Private Bag X422
Pretoria
0001

9 Annexure C: The research questionnaire

A TOOL TO MEASURE KNOWLEDGE, ATTITUDES, PRACTICE AND BEHAVIOUR OF NURSES CARING FOR HIV/AIDS PATIENTS AT PUBLIC HOSPITALS IN THE TSHWANE METROPOLITAN AREA

Number of the respondent:.....

Date:.....

Name of the hospital:

INSTRUCTIONS TO PARTICIPANTS

1. This study is conducted by an MPHIL student at the Africa Centre of HIV/AIDS Management at Stellenbosch University.
2. You are kindly requested to participate in this study by answering all the questions (individually and no consultations or discussions with colleagues or anyone else) and return the questionnaire within one day.
3. Please answer the questions by following the instruction at the top of the set of questions on the particular variable (Knowledge, Attitudes, Practice and Behaviour).
4. Please do not write your name on the questionnaire. This study is completely anonymous.
5. All the information will be treated as strictly confidential.
6. The success of this study depends entirely on your contribution. This is to say that you are asked and encouraged to be as sincere and honest as possible when answering the questions.
7. Note that this is neither a test, nor an exam and none's job or position will be jeopardised with the answers provided in this study.

We would like to thank you for your time and your acceptance and willingness to participate in this study.

Please answer the following questions by placing a cross [X] in the appropriate block or by filling in the information requested.

SECTION 1: BIOGRAPHICAL DATA

1.1 Gender

Male [1] Female [2]

1.2 Age

18-29 years [1] 30-39 years [2] Over 40 years [3]

1.3 Rank

Registered Nurse [1] Enrolled Nurse [2] Nursing Assistant [3]

1.4 Marital Status

Married [1] Divorced [2] Widow [3] Single [4] Separated [5]

1.5 Number of Children

0 [1] 1-2 [2] 3-4 [3] 5-6 [4] Over 7 [5]

1.6 Race

Black [1] White [2] Indian [3] Coloured [4] Asian and other [5]

1.7 Highest level of nursing education

Certificate [1] Diploma [2] Bachelors degree [3] Honours degree [4] Masters degree [5]

Doctorate degree [6]

1.8 Religion

Christian [1] Muslim [2] African faith [3] Other [4]

1.9 How long have you been caring for HIV/AIDS patients?

0-3 years [1] 4-6 years [2] 7-9 years [3] 10-12 years [4] 13-15 years [5]
More than 15 years [6]

1.10 What category of HIV/AIDS patients do you care for?

Children [1] Adult females [2] Adults males [3] Females and males [4]

Females and children [5]

All of them [6]

1.11 Ethnic group

Ndebele [1] Pedi (N-Sotho) [2] Sotho (S-Sotho) [3] Tshwana [4] Tsonga [5]
Venda [6] Xhosa [7]

Zulu [8] Other [9]

2. BASIC KNOWLEDGE OF HIV/AIDS ON AWARENESS

2.1 I am aware that HIV/AIDS exist

1	2	3	4	5
---	---	---	---	---

2.2 HIV is a contagious disease

1	2	3	4	5
---	---	---	---	---

2.3 I know the sources of HIV and AIDS

1	2	3	4	5
---	---	---	---	---

2.4 AIDS stands for acquired immune deficiency syndrome

1	2	3	4	5
---	---	---	---	---

2.5 HIV stands for human immunodeficiency virus

1	2	3	4	5
---	---	---	---	---

3. BASIC KNOWLEDGE OF HIV/AIDS ON TRANSMISSION

3.1 HIV is transmitted through sexual intercourse without using a condom

1	2	3	4	5
---	---	---	---	---

3.2 HIV is transmitted through sharing needles amongst

--	--	--	--	--

drug users

1	2	3	4	5
---	---	---	---	---

3.3 HIV is transmitted through blood transfusion

1	2	3	4	5
---	---	---	---	---

3.4 HIV is transmitted through Mother to Child

1	2	3	4	5
---	---	---	---	---

3.5 HIV is transmitted through having oral sex with an infected person

1	2	3	4	5
---	---	---	---	---

3.6 HIV is not transmitted through shaking hands with an infected person

1	2	3	4	5
---	---	---	---	---

3.7 HIV is not transmitted through mosquito bite

1	2	3	4	5
---	---	---	---	---

3.8 HIV is not transmitted through sharing food with an infected person

1	2	3	4	5
---	---	---	---	---

3.9 HIV is not transmitted through sharing stools and official utensils with an infected person

1	2	3	4	5
---	---	---	---	---

3.10 HIV is not transmitted through sharing public toilets with an infected person

1	2	3	4	5
---	---	---	---	---

4. BASIC KNOWLEDGE OF HIV/AIDS ON PREVENTION

4.1 HIV is prevented by ABC method

1	2	3	4	5
---	---	---	---	---

4.2 HIV is prevented by not sharing needles

1	2	3	4	5
---	---	---	---	---

4.3 HIV is prevented by reducing unnecessary blood transfusions and injections

1	2	3	4	5
---	---	---	---	---

4.4 HIV is prevented by using a condom during sexual intercourse

1	2	3	4	5
---	---	---	---	---

4.5 HIV is prevented through prevention of Mother to child

1	2	3	4	5
---	---	---	---	---

4.6 HIV is prevented by treating STIs promptly

1	2	3	4	5
---	---	---	---	---

4.7 HIV is prevented by not donating blood illegally

1	2	3	4	5
---	---	---	---	---

4.8 HIV is not prevented by avoiding mosquito bite

1	2	3	4	5
---	---	---	---	---

4.9 HIV is not prevented by not sharing public swimming pools with an infected person

1	2	3	4	5
1	2	3	4	5

4.10 HIV is not prevented by not sharing food with people living with HIV or AIDS

1	2	3	4	5
---	---	---	---	---

4.11 HIV is not prevented by isolating people living with HIV or AIDS

1	2	3	4	5
---	---	---	---	---

5. IN-DEPTH KNOWLEDGE OF HIV/AIDS

5.1 HIV destroys the CD4 cell of the body's immune system

1	2	3	4	5
---	---	---	---	---

5.2 The strength of the immune system is measured through the CD4 count

1	2	3	4	5
---	---	---	---	---

5.3 Over time the viral load and the CD4 count have a reverse relationship

1	2	3	4	5
---	---	---	---	---

5.4 During the window period the person will test HIV+ if he/she has been infected with the virus

1	2	3	4	5
---	---	---	---	---

5.5 The CD4 count of an HIV-negative person is between 700-1200

1	2	3	4	5
---	---	---	---	---

5.6 The person qualifies for ARV when the CD4 cell count is 200 or lower

1	2	3	4	5
---	---	---	---	---

5.7 ARV don't cure HIV/AIDS but treat it

1	2	3	4	5
---	---	---	---	---

5.8 HIV/ AIDS patients are identified in the hospital by means of a blood test for HIV

1	2	3	4	5
---	---	---	---	---

5.9 HIV/ AIDS patients are identified in the hospital by means of signs and symptoms

1	2	3	4	5
---	---	---	---	---

5.10 HIV/ AIDS patients are identified in the hospital by means of blood test for HIV, signs and symptoms

1	2	3	4	5
---	---	---	---	---

6. In-SERVICE TRAINING ATTENDED

6.1 I have attended in-service training to prepare me for care-giving role for HIV/AIDS patients

1	2	3	4	5
---	---	---	---	---

6.2 I have attended in-service training in Epidemiology

1	2	3	4	5
---	---	---	---	---

6.3 I have attended in-service in Basic facts of HIV. This included HIV transmission, prevention, pathogenesis, clinical features, diagnosis, monitoring HIV disease, CD4 cell count and viral load

1	2	3	4	5
---	---	---	---	---

6.4 I have attended in-service training in recognition and management of opportunistic infections

--	--	--	--	--

1	2	3	4	5
---	---	---	---	---

6.5 I have attended in-service training in ARV management of HIV/AIDS

1	2	3	4	5
---	---	---	---	---

6.6 I have attended in-service training in VCT (HCT)

1	2	3	4	5
---	---	---	---	---

6.7 I have attended in-service training in cultural and spiritual context of death and bereavement

1	2	3	4	5
---	---	---	---	---

6.8 I have attended in-service training in caring for caregiver

1	2	3	4	5
---	---	---	---	---

6.9 I have attended in-service training in dealing with bereaved families

1	2	3	4	5
---	---	---	---	---

6.10 I have attended in-service training in recognition and management of stress and prevention of burnout in HIV/AIDS care

1	2	3	4	5
---	---	---	---	---

6.11 I have attended in-service training in staff support group

1	2	3	4	5
---	---	---	---	---

6.12 I have attended in-service training in home-based care for patients

1	2	3	4	5
---	---	---	---	---

6.13 I have attended in-service training in legal and ethical issues on HIV/ AIDS

1	2	3	4	5
---	---	---	---	---

7. THE LEVEL OF UNDERSTANDING OF TOPICS FOR TRAINING ATTENDED

No training = 1; Inadequate = 2; Adequate = 3 and Extensive = 4

7.1 Epidemiology of HIV/AIDS

1	2	3	4
---	---	---	---

7.2 HIV transmission, prevention, pathogenesis, clinical features and diagnosis of HIV/AIDS

1	2	3	4
---	---	---	---

7.3 Monitoring HIV disease, CD4 cell count and viral load

1	2	3	4
---	---	---	---

7.4 Recognition and management of opportunistic infections

1	2	3	4
---	---	---	---

7.5 ARV management of HIV/AIDS

1	2	3	4
---	---	---	---

7.6 VCT (HCT)

1	2	3	4
---	---	---	---

7.7 Cultural and spiritual context of death and bereavement

1	2	3	4
---	---	---	---

7.8 Emotional care of a dying patient

1	2	3	4
---	---	---	---

7.9 Caring for care-givers

1	2	3	4
---	---	---	---

7.10 Dealing with bereaved families

1	2	3	4
---	---	---	---

7.11 Recognition and management of stress and prevention of burnout in HIV/AIDS care

1	2	3	4
---	---	---	---

7.12 Staff support groups

1	2	3	4
---	---	---	---

7.13 Home-based care for HIV/AIDS patients

1	2	3	4
---	---	---	---

7.14 Legal and ethical issues with regard to HIV/AIDS

1	2	3	4
---	---	---	---

8. PROBLEMS EXPERIENCED IN THE CARE OF HIV/AIDS PATIENTS

Please evaluate each statement by using the following keys:

1 = SD (Strongly disagree) (SD)

2 = D (Disagree) (D)

3 = UC (Undecided) (U)

4 = A (Agree) (A)

5 = SA (Strongly agree) (SA)

8.1 Caring for HIV/AIDS patients is more stressful than working in other departments

1	2	3	4	5
---	---	---	---	---

8.2 In the hospital HIV/ AIDS patients are nursed in separate wards

1	2	3	4	5
---	---	---	---	---

8.3 In the hospital HIV/ AIDS patients are nursed in mixed wards (general) with other patients

1	2	3	4	5
---	---	---	---	---

8.4 The main mode of transmission for the majority of patients whom you nurse is intravenous drug use

1	2	3	4	5
---	---	---	---	---

8.5 The main mode of transmission for the majority of patients whom you nurse is heterosexual

1	2	3	4	5
---	---	---	---	---

8.6 The main mode of transmission for the majority of patients whom you nurse is homosexual

1	2	3	4	5
---	---	---	---	---

8.7 The main mode of transmission for the majority of patients whom you nurse is blood transfusion

1	2	3	4	5
---	---	---	---	---

8.8 The main mode of transmission for the majority of patients whom you nurse is Mother-to-child transmission

1	2	3	4	5
---	---	---	---	---

8.9 The main mode of transmission for the majority of patients whom you nurse is unknown

1	2	3	4	5
---	---	---	---	---

9. ATTITUDES ABOUT HIV/AIDS PATIENTS

The following statements below are intended to measure your attitudes towards HIV/AIDS patients. There are no right or wrong responses to any of these statements, but you need to be as honest as possible when answering.

Please read each of the following statements and indicate, on the answer sheet by placing an [X], the response that best fits your feelings about the statement. For example, if you agree with a certain statement, place an [X] in the space provided.

Please evaluate each statement by using the following keys:

1 = SD (Strongly disagree) (SD)

2 = D (Disagree) (D)

3 = UC (Undecided) (U)

4 = A (Agree) (A)

5 = SA (Strongly agree) (SA)

9.1 I am willing to live with people who have HIV/AIDS in the same community

1	2	3	4	5
---	---	---	---	---

9.2 I am comfortable caring for HIV/AIDS patients

1	2	3	4	5
---	---	---	---	---

9.3 I am reluctant to live with people who have HIV/AIDS in the same community

1	2	3	4	5
---	---	---	---	---

9.4 I dislike having contact with HIV/AIDS people

1	2	3	4	5
---	---	---	---	---

9.5 I feel empathetic towards people living with HIV/AIDS

1	2	3	4	5
---	---	---	---	---

9.6 I avoid and prevent any contact with an HIV/AIDS patient

1	2	3	4	5
---	---	---	---	---

9.7 I think HIV/AIDS people are paying for their sins because God is punishing them

1	2	3	4	5
---	---	---	---	---

9.8 People with HIV/AIDS deserve to die

1	2	3	4	5
---	---	---	---	---

9.9 People with HIV/AIDS deserve to be isolated from the entire community

1	2	3	4	5
---	---	---	---	---

9.10 People with HIV/AIDS are bringing shame to our community

1	2	3	4	5
---	---	---	---	---

3.11 I hate to work in the HIV/AIDS ward

1	2	3	4	5
---	---	---	---	---

3.12 I do not discriminate against HIV/AIDS patients

1	2	3	4	5
---	---	---	---	---

10. PRACTICE REGARDING CARING FOR HIV/AIDS PATIENTS

Please evaluate each statement by using the following keys:

1 = SD (Strongly disagree) (SD)

2 = D (Disagree) (D)

3 = UC (Undecided) (U)

4 = A (Agree) (A)

5 = SA (Strongly agree) (SA)

10.1 Caring for HIV/AIDS patients gives me job satisfaction

1	2	3	4	5
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10.2 Caring for HIV/AIDS patients makes me happy

1	2	3	4	5
---	---	---	---	---

10.3 My family resents me nursing HIV/AIDS patients

1	2	3	4	5
---	---	---	---	---

10.4 My family fears that I may become infected with HIV when nursing HIV/AIDS patients

1	2	3	4	5
---	---	---	---	---

10.5 My family fears that they may become infected with HIV as a result of me nursing HIV/AIDS patient

1	2	3	4	5
---	---	---	---	---

10.6 Caring for HIV/AIDS patients displaying some opportunistic diseases such as herpes zoster, kaposi sarcoma, oral candidiasis, pneumocystic carinii pneumonia, chronic diarrhea, tuberculosis, cryptococcal meningitis and loss of weight is more stressful

1	2	3	4	5
---	---	---	---	---

10.7 When drawing blood from an HIV/AIDS patient, my risk of being infected is very high

1	2	3	4	5
---	---	---	---	---

10.8 When drawing blood from an HIV/AIDS patient, my risk of being infected is very low

1	2	3	4	5
---	---	---	---	---

10.9 When giving an injection to an HIV/AIDS, my risk of being infected with HIV is very high.

1	2	3	4	5
---	---	---	---	---

10.10 When giving an injection to an HIV/AIDS patient, my risk of being infected is very low

1	2	3	4	5
---	---	---	---	---

10.11 I take universal precautions when caring and treating the HIV/AIDS patients

1	2	3	4	5
---	---	---	---	---

11. BEHAVIOUR TOWARDS HIV/AIDS PATIENTS

The following statements below are intended to measure your behaviour towards HIV/AIDS patients. There is no right or wrong response to any of these statements but you just need to be as honest as possible when answering.

Please read each of the following statements and indicate, on the answer sheet by placing an [X], the response that best fits your feelings about the statement. For example, if you agree with a certain statement, place an [X] in the space provided.

Please evaluate each statement by using the following keys:

1 = SD (Strongly disagree) (SD)

2 = D (Disagree) (D)

3 = UC (Undecided) (U)

4 = A (Agree) (A)

5 = SA (Strongly agree) (SA)

11.1 I attend to HIV/AIDS patients as quickly as possible.

1	2	3	4	5
---	---	---	---	---

11.2 I attend to HIV/AIDS patients whenever they need my services.

1	2	3	4	5
---	---	---	---	---

11.3 I attend to HIV/AIDS patients with love, care and passion.

1	2	3	4	5
---	---	---	---	---

11.4 I talk to HIV/AIDS patients to obtain more information in order to understand them and offer them the appropriate care and treatment.

1	2	3	4	5
---	---	---	---	---

- | | | | | | |
|---|---|---|---|---|---|
| 11.5 I seek help from my colleagues and superiors when caring and treating an HIV/AIDS patient. | 1 | 2 | 3 | 4 | 5 |
| 11.6 I treat the HIV/AIDS patient the same way I treat any other patient. | 1 | 2 | 3 | 4 | 5 |
| 11.7 I usually counsel the HIV/AIDS patients under my care. | 1 | 2 | 3 | 4 | 5 |
| 11.8 I assist and help the HIV/AIDS patients to the best of my ability. | 1 | 2 | 3 | 4 | 5 |
| 5.10 I handle the HIV/AIDS patients without any discrimination or hatred. | 1 | 2 | 3 | 4 | 5 |

THANK YOU SO MUCH FOR COMPLETING THE QUESTIONNAIRE

Annexure C: The Informed Consent for participants

**STELLENBOSCH UNIVERSITY
 CONSENT TO PARTICIPATE IN RESEARCH**

**“KNOWLEDGE, ATTITUDES, PRACTICE AND BEHAVIOUR OF NURSES
 CARING FOR HIV/AIDS PATIENTS AT PUBLIC HOSPITALS IN THE
 TSHWANE METROPOLITAN AREA”**

You are asked to participate in a research study conducted by Mr Omari Shabani who is studying for MPHIL 2010 in HIV/AIDS Management at the Africa Center for HIV/AIDS Management at Stellenbosch University. This is an Assignment Presented in Partial Fulfilment of the Requirements for the Degree of Master of Philosophy (HIV/AIDS Management) at Stellenbosch University. You were selected as a possible participant in this study because of the crucial role that nurses play in the care of HIV/AIDS patients and your role in the community at large.

1. Purpose of the Study

The main purpose (aim) of this study is to establish how knowledge, attitudes, practice and behaviour influence nurses' care for HIV/AIDS patients in public hospitals in the Tshwane Metropolitan area. This knowledge is necessary in order to provide suggestions to empower and upskill nurses to enable them and the hospitals to take care of HIV/AIDS patients effectively and efficiently in the Tshwane Metropolitan area in particular, and in South Africa in general.

2. Procedures

You are kindly requested to participate in this study by answering all the questions (individually and no consultations or discussions with colleagues or anyone else) and return the questionnaire within one day. Please answer the questions by following the instruction at the top of the set of questions on the particular variable (Knowledge, Attitudes, Practice and Behaviour). Please do not write your name on the questionnaire. This study is completely anonymous and all the information will be treated as strictly confidential.

The success of this study depends entirely on your contribution. This is to say that you are asked and encouraged to be as sincere and honest as possible when answering the questions.

Note that this is neither a test, nor an exam and none's job or position will be jeopardised by the answers provided for this study.

3. Potential Risks and Discomforts

As far as this study is concerned, the researcher has neither seen, nor foreseen any risk, whatsoever involved in or during the study.

4. Potential Benefits to Subjects and/or to Society

The findings of this study could be used to draw up new policies at national, provincial and local levels of government and to develop new training programmes for nurses. New intervention strategies could be set up to enable nurses not only caring for HIV/AIDS patients at public hospitals, but all nurses caring for HIV/AIDS patients to improve their knowledge, skills, practices and change their attitudes and behaviour towards HIV/AIDS patients in order for them to offer effective and efficient care. This fact would make these patients feel special, loved and worthy. It would also restore in these patients a sense of belonging in the community. This knowledge is necessary in order to provide suggestions to empower and upskill nurses to enable them and the hospitals to take care of HIV/AIDS patients effectively and efficiently in the Tshwane Metropolitan area in particular, and in

South Africa in general.

5. Payment for Participation

As far as this study is concerned, there is no payment for participation.

6. Confidentiality

Any information that is obtained in connection with this study and that could be identified with you will remain confidential and will be disclosed only with your permission or as required by law. Confidentiality will be maintained by means of a secret password for the researcher's personal computer and only the researcher knows the password. All other information will be kept in a safe cupboard and only the researcher will have the key. This information will, however, be made available to the management of the hospital, Stellenbosch University and the Department of Health because of the abovementioned reasons. The findings of this study will under no circumstances be published without your written permission.

7. Participation and Withdrawal

You can choose whether to be part of this study or not. If you volunteer to participate in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you don't wish to answer and still remain in the study. However, it is very important that you answer all the questions for the study to be meaningful and render reliable and valid results.

8. Identification of Investigators

If you have any questions or concerns about the research, please feel free to contact me, Omari Shabani (cell no. 082 410 8734, e-mail: omarishabani@hotmail.com) or my supervisor, Professor JC Augustyn (cell no. 083 626 3081, e-mail: jcda@sun.ac.za).

9. Rights of Research Subjects

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding your rights as a research subject, kindly contact Ms Maléne Fouché [mfouche@sun.ac.za; tel 021 808 4622] at the Division for Research Development.

Signature of Research Subjects or Legal Representative

The information above was described to me (the participant) by Mr Omari Shabani in English and I (the participant) am in command of this language or it was satisfactorily translated to me. I (the participant) was given the opportunity to ask questions and these questions were answered to my satisfaction.

I hereby consent voluntarily to participate in this study and I have been given a copy of this form.

Name of Participant

Name of Legal Representative (if applicable)

Signature of Participant or Legal Representative Date

Signature of the Researcher

I declare that I explained the information divulged in this document to
_____ [name of the subject/participant] and/or [his/her] representative
_____ [name of the representative]. [He/she] was encouraged and
granted ample time to ask me any questions. This conversation was conducted in English
and [no translator was used/this conversation was translated into _____ by
_____].

Signature of Investigator Date

10 Annexure D: Approval from the Research Ethics Committee: Human Research. University of Stellenbosch



UNIVERSITEIT-STELLENBOSCH-UNIVERSITY
Jou kennisvennoot • your knowledge partner

18 November 2010

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Mr O Shabani
Africa Centre for HIV/Aids Management
University of Stellenbosch
STELLENBOSCH
7602

Reference: 432/2010

Mr O Shabani

APPLICATION FOR ETHICAL CLEARANCE

With regards to your application, I would like to inform you that the project, *Knowledge, attitudes, practice and behaviour of nurses caring for HIV/Aids patients at public hospitals in the Tshwane metropolitan Area*, has been approved on condition that:

1. The researcher/s remain within the procedures and protocols indicated in the proposal;
2. The researcher/s stay within the boundaries of applicable national legislation, institutional guidelines, and applicable standards of scientific rigor that are followed within this field of study and that
3. Any substantive changes to this research project should be brought to the attention of the Ethics Committee with a view to obtain ethical clearance for it.
4. The researcher/s implements the suggestions made by the mentioned by the Research Ethics Committee (Human Research) in order to reduce any ethical risks which may arise during the research.

We wish you success with your research activities.

Best regards




MR SF ENGELBRECHT
Secretary: Research Ethics Committee: Human Research (Non-Health)

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