NURSES' UNDERSTANDING AND IMPLEMENTATION OF MENTAL HEALTH SCREENING AMONG HIV INFECTED IN LIMPOPO

by

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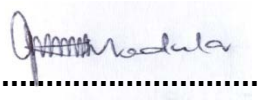
DECLARATION

I declare that **NURSES' UNDERSTANDING AND IMPLEMENTATION OF MENTAL HEALTH SCREENING AMONG HIV INFECTED IN LIMPOPO** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references and that this work has not been submitted before for any other degree at any other institution.



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Mantji Juliah Modula **Date**

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ABSTRACT

The purpose of the study was to explore the understanding and implementation of the guidelines by nurses to detect mental disorders in Human Immunodeficiency Virus (HIV) management in the Limpopo Province, South Africa. The study aimed to recommend measures to strengthen implementation practices. Qualitative, exploratory and descriptive approach was conducted. Non-probability purposive sampling was used to select primary health professional nurses trained in HIV programme at primary health care facilities in Capricorn District. Data were collected through focus groups and in-depth individual interviews approach using the interview guide. The interviews started with focus group discussions as primary method and in-depth individual interviews as follow-up. Interviews were tape recorded and transcribed.

Data were analysed using Creswell's data analysis steps. Four themes emerged from data: understanding of HIV management guidelines; implementation of the guidelines; strengthening of mental health screening and competencies required for mental health screening. The study revealed that the nurses who did not have psychiatric nursing as an additional qualification lacked confidence and skills to conduct mental health screening in HIV positive infected individuals. However, they used their background nursing knowledge to manage clients. They all experienced challenges with information provided in the guidelines to screen for mental health in HIV management.

Based on the results of this study, it was recommended that there should be integration of mental health and HIV and development of practical assessment tools for mental health screening. The study acknowledges the importance of equipping nurses with adequate skills to diagnose altered mental health states among HIV infected individuals.

KEY CONCEPTS

HIV; HIV management guidelines; mental health screening; nursing practice.

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Dedication

The late Sophia and William Modula for providing me with the foundation of education.

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LIST OF ABREVIATIONSB

AIDS	Acquired immune deficiency syndrome
DoH	Department of Health
ART	Antiretroviral therapy
ARVs	Antiretroviral drugs
CD4	T4 helper lymphocyte
CMD	Common mental disorders
HAART	Highly active antiretroviral treatment
HIV	Human immunodeficiency virus
MSE	Mental status examination
NIMART	Nurse-initiated and managed antiretroviral treatment
PHC	Primary health care
PLWHA	People living with HIV and AIDS
PMTCT	Prevention of mother to child transmission
SANC	South African Nursing Council
TB	Tuberculosis
PTSD	Post traumatic stress disorder
WHO	World Health Organization

CHAPTER 1

ORIENTATION TO THE STUDY

1.1 INTRODUCTION

Human immunodeficiency virus/Acquired immune deficiency syndrome (HIV/AIDS) epidemic continues to be a major global health issue and a public health crisis in developing countries including South Africa. It is an extraordinary global epidemic and extremely dynamic, growing and changing in character. More than 35.3 million people were living with HIV in 2013 (World Health Organisation 2014). A growing body of scientific literature emphasises a strong link between HIV/AIDS and mental illness. As a result, there is a strong interrelationship between mental illness and HIV/AIDS due to the effect of neurotoxicity of HIV on the central nervous system (Uys & Middleton 2014:716).

The immune dysfunction associated with HIV infection can lead to brain infections by other organisms and the HIV-1 also appears to cause dementia directly. Severe cognitive changes, particularly confusion, changes in behaviour and sometimes psychoses, are common in the later stage (Townsend 2012:429). In the general population, it was found that South Africa has 16.5% of people suffering from some form of mental disorder. The incidence is up to 43.7% among people living with HIV (Freeman, Nkomo, Kafaar & Kelly 2008:493).

Freeman, Patel, Collins and Bertolote (2005:2) identified five distinct mental health-related issues that would be relevant to HIV/AIDS programmes: cognitive impairment and dementia due to viral infection of the brain; depression and anxiety due to the impact of the infection on the person's life; alcohol and drug use, which contribute to risky behaviour; the psychiatric side-effects of some antiretroviral therapy; and the social difficulties faced as a result of stigma and discrimination. A study by Sall, Salamon, Allgulander and Owe-Larsson (2009:209) done on HIV positive mine workers in South Africa, between 1987-1997, revealed that a third of them had dementia and others manifested abnormal behaviour, psychotic symptoms, secondary mania and

delirium. Screening for substance abuse showed that almost 50% of patients had ongoing abuse of cannabis and alcohol.

1.2 RESEARCH PROBLEM

Research problem is an area of concern in which there is a gap in the knowledge base needed for nursing practice. Research is conducted to generate essential knowledge to address the concern (Grove, Gray & Burns 2015:511).

1.2.1 Background to the problem

Globally, it is estimated that depressive features occur in 15-36% of people suffering from chronic diseases and 60% of people living with HIV (Bongongo, Tumbo & Govender 2013:33). Martin and Kagee's (2011:128) findings suggest that being HIV positive may be a stressor that results in HIV-related post-traumatic stress disorder. According to Jonsson, Davies, Freeman, Joska, Thom, Thompson, Woollett, Furin and Meintjies (2013:157), up to 25% of people living with HIV (PLWHA) in South Africa are thought to suffer from some form of depression during the course of the illness. In South Africa, 26 to 28 of people living with HIV have a common mental disorder which is 12% of the general population

Mall, Sorsdahl, Swartz and Joska (2012:321), indicated that the role of HIV/AIDS care providers in detecting mental disorders in their patients is important to strengthen retention in antiretroviral care programmes as well as adherence to treatment. Research on HIV in relation to mental health is increasing; however, there is a need for good-quality prospective studies to investigate the bidirectional effects of mental illness and HIV on each other (Breuer, Myer, Struthers, & Joska 2011:118).

Limpopo Province is situated in the northern part of South Africa. The province is rated second rural and is divided into five health districts, namely; Capricorn, Vhembe, Mopani, Waterberg and Sekhukhune. Capricorn District comprises of five municipalities, namely; Aganang, Blouberg, Lepelle-Nkumpi, Molemole and Polokwane. The five municipalities consist of 25 local municipalities. The study focused on Capricorn District which has population estimation of 5.2 million. The prevalent health conditions in

Capricorn District are tuberculosis, diabetes mellitus, hypertension, arthritis and HIV (Capricorn District Municipality Final 2013/14 IDP Budget).

Patients who are HIV positive are managed according to clinical guidelines for the management of HIV and AIDS in adults and adolescents (DoH 2010:28). According to the guidelines, routine patient management at each visit which includes the history, physical examination and appropriate investigations, should be done focusing on the following: patient weight; TB screening; clinical HIV staging; opportunistic infection diagnosis and management; CD4 and viral load monitoring; cotrimoxazole prophylaxis; sexually transmitted infections screen; pap smear; immunisations; family planning; mental health screen (screening for depression, anxiety, substance abuse and sleep problems); adherence check; prevent HIV transmission plus reinfection and provide support.

Initiation of antiretroviral therapy (ART) and follow-up care are managed by nurses who have undergone HIV/AIDS training and who are either or not trained in psychiatric nursing. Bongongo et al (2013:34) found that in non-mental health care settings, health professionals may often miss symptoms of common mental diseases. The researcher is a psychiatric lecturer at a nursing college. She has undergone HIV/AIDS training programmes and does clinical accompaniment of students at short and long-term psychiatric hospital and clinics. During clinical teaching of students and harmonisation at the clinics, the researcher observed shortcomings in implementation of HIV management guidelines. It was observed that mental health screening of HIV infected individuals was not done properly by the nurses. The researcher observed a lack of knowledge and skills to assess and record mental health functioning.

1.2.2 Statement of the research problem

The reports about the prevalence of mental disorders among HIV infected patients require a comprehensive HIV/AIDS management programme that includes screening for mental illness. The study on recently diagnosed HIV patients in a hospital-based HIV clinic in South Africa showed the overall prevalence of psychiatric disorders remained high at 56%. Depression and post-traumatic stress disorder (PTSD) were the most prevalent at 34,9% and 14% (Olley, Seedat & Stein 2006:484).

The South African Department of Health (DoH) issued clinical guidelines for the management of HIV and AIDS in adults and adolescents in 2010 to screen for mental health among HIV infected individuals as part of routine patient management. However, the guidelines are very broad and do not provide the specifics on how the screening should be conducted. Currently, the frontline providers are normally professional nurses who are trained in HIV/AIDS management and may not necessarily have a background in psychiatric nursing. In 2013, the South African HIV clinicians' society reported that there has been a 50% increase of common mental diseases (CMD) among HIV positive individuals, despite the guidelines provided (Jonsson et al 2013:160).

The increase in the incidence of common mental diseases among people infected with HIV led to questions about possible challenges related to the interpretation and implementation of guidelines. Horwood, Haskin, Vermaak, Phakathi, Subbaye and Doherty (2010:996) indicate that there has been little empirical evidence to suggest how to effectively implement the guidelines. The researcher identified a need for a systematic study to explore how nurses understand and implement the mental health screening guidelines.

1.3 RESEARCH PURPOSE

The purpose of the study was to explore the understanding and implementation of the guidelines by nurses to detect mental disorders in HIV infected individuals in Limpopo Province, with the aim of recommending measures to strengthen implementation practices.

1.3.1 Research objectives

Objectives of this study were to

- explore nurses' understanding of the guidelines to screen for mental health among HIV infected individuals
- describe the relationship between their understanding of guidelines and implementation practices
- recommend measures to strengthen the implementation practices

1.3.2 Research questions

The following research questions guided the study:

- What are the nurses' understanding of mental health screening guidelines for HIV infected individuals?
- What is the relationship between understanding of guidelines and nurses' implementation practices?

1.4 SIGNIFICANCE OF THE STUDY

The knowledge generated from nurses' understanding and implementation of mental health screening in the management of HIV infected individuals provided HIV programme developers with insights into possibilities of gaps between guidelines and implementation. The study provided evidence on how to strengthen community-based mental health services by developing programmes that built capacity and translated guidelines into tangible practices in order to integrate mental health care services effectively with HIV/AIDS management. The anticipated outcome was the development of measures to strengthen the implementation of guidelines such as development of the screening tool for mental health screening for nurses in all health care facilities. This will help in early detection, referral and reduction of mental illness in people living with HIV. The knowledge might translate into improved adherence of patients to antiretroviral drugs thus reducing opportunistic diseases that may exacerbate or predispose them to mental illness.

1.5 DEFINITIONS OF KEY CONCEPTS

- **Screening**

Screening refers to mass examination of the population in a circumscribed area for the detection of diseases (*Blackwell's Nursing Dictionary* 2014a:543). In the current study, screening refers to performance of a specific test during management of HIV to identify mental disorder.

- **Mental health**

Mental health refers to the state of well-being where the individual is able to identify his own capabilities to cope normal stresses of life period where he/she performs productively and fruitfully and contributes to the community (Uys & Middleton 2014:16).

In this study, mental health refers to a mental status where one is emotionally stable and able to make own decisions.

- **Mental health status**

The term mental health status according to Mental Health Act 17 of 2002 refers to disturbance of the level of mental well-being of an individual as affected by physical, social and psychological factors and which may result in a psychiatric diagnosis as indicated in (South Africa 2002:10). In this study altered mental states refers to the ability in mental functioning where one is emotionally stable to make own decisions.

- **Mental health screening**

The term refers to nurses using the self-reporting questionnaire for screening those patients whom they think may have psychiatric disorder (Uys & Middleton 2014). In this study, mental health screening is assessment of HIV infected individual by professional nurses to detect altered mental states.

- **Mental health screening tools**

Mental health screening tool refers to an assessment document that provides guideline on examination of mental health status (Uys & Middleton 2014). In this study, mental health screening tool refers to the document designed to assess mental health status for the purpose of identifying mental disorder.

- **Human immunodeficiency virus (HIV)**

The term refers to human immunodeficiency virus, a retrovirus that causes AIDS by infecting helper T cells of the immune system (Van Dyk 2013:4). In this study, HIV

means any person who tested HIV positive living with the infection and either on or not on antiretroviral therapy.

- **Professional nurse**

The term refers to a person registered as such in terms of section 31 of Nursing Act 33 of 2005 (South Africa 2005: 6). In this study, professional nurse means a nurse who has undergone HIV management training and who works with HIV infected individuals.

- **Implementation**

The term refers to the process of putting a decision or plan into action effect (*Oxford Dictionary* 2010:753).

In this study, implementation means deliberate action performed to achieve a set goal in management of HIV infected patient.

1.6 RESEARCH METHODOLOGY

The research methodology will be discussed under research design and population.

1.6.1 Research design

A qualitative, explorative and descriptive design was adopted for this study. Qualitative research is a means to explore and understand the meaning of individuals or participants given to a social or human problem (Creswell 2014:4).

The study objectives influenced the choice of the design to explore participants' understanding and implementation of the guidelines. The study was collected in real situation of the participants. Data were collected from professional nurses who take part in managing HIV infected patients at the clinics. The study focused on in-depth description and understanding of participants' interpretation and implementation of guidelines in their complexity. Emphasis was based on essential subjectivity to understand nurses' practice on mental health screening.

Exploratory design is a means to understand and gain insight into a phenomenon under study (De Vos, Strydom, Fouché & Delport 2011:114). The researcher explored nurses' interpretation of guidelines and views regarding their implementation of the guidelines thus providing in-depth understanding of how best nurses can be supported to improve management of HIV in totality. The explorative design was appropriate for this study as it describes the characteristics of a specific population or a specific phenomenon and clarifies the factors that contribute, in some way, to the occurrence of a phenomenon (De Vos et al 2011:115).

Descriptive design focuses on the how and why questions to present a picture of a specific situation, social setting or relationships (De Vos et al 2011:115). The use of descriptive design was justified by the fact that methods or practices that nurses use in the detection of mental illness were systematically described and possible deficiencies that might have led to under diagnosis discovered. The researcher described and presented complete data about the nurses' implementation of DoH guidelines in the management of HIV.

1.6.2 Population

Population is a complete set of persons or objects that possess some common characteristic that is of interest to the researcher (Brink, Van der Walt & Van Rensburg 2012:216). The research population consisted of primary health professional nurses, providing care in Capricorn District, trained in HIV management programme. Professional nurses were relevant as they were directly exposed and implemented the HIV programme.

1.6.3 Sample and sampling methods

According to Polit and Beck (2012:725), sampling refers to the process of selecting a portion of the population to represent the entire population. Non-probability sampling method was proposed in line with qualitative methods. Convenience and purposive sampling strategies were used to select nurses from the five clinics. Purposive sampling refers to selection of participants for a specific purpose based on the judgment of the researcher (Polit & Beck 2012:765).

Participants had special knowledge of the topic and experience about the phenomenon under study (Holloway & Wheeler 2010:138). Purposive sampling was appropriate for this study as it is based on judgment of the researcher to select participants that are representative of the phenomenon under study. Professional nurses who were managing HIV infected populations, who were willing to share their practice in screening mental health, were included in the study. Details are provided in chapter 2.

1.7 RESEARCH SETTING

Research setting refers to location in which study is conducted (Burns, Grove & Gray 2011:40). The study was conducted at Capricorn District clinics. Capricorn District consists of five municipalities, namely; Lepelle-Nkumpi, Polokwane, Aganang, Molemole and Blouberg. The study included four clinics, namely; Mankweng, Mamotshwa, Buite and Molepo. Details are provided in chapter 2.

1.8 DATA COLLECTION

Data collection is the process of gathering information relevant to address a research problem (Polit & Beck 2012:725). For this study, data were collected using semi-structured in-depth individual and focus group interviews. The interviews were conducted until saturation of data was reached (Botma, Greeff, Mulaudzi & Wright 2010:207). Participants were given an opportunity to elaborate on their interpretation of the guidelines, and described how they implement the guidelines in-depth. The voice recorder was used to capture all interview sessions and the scribe assisted to capture data. The advantage of this method is that the interviewer was able to ask certain number of specific open-ended questions, but could also pose additional to probe for more information (Brink et al 2012:158).

Focus group interview is a method where participants meet in a group to talk to one another under the guidance of a facilitator. It helped the researcher to gain insight into the opinions, perceptions and attitudes of participants on a prearranged topic (Joubert & Ehrlich 2010:320). Focus group interviews were appropriate to this study as it allowed the participants to share their thoughts with one another and to generate new ideas about how they implement guidelines and manage their clients (Brink et al 2012:158). Details are provided in chapter 2.

1.8.1 Data collection instrument

The researcher asked in the focus groups and probing questions followed for in-depth examination. The central question was “Tell me about the screening for mental health among HIV infected individuals”. Information from the focus groups was used to develop the interview guide to enrich in-depth interviews.

1.8.2 Data analysis

Data analysis refers to ongoing process which involves continual reflection about the data, asking of analytic questions and writing of memos throughout the study. It is conducted concurrently with gathering data, making interpretations and writing of reports (Creswell 2014:184). Data in qualitative research is non-numerical and is usually in the form of written or audio-taped information, hence was appropriate for this study (Brink et al 2012:193). The researcher analysed data using the data analysis steps described in Creswell (2014:194) and are discussed in chapter 2.

1.9 MEASURES TO ENSURE TRUSTWORTHINESS

Trustworthiness refers to the degrees of confidence qualitative researchers have in their data, assessed using the criteria of credibility, transferability dependability and conformability in the study (Polit & Beck 2012:745). Measures to ensure trustworthiness will be discussed in Chapter 2.

1.10 ETHICAL CONSIDERATIONS

Ethics is concerned with protection of human rights of the subjects who participate in the research study. Human rights are self-determination, privacy, anonymity and confidentiality, fair selection, treatment and protection from discomfort and harm (Grove et al 2015:100).

Participants were informed of the nature and purpose of the study, the procedures to be followed and how the results will be published. Informed consent was sought prior to the commencement of the study and participants were informed about their option to withdraw from the study at any time, if they so wished. The participants were allowed to

ask questions for clarity and subsequently given the opportunity to confirm their participation by a written consent. Details provided in chapter 2.

1.11 SCOPE AND LIMITATIONS

The focus of this study was on the nurses' interpretation and implementation of the guidelines issued by the Department of Health (DoH) on mental health screening among HIV infected individuals. There were limitations to the study such as the sampling techniques; the researcher had little control over who chose to participate in the study. The uniqueness of the screening practices in non-mental health setting may imply that the findings and model may not be transferable to other primary health care environments. However, in a qualitative study, researchers do not specifically seek to generalise the findings but have sought an in-depth understanding of a phenomenon that might prove useful in other situations. The researcher attempted to minimise limitations by authentic descriptions of data.

1.12 OUTLINE OF THE STUDY

Table 1.1 presents an outline of the study.

Table 1.1: Outline of the study

Chapters	Research proposal	Content description
Chapter 1	Research proposal	Describes the problem and its background. The purpose and significance of the study and the research design, methodology and defines the key terms.
Chapter 2	Research methodology	Describes the research design and methodology.
Chapter 3	Data analysis	Presents data analysis and presentation of research findings.
Chapter 4	Integration of findings and literature	Discussion of findings and the literature control.
Chapter 5	Conclusion, limitations and recommendations	Discusses findings, conclusions and makes recommendations based on research findings for further practice and research.

1.13 CONCLUSION

The chapter indicated the problem, purpose and significant of the study, research design and methodology, including population, sample, data collection, analysis and ethical considerations. Key terms were defined and outline of the study given. The next chapter discusses the research design and study methodology.

CHAPTER 2

RESEARCH DESIGN AND METHODOLOGY

2.1 INTRODUCTION

Research methodology refers to the controlled investigation and measurement of the means of gathering and analysing data (LoBiondo-Wood & Haber 2010:581). It focuses on research process and the kind of tools and procedures to be used (Babbie & Mouton 2012:75). This chapter describes the research design and methodology of the study including research setting and population, data collection and analysis, trustworthiness and ethical considerations.

2.2 PURPOSE OF THE STUDY

The purpose of the study was to explore nurses' understanding and implementation of mental health screening among HIV infected individuals in Limpopo Province, with the aim of recommending measures to strengthen implementation practices.

2.3 RESEARCH DESIGN

Research design refers to a plan or blueprint of how to conduct the study. It focuses on the end-product and logic of the study (Babbie & Mouton 2012:74). It maximises control over factors that could interfere with the validity of the findings, guides the planning and implementation so that the purpose and objectives of the study are achieved (Burns, Grove & Gray 2011:253). This research lent itself to a qualitative study which was exploratory and descriptive in nature.

2.3.1 Qualitative research

Qualitative research is a systematic approach used to describe the life experiences and situations and to give meaning to them. It is conducted to understand the unique, dynamic, holistic nature of humans. The method is interpretive, humanistic and naturalistic and is concerned with understanding of the meaning of social interactions of

those involved in the study (Grove et al 2015:20). Qualitative research is a means to explore and understand the meaning of individuals or participants given to a social or human problem (Creswell 2014:4). According to Babbie and Mouton (2012:53), qualitative researchers study human action from the insiders' perspective and describe all understandings rather than the explanation or prediction of human behaviour. Qualitative study was adopted to explore the nurses' understanding and implementation of HIV management guidelines on mental health screening among HIV infected individuals.

Qualitative method enabled the researcher to explore the depth, richness and complexity of nurses' understanding and implementation HIV guidelines on mental health screening (Burns et al 2011:78). The answers provided by qualitative data reflected important evidence with valuable insights about a particular phenomenon or particular situation. Each unique human being attributes meaning to his or her experience from his or her social and historical context (LoBiondo-Wood & Haber 2010:101). Participants described their own understanding and implementation of HIV guidelines with regard to mental health screening.

Qualitative approach assumes that subjectivity is essential for the understanding of participants' human experiences (Brink et al 2012:11). This approach assisted the researcher to make representations based on the nurses' interpretation, understanding, knowledge and implementation of management of HIV guidelines with special focus on mental health screening.

Qualitative research design was appropriate for this study as it can use different data collection instruments to generate detailed information. This study used two common qualitative instruments, namely; focus group discussions and in-depth individual interviews. The researcher asked open-ended questions to elicit views and opinions of participants regarding mental health screening (Creswell 2014:186), the design was exploratory and descriptive.

2.3.2 Exploratory design

Exploratory design is a means to understand and gain insight into a situation, community, individual or phenomenon being studied (De Vos, Strydom, Fouché and Delport 2011:95). Little was known about nurses understanding and implementation of mental health screening among HIV infected individuals. Therefore, it was imperative to explore this phenomenon to understand how best nurses can be supported to improve the management of HIV in totality. The researcher conducted exploratory to become conversant with the general picture of how nurses screen for mental health in management of HIV infected individuals.

Exploratory research helps the researcher to be able to answer the research question of the study. It also provides the researcher with the information needed to achieve the purpose of the study. The findings of the study are the real situation of what is happening (Grove et al 2015:77). Babbie and Mouton (2012:80) state that explorative design is conducted to satisfy the eagerness and the desire for better understanding, to test the feasibility of the researcher to undertake a more extensive study, to develop the methods to be utilised in the study, to derive the central concepts of the study and to determine priorities for future research. The design was appropriate for the study as it allowed the researcher to develop approaches to conduct in-depth interviews with nurses who have practical experience of HIV management and to understand how they assess mental health status of HIV infected clients.

2.3.3 Descriptive

Descriptive design focuses on how and why questions to present a picture of a specific situation, social setting or relationships. It has a basic or applied research in nature (De Vos et al 2011:96). It enables the researcher to discover new meaning, describe what exists and to categorise information in real world setting (Grove et al 2015:33). The purpose of descriptive design is to observe, describe, and to document the aspect of a situation as it naturally occurs (Polit & Beck 2012:505). The use of descriptive design was justified by the fact that methods or practices that nurses used in the detection of mental illness were systematically described and possible deficiencies that might lead to under diagnosis discovered. The researcher described and presented complete data about the nurses' implementation of national guidelines in the management of HIV with

regard to mental health assessment. The researcher formulated central and probing questions to understand the practice of nurses on the guidelines.

2.4 RESEARCH METHODS

Research methodology refers to the controlled investigation and measurement of the means of gathering and analysing data (LoBiondo-Wood & Haber 2010:581). It includes research setting, population and sampling of the study.

2.4.1 Research setting

Research setting refers to location in which the study is conducted (Burns et al 2011:40). Brink et al (2012:59) define research setting as the specific place or places where the data are collected. The study was conducted in a natural setting consistent with the orientations of qualitative research. The study was conducted in a natural, uncontrolled or real-life clinics setting of Mamotshwa, Mankweng, Buite and Molepo in Capricorn District.

Capricorn district is located in the rural areas of Limpopo Province in the northern part of South Africa. It is named after the Tropic of Capricorn which runs through it. It forms part of the 6 health districts in the Province and consists of five local municipalities namely, Aganang, Blouberg, Lepelle-Nkumpi, Molemole and Polokwane. It is surrounded by Mopani, Sekhukhune, Vhembe and Waterberg districts and has population estimation of 5.2 million. The district has 102 clinics facilities. Some of the clinics provide 24 hours service and each clinic has average of 6 to 8 professional nurses. (Capricorn District Municipality: 2015).

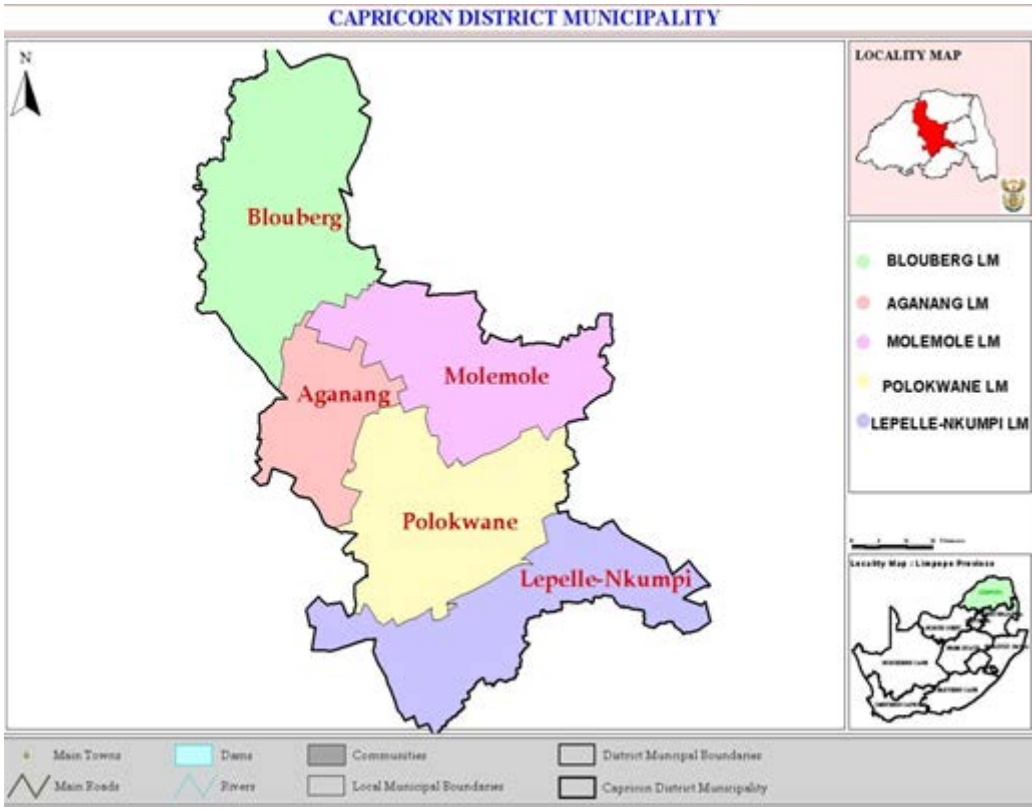

Figure 2.1: Map of Capricorn District Municipality

(Maps. Capricorn District Municipality 2015)

2.4.2 Population

Population is a complete set of persons or objects that possess some common characteristic that is of interest to the researcher (Brink et al 2012:216). In addition, Grove et al (2015:46) refer to population as all elements (individual, objects or substance) that meet certain criteria for inclusion in a study.

The target population comprised of primary health professional nurses providing HIV care in Capricorn District trained in HIV management programmes. Professional nurses were relevant as they were directly exposed and implement the HIV programme. The accessed population for this study was nurses who were on duty during the visit at the clinic.

The inclusion criteria refers to characteristics that the elements or subject of the population must possess to be participants of the study (Grove et al 2015:505).

Eligibility criteria for inclusion in the study were as follows:

- Participants must be professional nurses working at the clinics.
- The nurses directly involved in management of HIV infected individuals including follow up visits.
- Participants must have undergone HIV training programmes.
- Nurses willing to participate.

2.4.3 Sampling

Polit and Beck (2012:275) refer to sampling as the process of selecting a portion of the population to represent the entire population. Brink et al (2012:132) refer to sampling as the process whereby the researcher selects the sample from a population to obtain data that represent the population. A sample is a subset of the population selected for a particular study and the members of a sample are subjects or population (Grove et al 2015:46). Four clinics in Capricorn district were sampled to collect data. In this study, non-probability sampling was used to recruit nurses to participate in the study. Non-probability sampling refers to a situation where not every element of a population has an opportunity to be selected to participate in the study (Grove et al 2015:263). The aim was to recruit participants who were knowledgeable about the phenomenon and would be in a position to provide rich data on HIV management (Brink et al 2012:139). Non-probability sampling was appropriate for the study as it allowed the researcher to interview nurses in their work environment, able to compare and collect rich data about how nurses interpret HIV guidelines and manage HIV infected individuals.

The study utilised convenience and purposive sampling approaches. Convenience sampling refers to a situation in which easy and convenient elements of the population are selected. It helps the researcher to explore to find the approximate of the truth (Maree 2014:176). According to Holloway and Wheeler (2010:141), convenience sampling refers to selection of participants who might be useful for the study and easily accessible. The approach was relevant and appropriate for this study as the nurses are readily available in the clinic and HIV services are rendered daily. The study focused only on professional nurses who were on duty in the HIV section of the health care facility.

Purposive sampling refers to selection of participants for a specific purpose based on the judgment of the researcher. Participants had special knowledge of the topic and experience about the phenomenon under study (Holloway & Wheeler 2010: 138). The researcher selects participants based on their knowledge about the phenomenon or question on hand (Brink et al 2012:140).

Purposive sampling was appropriate to this study as it is based on judgment of the researcher to select participants that are representative of the phenomenon under study. Professional nurses who were involved in management of HIV infected populations and willing to share their understanding, practice and experience on screening mental health were interviewed. According to De Vos et al (2011:391), the method enables the researcher to seek participants and settings where the phenomenon under study most likely occurs. It provides a constant comparison between participants, thus giving the researcher the opportunity to understand the topic under study.

2.4.4 Data collection

Data collection refers to a systematic gathering of information relevant to the research purpose or the specific objectives, questions or hypothesis of a study. Semi-structured or focused interview refers to collection of data with prepared written topic guide with list of areas or questions to be covered with each participant (Polit & Beck 2012:725; Botma et al 2010:207). LoBiondo-Wood and Haber (2010:274) refer to interview guide as a list of questions and probes that are used during the interview. Qualitative researchers use data collection methods such as interviews, conducting focus group, observations, examining written documents, observations and records (Grove et al 2015:82). The researcher conducted focus groups and in-depth individual interviews using the interview guide as data collection method to explore nurses' understanding and implementation of HIV management guidelines on mental health.

In qualitative research, the researcher has prolonged contacts with participants and participants are added to the sample till data saturation. Data saturation occurs when additional sampling yields no additional new information and information that emerges becomes repetitive (LoBiondo-Wood & Haber 2010: 236). Quality of collected data is enhanced by good relationship between the researcher and participants. Relationship is

based on mutual trust and cooperation (De Vos et al 2011:334). Participants were given an opportunity to elaborate on their interpretation of the guidelines, and describe how they implement the guidelines in-depth. The voice recorder was used to capture all interview sessions and field notes of focus groups were written. The advantage of this method is that the interviewer was able to ask certain number of specific open-ended questions, but could also pose additional questions to probe for more information (Brink et al 2012:158).

2.4.5 Focus group method

Focus group interview is a method in which participants meet in a group to talk to one another under the guidance of a facilitator. It helps the researcher to gain insight into the opinions, perceptions and attitudes of participants on a prearranged topic (Joubert & Ehrlich 2010:320). Focus groups are a means of better understanding how people feel or think about an issue, product or service. Participants with common characteristics related to the topic are selected (De Vos et al 2011:360). Focus groups were used to obtain participants' understanding and implementation of HIV management with regard to mental health screening in a permissive and non-threatening setting to help them to express and clarify their views in ways that are less to occur in one-to-one interview (Grove et al 2015:85). This approach was appropriate to this study as it allowed the participants to share their thoughts with one another and to generate new ideas about how they implemented guidelines to manage their clients (Brink et al 2012:158). The method was selected for this study because it provided the researcher the means to probe further in a group setting to obtain in-depth understanding of the management of common mental illnesses among HIV infected individuals.

Professional nurses working at the clinics, trained in HIV programmes and managing HIV clients were grouped to discuss HIV management guidelines. The discussion of the topic helped to stimulate participants who were able to reveal their interpretation and practices regarding screening for mental health among HIV infected individuals. Data from focus groups were used as a baseline to direct the in-depth individual interviews.

2.4.6 Preparing for focus groups interviews

The researcher coordinated the date for a meeting in consultation with area clinic manager and invited the clinic professional nurses to participate in focus groups. A private room at three clinics was selected as a venue for meetings. Refreshments were offered to ensure a relaxed environment and good interaction between the researcher and participants. Three focus groups with 16 participants were conducted.

The purpose of the study and central question were discussed with participants. The researcher informed participants of their rights concerning their participation in the study. All participants signed consent form voluntarily. Two focus groups consisted of six (6) professional nurses and one with four (4) were conducted.

The researcher requested the HIV counsellor to be the scribe for the focus group, and discussed the study with the scribe to make sure that relevant data is captured adequately. The role of the scribe was clarified prior to data collection. A high quality voice recorder with back-up batteries was used to record the sessions.

2.4.7 Facilitation of focus group

The focus groups were conducted in private rooms with ‘do not disturb’ note placed on the doors to avoid disturbances. The researcher and participants were seated in a full view of one another. The scribe was seated in a position to view and hear all participants. Each participant had a coded sticker to ensure anonymity during the recordings of the focus groups. The researcher welcomed participants and introduced herself and the scribe. Participants introduced themselves and the role of scribe was outlined. Ground rules such as use of cell phones and one person to speak at a time were emphasised. Moreover, participants were reminded of their right to withdraw at any stage.

The participants were informed about the voice recorder and its purpose. The recorder was placed in the middle of the group to ensure adequate recording. The researcher explained the purpose of the research and clarified any questions from the participants regarding the study. The researcher gave all participants the opportunity to speak as the group was manageable. The researcher started facilitation of the focus group with

the question, “What is your opinion regarding HIV management in this clinic?” Further open-ended probing questions were asked in order to elicit comprehensive and in-depth data.

2.4.8 Individual in-depth interviews

Brink et al (2012:157) refer to interviews as methods of collecting data in which the researcher obtains responses from participants about the phenomenon in a face-to-face encounter, using telephone call or by electronic means. In this study, the researcher used face-to-face interviews to collect data from 8 professional nurses providing HIV care to explore the understanding and practice of nurses regarding mental health screening among HIV infected individuals.

The interviews were also conducted in a private room to avoid destructions. The semi-structured interview guide was used and probing questions were asked, interviews lasted for 40 to 55 minutes and included prompts to encourage participants to talk freely. Biographic data of participants were collected prior to discussions (see Annexure D section A).

2.5 DATA ANALYSIS

Data analysis refers to the ongoing process which involves continual reflection about the data, asking of analytic questions and writing of memos throughout the study. It is conducted concurrently with gathering data, making interpretations and writing of reports (Creswell 2014:184). Data in qualitative research is non-numerical and is usually in the form of written or audio-taped information, hence was appropriate for this study (Brink et al 2012:193).

The researcher analysed data using the data analysis steps described in Creswell (2014:194) as follows:

- The researcher studied the recordings from both focus groups and individual in-depth interviews and transcribed them.
- The researcher read the written data again to immerse herself in it.

- Sections of the data which seemed to be distinct opinions of participants were highlighted with coloured pens to develop broad topics which were abbreviated into the predetermined codes.
- Coded sections were read again to mark sections that fitted into the topic, cut, pasted and grouped similar data from the quotes and classified them to develop themes, sub-themes and categories. Themes appeared as major headings in the findings.
- A general description of the themes was described by developing emerging meanings into sub-themes and categories from individual quotes.

2.6 TRUSTWORTHINESS

Trustworthiness refers to the degrees of confidence qualitative researchers have in their data, assessed using the criteria of credibility, transferability, dependability and conformability (Polit & Beck 2012:745).

Table 2.1: Trustworthiness of the study

Criteria for trustworthiness	Current research study
Credibility. Credibility refers to confidence in the truth of the data and its interpretations (Polit & Beck 2012:724). Confidence in the truth of the findings can be established through prolonged engagement, persistent observation, triangulation, peer debriefing, member checks, negative case analysis and referral adequacy (Brink et al 2012:172).	Data collection involved only those who signed the consent form. Data collection was recorded. The researcher enhanced credibility by interacting with participants through prolonged interviews and remained in the study field until saturation of data was attained. Multiple methods of data collection were used to increase the understanding of nurses' mental health screening practices. The researcher attempted to deliberately put aside own preconceived ideas and biases.
Dependability. Dependability refers to provision of evidence which will give similar findings if repeated with the same participants in the same context and same methods. (Brink et al 2012: 172).	An audit trail was established to enable the supervisor to scrutinise the research method and the researcher's interpretations. The research design, methods and its implementation, data collection process and procedures used by the researcher in the study were described in detail. Continuous checks were built into data collections process by using participants' verbatim accounts and

Criteria for trustworthiness	Current research study
	using the audio recorder.
Conformability. Conformability refers to the potentiality in congruency in terms of relevance or meaning of data. Collected data must reflect the voice of participants not the researcher perceives to be correct. It provides guarantee that the findings, conclusions and recommendations are supported by collected data and that that there is internal agreement between the researcher`s interpretation and the actual evidence (Brink et al 2012:173).	Confirmability was enhanced by creating an audit trail as described above, comprehensive raw data were compiled and assembled according themes and sub-themes in one column and preliminary analysis was performed to reflect participant's views and actual practice. The researchers also sought confirmation from the participants that the interpretations were true reflections of their understanding and implementation of guidelines.
Transferability. Transferability refers to ability of the research findings to be applied in another context or other participants. The researcher is interested in defining observations than primarily generalising the findings (Brink et al 2012:173).	The premises of qualitative studies include the uniqueness that the findings cannot be generalised. The findings of the study were specific to the Capricorn District. The researcher provided thick descriptions of the research method and data, with the premise that in similar contexts and conditions, the results could be transferable.

2.7 ETHICAL CONSIDERATIONS

Ethics is concerned with protection of human rights of the subjects who participate in the research study. Human rights are self-determination, privacy, anonymity and confidentiality, fair selection, treatment and protection from discomfort and harm (Grove et al 2015:100).

The ethical considerations taken into account during this study are discussed below.

2.7.1 Permission

The researcher obtained permission from the Research Ethics Committee of the Department of Health Studies of the University of South Africa (Annexure G), the Department of Health Limpopo South Africa (Annexures B and E) and from the Senior Manager of the Capricorn District (Annexures C and F).

2.7.2 Informed consent

Informed consent means that participants have adequate information disclosure regarding the research, capable of comprehending the information, and have the power of free choice enabling them voluntarily to give consent to participate in the study (Grove et al 2015:111). The researcher informed the participants of the nature and purpose of the study (Annexure A) and participants made informed consent by signing an agreement to participate.

2.7.3 Self-determination

The rights of participants to self-determination are based on principle of respect for persons, which implies that an individual has the right to decide whether or not to participate in a study, without the risk of penalty or prejudicial treatment. Participants have right to withdraw from the study at any time or to refuse to give information and to ask clarification about the purpose of the study (Brink et al 2012:35). The researcher explained the purpose of the study and informed the participants that they have a right to choose to participate or withdraw at any time. Participants participated voluntarily after informed consent was signed.

2.7.4 Privacy, anonymity and confidentiality

Privacy means to keep to oneself that which is normally not intended to others to observe or analyse. Participants have right to decide when, where, to whom and to what extent to reveal his or her beliefs, behaviour and attitudes (De Vos et al 2011:119). In this study, the researcher ensured privacy by making appointments for date and time that was convenient to participants and private rooms used for individual interviews.

Anonymity means participant's identity cannot be linked even by the researcher with his or her individual responses (LoBiondo-Wood & Haber 2010:252). It is provided when participants' identity, responses and information cannot be linked in any way to the participants (Burns et al 2011:533). In this study, participants were given code numbers for identification instead of names even during report writing.

Confidentiality means that individual identities of subjects will not be linked to information they provide (LoBiondo-Wood & Haber 2010:253). In this study, no unauthorised person was allowed to gain access to data and focus group data was analysed as group data and individuals could not be identified by their responses.

2.7.5 Protection from discomfort and harm

The right of participants from discomfort and harm is based on the principle of beneficence to secure the well-being of the participant be it physical, psychological, emotional, spiritual, economic, social or legal (Brink et al 2012:36). Furthermore, Grove et al (2015:98) encourage the researcher to do good and above all do no harm. The researcher facilitated debriefing by giving participants the opportunity to ask questions or present complaints, they were also monitored for any sign of psychological distress.

2.7.6 Fair selection and treatment

The right of participants' to fair selection and treatment is based on ethical principle of justice which indicates that the researcher must select with fairness the study population in general. The participants should be selected for reasons directly related to research problems (Brink et al 2012:36). In addition, Grove et al (2015:98) add that human subjects should be treated fairly in terms of the benefits and the risks of research.

The researcher selected the participants fairly for reasons directly related to management of HIV infected individuals, not because they were readily available. Participants were treated fairly and agreements made were respected by ensuring dates and time of appointments for data collection.

2.7.7 Scientific integrity of the study

Scientific integrity refers to honest respect practices commonly accepted within the scientific community for proposing, conducting or reporting research (Brink et al 2012:43). The researcher acknowledged all sources and references used in the study as well as all the individuals and institution who contributed to the study. Findings were presented fully and not misrepresented. The researcher adhered to high technical

standards. The measures which the researcher applied to enhance the trustworthiness of the study also served to ensure its scientific integrity.

2.8 CONCLUSION

This chapter discussed research design and methodology, including the setting population, sampling, data collection and analysis. Measures to ensure trustworthiness and ethical considerations of the study were presented. Chapter 3 presents the description of research findings.

CHAPTER 3

PRESENTATION AND DESCRIPTION OF RESEARCH FINDINGS

3.1 INTRODUCTION

This chapter discusses the presentation and description of the research findings. The findings are based on qualitative data collected from nurses working in Capricorn clinics, Limpopo Province. The objectives of the study were to explore nurses' understanding of the guidelines to screen for mental health among HIV infected individuals, describe the relationship between their understanding of guidelines and implementation practices and recommend measures to strengthen the implementation practices.

Two focus groups with six participants and one with four participants were conducted from three clinics. In-depth interviews were collected from the four clinics with two participants per clinic. Data are presented in a discussion of themes, subthemes and categories with verbatim supporting statements.

3.2 DATA ANALYSIS

Data analysis refers to ongoing process which involves continual reflection about the data, asking of analytic questions and writing of memos throughout the study. It is conducted concurrently with gathering data, making interpretations and writing of reports (De Vos et al 2011:409). Data in qualitative research are non-numerical and is usually in the form of written or audio-taped information, hence was appropriate for this study (Brink et al 2012:193).

The interviews started with focus group discussions as primary research method and in-depth interviews as a follow-up. The design allowed participants to share their experiences in a group setting followed by individual time to elaborate on their understanding and practices of mental health screening among HIV infected individuals. The individual interviews were guided by data collected during focus group discussions

(Hess-Biber & Leavy 2010:177). Findings from both interviews were merged and are presented as a whole.

Data analysis followed steps described in Creswell (2014:194) as already described in chapter 2 (2.5).

3.2.1 Participants' biographical information

The biographical data of both focus groups and individual interviews reflect participants' gender, programme towards registered nurse, years of experience as a registered nurse and specialty qualification.

3.2.1.1 Focus group biographical information

A total of 16 nurses participated in the focus group discussions. Five nurses were trained in the R425 programme leading to registration as general nurse, midwifery, community and psychiatric nursing. Four trained in the bridging course and seven in integrated training. The average years of experience as a professional nurse were 35 years. Of the 16 nurses, six were trained in primary health care, two in advanced midwifery, one in intensive and trauma care, and seven had no specialty.

Table 3.1 lists the focus group biographical information.

Table 3.1: Focus group biographical information

Parameter	Focus group 1 (n=4)	Focus group 2 (n=6)	Focus group 3 (n=6)
Gender	Males = 0 Females = 4	Males = 0 Females = 6	Males = 1 Females = 5
Programme towards registered nurse	R425 = 1 Bridging course = 1 Integrated = 2	R425 = 1 Bridging course = 1 Integrated = 4	R425 = 3 Bridging course = 2 Integrated = 1
Years of experience as registered nurse	0-5 years = 1 5-10 years = 0 10-20 years = 0 20-30 years = 1 30-40 years = 2	0-5 years = 0 5-10 years = 1 10-20 years = 1 20-30 years = 1 30-40 years = 3	0-5 years = 1 5-10 years = 1 10-20 years = 1 20-30 years = 2 30-40 years = 1
Specialty qualification	Primary health care = 2 Advanced midwifery = 0 Intensive and trauma = 0 None = 2	Primary health care = 2 Advanced midwifery = 1 Intensive and trauma = 0 None = 3	Primary health care = 2 Advanced midwifery = 1 Intensive and trauma = 1 None = 2

3.2.2.2 Individual biographical information

Eight in-depth individual interviews were conducted in four clinics. Of the eight participants, one was male, five were trained in the R425 programme towards registered nurse, one bridging course and two integrated. Years of experience ranges between four and 35 years. Four participants had specialty qualification in primary health care, one in intensive and trauma care and one in advanced midwifery. Table 3.2 lists the individual biographical information.

Table 3.2: Individual biographical information

Parameter	n=8		
Gender	Males	=	1
	Females	=	7
Programme towards registered nurse	R425	=	5
	Bridging course	=	1
	Integrated	=	2
Years of experience as registered nurse	0-5 years	=	1
	5-10 years	=	2
	10-20 years	=	2
	20-30 years	=	2
	30-40 years	=	1
Specialty qualification	Primary health care	=	4
	Advance midwifery	=	1
	Intensive care and trauma	=	1
	Advance psychiatry	=	0
	None	=	2

3.3 THEMES

A theme is defined as a label that represents a way of describing large quantities of data in a condensed format (LoBiondo-Wood & Haber 2010:128). Themes emerged from data and developed within the categories of the data. The researcher identified the following four themes:

Theme 1: Understanding of HIV management guidelines
Theme 2: Implementation of the guidelines
Theme 3: Strengthening of mental health screening
Theme 4: Competencies required for mental health screening

3.3.1 Theme 1: Understanding of HIV management guidelines

Two subthemes emerged from Theme 1, understanding of HIV management guidelines: the meaning of HIV management guidelines and the meaning of mental health screening of HIV positive infected individuals. The subthemes and categories in Theme 1 are presented in table 3.3.

Table 3.3: Theme 1: Understanding of HIV management guidelines

Theme	Subtheme	Category
Theme 1 Understanding of HIV management guidelines	The meaning of HIV management guidelines	• Broad directives for HIV care • Guidelines as empowerment of nurses • Provisions for proper assessment
	Meaning of mental health screening for HIV positive infected individuals	• Interpretation of mental health assessment guidelines • Resources available for screening

3.3.1.1 Subtheme 1.1: The meaning of HIV management guidelines

The researcher asked probing questions to gain understanding of participant's views on the HIV management guidelines. Data were collected from participants' responses regarding the question: "What is your understanding of HIV management guidelines?" In this subtheme, participants described the guidelines in terms of the protocols to manage and monitor HIV infected individuals.

The following three categories emerged from the subtheme: broad directives for HIV care; guidelines as empowerment of nurses and provisions for proper assessment. Literature refers to the guidelines as the directions or principles presenting current or future rules of policy which may be developed by government agencies at any level (*Blackwell's Nursing Dictionary* 2014b:259).

3.3.1.1.1 Category 1.1.1: Broad directives for HIV care

Data from the participants revealed various interpretations of the HIV guidelines. Participants understood the guidelines to be broad policies that support or direct specific interventions in caring for HIV infected clients, a few described them as ethical obligations regulating their practice on management of HIV and mental health. The following verbatim quotes support the findings:

> "The guidelines are broad and contain information that direct on how to manage HIV clients, my knowledge is that we must give HIV treatment following the steps

in the guidelines. The guidelines indicate clearly which combination of ARV should be given depending on the history and assessments results of a client."

"...HIV is a very complicated condition, you cannot do anything outside of guidelines. We follow directives and standards to provide proper care to all clients."

"I understand that guidelines provide us with information of when HIV positive client is eligible to start on ART and what type of ARV regime to give according to physical and mental readiness of the client."

"I think that the guidelines protect the patients by providing and guiding us to understand ART initiation better to save lives because giving wrong treatment can cause serious problems like losing one's life. We should usually start antiretroviral drugs after investigations."

3.3.1.1.2 Category 1.1.2: Guidelines as empowerment of nurses

The guidelines were understood by the majority of nurses to be empowering and enabling them to practice as independent practitioners to effectively manage HIV. This was more evident for those that felt confident in HIV care. The following verbatim statements support the findings:

"Guidelines empower us to handle HIV infected clients more effectively, thus knowing what to do in each case, even if you did not get the specific training, but just following what is in the manual helps…"

"The HIV management guidelines enable us to manage HIV as independent practitioners, we have been trained on many aspects of HIV."

3.3.1.1.3 Category 1.1.3: Provision for proper assessment

Assessment is a vital aspect in managing any condition, especially HIV. The participants described HIV guidelines as a means to conduct comprehensive, and accurate general assessment. Verbatim statements made by the participants are given below:

"My understanding of the guidelines is that all HIV infected individuals should be assessed in full in order to receive proper care."

"The guidelines provide for thorough assessment of clients, knowing how to conduct an assessment of HIV positive client is very important."

"I understand that HIV guidelines is a document to provide us with information on what to assess and which observations to collect so that we are able to make decision on intervention."

3.3.1.2 Subtheme 1.2: Meaning of mental health screening for HIV positive infected individuals

Participants described their views on HIV management guidelines regarding mental health screening of HIV infected individuals. Two categories emerged from the subtheme: interpretation of mental health assessment guidelines and resources available for screening.

According to the national HIV guidelines (NDoH 2010:32) and 2015 updates, nurses should perform mental health screening to exclude mental health problems such as depression, anxiety, sleep problems and substance abuse which are more common among HIV positive individuals.

3.3.1.2.1 Category 1.2.1: Interpretation of mental health assessment guidelines

Participants described mental health assessment as a necessary process following specific steps in order to identify HIV infected individuals who show symptoms of common mental health problems. Participants had varied understanding of these guidelines as shown below:

"…mental health assessment is an important aspect of overall assessment of HIV positive patients, but it should be completed by nurses who had undergone mental health training programmes on HIV management."

> "My understanding of mental health assessment guidelines is that nurses working with HIV infected individuals should assess all clients not only those who show symptoms of mental illness."

3.3.1.2.2 Category 1.2.2: Resources available for screening

The participants understood that both material and human resources are important to assess mental health status in HIV infected individuals. This seemed to refer mostly to skills and competencies to assess, diagnose and manage HIV infected individuals. They emphasised that mental health screening needs relevant skills to assess and document findings, as indicated below:

> "My understanding of the guidelines is that screening needs a nurse with relevant skills to assess for mental health. A person who is not trained in mental health will have problems in assessing the client, like missing important information about the client."

> "Mental health screening requires knowledge to record information about history of patients and it needs specialised skills. I am not trained in psychiatric nursing so I am not quite sure of mental health but I think the guidelines are straightforward that all HIV positive patients should be assessed for any sign of mental illness, if you know what you are doing."

> "At the moment we only have HIV forms and my understanding is that we must record mental assessment on mental health forms which we do not have "

> "The HIV form has more information on physical assessment than mental health. There is no part on the form on how to handle mental illness…no course on how to deal with mental diagnosis in HIV programmes…there must be mental health tools to guide with follow-ups of HIV patients."

3.3.2 Theme 2: Implementation of the guidelines

In Theme 2, implementation of the guidelines, three subthemes emerged; mental health screening; management of known mental disorders and evaluation of current practices. The subthemes and categories in theme 2 are presented in table 3.4.

Table 3.4: Theme 2: Implementation of the guidelines

Theme	Subtheme	Category
Theme 2 Implementation of the guidelines	Mental health screening	• Self-efficacy in holistic HIV management • General assessment of HIV positive infected individuals • Diagnosis of altered mental health status • Awareness of referral chain • Monitoring of clients
	Management of known mental disorders	• Counselling of clients • Integration of services • Family involvement
	Evaluation of current practices	• Adequacy of information on mental health screening • Human resources issues • Specialised psychiatric skills

3.3.2.1 Subtheme 2.1: Mental health screening

Participants explained their role and current practices in the implementation of HIV management guidelines. Five categories emerged from the data, namely; self-efficacy in holistic HIV management; general assessment of HIV infected individuals; diagnosis of altered mental health status; awareness of referral chain and monitoring of clients. Alteration of mental status (confusion, dementia, or impaired cognition) is common in people living with HIV and AIDS (PLWHA) because of the effects of HIV on the brain. Impaired cognition is also caused by opportunistic infections like atypical Mycobacterium tuberculosis infection, fungal and viral infections (Van Dyk 2013:411).

3.3.2.1.1 Category 2.1.1: Self-efficacy in holistic HIV management

Management of HIV inclusive of mental health is complex. It requires appropriate confidence, knowledge and skills. Participants showed different levels of self-efficacy regarding holistic HIV management, especially with mental health assessment. Some were confident in their skills, others appeared less confident. They also agreed that independent mental health screening can only be done well by nurses with psychiatric nursing background. The following verbatim quotes illustrate the findings:

> "Mental health screening needs competent assessment skills and I know that those trained in psychiatry can assess properly because they were trained but I am not well covered on that."

> "There is only one question on screening and if you are not trained on mental health assessment you will not be able to screen. It only allows for nurses with psychiatric nursing, those who are not trained face challenges."

> "Mental health assessment requires specific and specialised knowledge, and as a psychiatric nurse, I am able to perform it because of my basic mental health training."

3.3.2.1.2 Category 2.1.2: General assessment of HIV infected individuals

Participants described how they conducted general assessments for HIV infected individuals, by following guidelines and also using their own background knowledge. The following quotes support the findings:

> "We assess clients by taking history on all aspects of health, and if need be, we observe for any symptoms of mental disorder. In case we need more information which the client cannot provide, we involve the family if available. We also assess vital observation like nutritional status, TB screening."

> "We practice according to the guidelines, all positive infected individuals are assessed by checking for CD4 count, and if it is less than 500 and at WHO stage 3, should be initiated HAART (Highly Active Antiretroviral Therapy). We check client's viral load at three months period and we assess for physical general health of the client like vital signs, weight …"

> "Once the patient explains that he sometimes hears voices after taking treatment, we assess for the effects of the drugs, especially efavirenz on mental functioning, it is not easy to find a true picture because most of clients hide their status."

3.3.2.1.3 Category 2.1.3: Diagnosis of altered mental status

Assessment is usually followed by formulation of a nursing diagnosis. Participants were aware of symptoms that suggest altered mental states. However, some verbalised the challenge of ensuring the accurate nursing diagnosis for proper referral. Others,

especially those with psychiatric nursing background seemed confident. The tool was also cited as not being helpful in assessment of the mental health status of the clients. Most of them seemed to rely on their nursing knowledge to arrive at a diagnosis. The quotes below support the findings:

> "I do not use any specific guide to diagnose mental status, but by assessing the patient through leading questions like, 'How do you feel after being diagnosed with HIV infection? I also observe mood, aggressiveness, silence or relevancy of the answer."

> "The way the client will be responding will show you that the client has mental problems. The tool is not very helpful, if you have query you can involve other members of the team by referring the clients."

> "I interview the client and observe for poor eye contact like the person appeared to be busy or loss of memory. I usually ask few questions and those with mental health problems most of the time tend to be impatient."

> "We usually diagnose clients with mental problems through conversations with the clients like client mixing of ideas or observations; for example, poor hygiene, appearance and attire…and refer to hospital because we do not have psychiatric nurses."

> "I usually check the client for adherence and compliance to the treatment because most of the time they default treatment due to mental disturbances. Once the client does not comply with ARVs, I start to suspect mental problems by asking the family history to confirm and refer appropriately."

3.3.2.1.4 Category 2.1.4: Awareness of referral chain

Accurate diagnosis of altered mental state necessitates referral to specialist for further management. Nurses need to know clinical criteria for referral as well as available specialists. Participants indicated how they implement the referral chain of clients who present with common mental disorders. They all agreed that clients with mental health problems should be referred to hospital for further management. The following quotes support the findings:

"Psychiatric nurses always have to assess the clients with suspected anxiety, depression or substance abuse. They make the final decision as to the next level of management and who to refer the client to."

"…usually the HIV infected individuals who present with swinging of mood, neglected personal hygiene responding irrelevantly; we refer them to the hospital for psychiatric assessment because our scope of practice does not allow us to prescribe anything for mental problems. As a psychiatric nurse, I assess all clients who need referral."

3.3.2.1.5 Category 2.1.5: Monitoring of clients

Monitoring of clients is important in HIV management. Participants indicated that the guidelines are clear regarding how and what they need to monitor. Issues such as adherence, drug toxicity, and general well-being of the clients were cited as very important. The following statements support the findings:

"I make sure that I do thorough assessment of the clients on monthly return visits because at the initiation phase of ARVs, clients experience lots of unusual problems like dizziness, fatigue, anxiety or depression which can cause the clients to stop the treatment because of lack of information."

"…the thing is that all HIV infected individuals on ARVs we check them for proper medication regimen to ensure continuous treatment. We encourage the clients to bring empty medication containers or remaining treatment so that we count if days and medication give us same number to ensure compliance."

"…we fill in HIV follow-up record or caudex to guide and help us to with information to evaluate how the client is coping with HIV infection. We screen for physical health CD4 count, viral load and opportunistic diseases like TB."

"The clients with mental disorders are diagnosed and treated at hospital level by psychologists and doctors then we continue to monitor the progress like side effects of drugs."

3.3.2.2 Subtheme 2.2: Management of known mental disorders

Literature refers to mental disorder as description of an emotional or behavioural disturbance that is characterised by symptoms that may have their origin in genetic, psychological or psychosocial factors (*Blackwell's Nursing Dictionary* 2014c:365, Uys & Middleton 2014:107). Participants responded to the question: "What is your role in the management of known common mental disorders among HIV infected individuals?" Three categories emerged from the data, namely; counselling of clients; integration of services; and family involvement. Participants expressed various views on management of clients diagnosed with mental disorders.

3.3.2.2.1 Category 2.2.1: Counselling of clients

In ensuring holistic care to all clients, participants believed that counselling plays a significant role in managing HIV infected clients. They indicated that they provide counselling on ARVs, adherence and self-management to improve their physical and mental health. They expressed themselves as follows:

> "We counsel HIV clients with problems concerning social, physical and emotional problems, adherence and ARV treatment to prevent opportunistic infections."

> "We do counselling before and after initiation of ART on healthy life style like exercising, nutritional status, ARVs adherence and drug side effects. In fact, counselling is continuous because we make sure that we support them to live with HIV."

> "The guidelines stipulate that nurses have to counsel all HIV infected individuals with every visit on adherence and compliance including ARVs side effects, prevention of spreading HIV and use of condoms. Most of the time we refer clients to counsellors like social workers and lay counsellors due to time…"

> "Follow-up is done on a monthly basis. We record counselling sessions on both HIV forms especially the outcome so that we are able to make follow-up."

3.3.2.2.2 Category 2.2.2: Integration of services

Participants explained that services for HIV require a multidisciplinary team. They described how their services are integrated with other health team members to provide holistic care to HIV positive infected individuals who are already on treatment or those who had mental illness and were recently found to be HIV positive. The following verbatim statements from data support the findings:

> "The home-based care workers working at our clinic draw a programme for home visit to monitor their progress and report back to nurses; it helps in a way as we cannot do it ourselves due to the shortage."

> "At the moment we are allocated two re-engineering community workers who are still on training and function above the level of home-based care workers. They are trained to identify health problems in the community like mental ill health and refer the clients to the clinic nurses for further management."

> "Psychologist and social workers do outreach at our clinic. The psychologist comes monthly to see patients and to monitor how we are managing. It is not ideal but currently, that is all we have."

3.3.2.2.3 Category 2.2.3: Family involvement

Participants stated that the management of mental disorders requires involvement of family members to support the client. The guidelines indicated that HIV is a family disease which affects the family members and requires active involvement (NDoH 2010:32). The findings are supported by the following verbatim quotes:

> "We involve the family to help us with the history of the client and to provide support by accompanying the client to the hospital for further assessment and diagnosis."

> "Clients with mental disorder find it difficult to understand and follow instructions with regard to medication and follow up dates. We normally ask the family member to accompany the client to the clinic and they assist us, especially with information on how the patient is coping."

> "Some of the families do not support the clients and are not actively involved because they do not respond if we ask them to help. We usually try our best to involve them but it sometimes becomes a failure".

3.3.2.3 Subtheme 2.3: Evaluation of current practices

Participants were granted the opportunity to evaluate their practices. They evaluated both personal and other resources in the implementation of the guidelines with regard to mental health assessment. Three categories emerged from the subtheme: adequacy of information on mental health screening; human resources issues and specialised psychiatric skills.

3.3.2.3.1 Category 2.3.1: Adequacy of information on mental health screening

Participants stated some barriers and challenges in the implementation of the guidelines and further indicated that HIV implementation form provides limited information on mental health screening and mostly, it is the tick of the boxes on the form. The following verbatim statements from data support the findings:

> "Insufficient information on the HIV caudex affects current practice. We are not really screening for mental health as far as the HIV form is concerned because they channel us as to what information to collect and record…"

> "The guidelines do not go in detail about mental health screening. It is difficult to assess mental disorder in HIV especially if the client does not give full history…I sometimes use general knowledge because I am not trained in psychiatry."

> "…the thing is that mental health is not taken serious in HIV because the guidelines instruct us to screen for it but recording is not saying anything about it. I meant that after observing altered mental status, we do not have anywhere to record on HIV form, so myself I just refer the client to the hospital without thorough mental health assessment."

> "The problem is that even if you managed to identify mental problem from a client, the HIV form and clients consultation register do not provide us with space

to record the findings but we write the mental report on part of clinical notes on HIV records."

3.3.2.3.2 Category 2.3.2: Human resources issues

In this category, participants acknowledged the impact of staff shortage on effective management of HIV and mental health screening. They described that their facilities experience shortage of staff and operate on minimal professional nurses which make it difficult for them to have time to assess mental health status of clients. The verbatim quotes below indicate participants' views as follows:

> "Currently we are working on minimal staff and most of the time we are overloaded with work. We do not have enough time to screen for mental health to all HIV infected individuals and this affects the quality of our work".

> "Mental health assessment is a long procedure with lots of documentation that need manpower and extra time to diagnose the clients and it is not easy to do it because the HIV form is not assessing the client mentally. We are running lot of programmes in our facility, and we are trying our best to cover every aspect of the HIV form."

> "Our facility is experiencing patient overload with shortage of staff. It is very difficult to assess clients properly to be able to make proper diagnosis, especially because most of HIV clients come to clinics very late and they need special treatment which makes it difficult for us…"

> "We are experiencing long patient waiting times and it is not easy to assess all clients thoroughly because we want to finish the line to make sure that everyone is provided with medication before going home as you can see outside that the line is long."

3.3.2.3.3 Category 2.3.3: Specialised psychiatric skills

Participants emphasised the need for good psychiatric skills especially communication skills to be able to interact with HIV clients and to maintain mental health. They stated the importance of therapeutic relation and good communication skills to encourage the

client to express their feelings. They expressed their needs with the following supporting quotations:

> "….It is now that I realised that I need good listening and observational skills to be able to assess mental health to manage HIV patients effectively. These skills are emphasised in psychiatric nursing"

> "I believe that there must be a good relationship between the nurse and the clients and the nurse must have knowledge to instil trust in the clients through good listening skills and empathy."

3.3.3 Theme 3: Strengthening of mental health screening

Participants made recommendations on how to improve and promote mental health in the management of HIV. They indicated strategies to strengthen mental health issues in the management of HIV clients. In Theme 3, strengthening of mental health screening, two subthemes emerged. The subthemes and categories in Theme 3 are presented in Table 3.5.

Table 3.5: Theme 3: Strengthening of mental health screening

Theme	Subtheme	Category
Theme 3 Strengthening of mental health screening	Continuous professional development	• Integration of HIV and mental health training • Nursing reference centre
	Improving efficiency of HIV and mental health care	• Strengthening multidisciplinary team • Need for mental health screening tool • Monitoring and evaluation of implementation

3.3.3.1 Subtheme 3.1: Continuous professional development

In the subtheme "continuous professional development", participants made recommendations to improve the service in order to strengthen the implementation of HIV guidelines. Two categories emerged from the subtheme, namely; integration of HIV and mental health training and nursing reference centre.

3.3.3.1.1 Category 3.1.1: Integration of HIV and mental health training

Participants explained that integration of HIV and mental health training is important in providing nurses with knowledge and skills to assess mental health in order to manage HIV effectively. The following statements below support the findings:

> "Integration of HIV and mental health will guide and provide us with knowledge of how to screen and manage HIV positive infected individuals with mental disorders including drug interactions."

> "I think that most of primary health care services are integrated and this enables us to be able to implement them effectively…but I have realised that mental health is not well integrated with HIV and TB."

> "I am of the opinion that mental health in our services needs to be taken into consideration so that clients and patients are treated in totality. HIV is well integrated to maternal, child, sexually transmitted diseases and reproductive health services but the gap is with mental health. Mental health integration will provide us with clear information like a tool to screen for mental health."

3.3.3.1.2 Category 3.1.2: Nursing reference centre

Nursing practice needs continuous updates in knowledge in order to provide quality care. Participants expressed that they provide different programmes at the clinics which require continuous referencing. They recommended establishment of a nursing referencing centre to update their knowledge. Participants indicated that they only had information about 2010 guidelines and not sure of new updates on HIV guidelines. The quotes below support the findings:

> "Nursing practice needs continuous updating and referencing, especially on management of conditions and drugs. It is not possible for us to attend workshops always because of shortage and work overload but having all updates can help us to implement new changes."

> "HIV is updated continuously and it is very important that we access recent knowledge on management…first-hand information to all nurses regarding HIV programmes will benefit the service because it is very difficult to share information because most of the time we work in single consultation rooms."

3.3.3.2 Subtheme 3.2: Improving efficiency of HIV and mental health care

In the subtheme "improving efficiency of HIV and mental health care," participants recommended measures to improve patient outcomes especially in relation to mental health care. Three categories emerged from the subtheme: strengthening multidisciplinary team; need for mental health screening tool; monitoring and evaluation of implementation.

3.3.3.2.1 Category 3.2.1: Strengthening multidisciplinary team

Participants maintained that the current multidisciplinary team needs some improvement. They recommended the need for all multidisciplinary professionals approach to be actively involved in the diagnosis process and management of HIV at primary health care level. The verbatim quotes below support the findings:

> "There is a need to strengthen the multidisciplinary team in HIV programmes. Psychiatrists should be involved in planning of HIV programmes to be able to provide clear information on integration of mental health and HIV management guidelines. I think that increasing the number of psychiatric nurses in HIV programmes will help us to implement the guidelines effectively."

> "Mental health specialists need to be part of HIV programmes planning so that HIV training includes mental health training. I think TB specialists are involved in planning of HIV programmes because it is well integrated with HIV programmes and that assist in diagnosing TB and I hope in future it will be the same with mental health."

> "Involvement of mental health specialists like psychologists and social workers during HIV updates will improve psychiatric skills to manage and improve mental health services…that will improve the way we manage HIV especially those who are not trained like myself."

> "Most of the time lay counsellors help us with clients and adherence. They should be given specialised, basic training on mental health to be able to detect mental health problems and to refer to professional nurses."

3.3.3.2.2 Category 3.2.2: Need for mental health screening tool

Participants explained that implementation of guidelines on mental health screening requires a tool with relevant information to adequately assess mental health. Participants showed lack of skills to assess mental health and expressed the need for screening tool or questionnaire. The quotes below support their views:

> "…mental health score or screening tool should be developed to screen for mental health…add more information on mental health screening including signs and symptoms on the caudex."

> "There must be mental health questionnaires like TB assessment tools which help to make follow-ups, refer or doing investigations. The questionnaires must be able to help those who are not even trained in psychiatry to be able to make follow-up by making a tick on the answer."

> "In most of our services we use algorithm which help us what to follow when screening for conditions. I think that is also important if mental health screening can utilise such document separate from mental health document used by psyche nurses which needs more time to complete for their clients. The algorithm can include questions like family mental health history, substance abuse, facial expression and attitudes which will help us to screen."

3.3.3.2.3 Category 3.3.3: Monitoring and evaluation of implementation

Participants recommended that monitoring and evaluation of the HIV management guidelines implementation is important to improve information required with regard to mental health. They indicated the need to improve the current monitoring and evaluation system because it is not sufficient to address mental health issues in HIV management. The quotes below support the findings:

"I suggest that we must be continuously checked on how we implement all aspects of HIV guidelines and how we cope so that we are assisted to provide the set standards with regard to mental health assessment to ensure safety of clients."

"I know that we compile reports and provide statistics of HIV clients to evaluate the programme but that is not enough because not all required assessment of HIV clients is done like mental health which needs serious attention to ensure proper care. I think there must be a way of closing a gap we experience when it comes to mental health screening."

"Sometimes we are visited by HIV specialist to monitor how we run the programmes and to assist us with information regarding HIV, especially initiation of ART but I think that they can make more time to elaborate more on mental health screening."

"I think that for us to be able to improve mental health screening in HIV clients, periodic observation of how the guidelines are implemented is very important. The available HIV specialist must assist us to ensure that mental health is a priority in HIV and they should provide us with relevant information to assess mental health in HIV."

3.3.4 Theme 4: Competencies required for mental health screening

In theme 4, competencies required for mental health screening, one subtheme emerged: nurses' interpersonal skills. The subtheme and categories in theme 4 are presented in table 3.6.

Table 3.6: Theme 4: Competencies required for mental health screening

Theme	Subtheme	Category
Theme 4 Competencies required for mental health screening	Nurses' interpersonal skills	• Assessment skills • Observational skills • Interviewing skills • Nursing diagnostic skills

3.3.4.1 Subtheme 4.1: Nurses' skills

Participants acknowledged the significance of interpersonal skills and knowledge to enable them to provide quality care to HIV infected individuals and be competent in managing common mental disorders. These techniques may require considerable training and practice before being incorporated by the nurses to become part of a personal communication style (Uys & Middleton 2014:177). Four categories emerged from the subtheme, namely; assessment skills, observational skills, interviewing skills and nursing diagnostic skills**.**

3.3.4.1.1 Category 4.1.1: Assessment skills

Participants recognised and suggested the need for nurses to be competent in basic assessment skills to diagnose mental health disorders in HIV infected individuals. Accurate and comprehensive assessment skills are necessary to obtain full personal, social medical and family history to identify the presence of basic vulnerabilities (Uys & Middleton 2014:197). The following quotations represent the views expressed:

> "…as a nurse, it is very important to possess good nursing assessment skills that will enable you to provide quality care. Thorough assessment of a clients' mental functional will enable us to identify mental disorder and intervention will be done."

> "I think that assessment of mental status is quite different from the physical one we trained as professional nurse. This one needs specific skills to diagnose mental functioning level and that needs to be taught."

3.3.4.1.2 Category 4.1.2: Observational skills

Participants recognised the need to be competent in observing common mental disorders during nurse-client interaction, to provide proper treatment. They explained that observation skills are imperative and enable nurses to identify altered mental status. The importance of observation in mental health screening as a nursing competence is confirmed by Uys and Middleton (2014:205). The following quotes from data describe the importance of observational skills:

> "I think that the professional nurse should be able to realise the signs of mental problems by observing the client for mental disorders like mannerism. Observation is very important in diagnosing mental ill health, monitoring and general management of patients."

> "I think that the most important mental health screening skill is observation of the behaviour displayed by HIV clients. I believe that nurses should learn adequate observation skills."

3.3.4.1.3 Category 4.1.3: Interviewing skills

Participants recognised that is it important for nurses to be competent in interviewing clients as it is part of valuable communication skill in nurse-patient interactions. This category is illustrated by the following quotes:

> "Diagnosing altered mental status needs vigilant conversations with the client. As a nurse, I must be competent to interview the client. For example, when the client is presenting mixed ideas in his speech, I must be able to maintain therapeutic nurse-client relationship so that he can able to provide me with full information to help with diagnosis."

> "Probing and leading skills during history taking will help to collect information about the client's psychiatric history especially because most of clients with mental disorders do not admit to having signs of mental illness like depressed client who normally shows no interest in giving information."

3.3.4.1.4 Category 4.1.4: Nursing diagnostic skills

Participants described the specific knowledge required to implement HIV guidelines with regard to mental health. Participants showed that knowledge of signs and symptoms of mental illness is important to help with diagnosis and treatment of HIV infected individuals. The following verbatim statements from data support the findings:

> "My opinion is that nurses should be trained in mental health issues because I have realised that, sometimes people do not die because they are HIV positive, but because they are mentally affected and were not able to adhere to treatment

and we failed to identify mental problems like depression due to lack of knowledge."

"I think that if all nurses who are trained in HIV programmes have sufficient knowledge on side effects of drugs and mental health screening, services will be run effectively because all clients will be treated in totality."

3.4 EMERGING RELEVANT OUTLIERS

There are comments stated only once by one participant but were important to the study. The comments were made on the question, "Tell me your views regarding other factors that influence the implementation of the guidelines".

Quotation 1: Attitude of the client

Participant described the type of attitude displayed by the client during their conversation where the client does not give full mental history which will assist to screen mental health. Insufficient history is perceived to mislead the signs and symptoms of mental disorder.

"Some of the clients show negative attitude and reluctant to give full history of mental problems to the nurse. The response that they give during history taking does not help with regard to mental health, especially depression."

Quotation 2: Attitude of the nurse towards mental health

Participant described the negative attitude of the nurse toward HIV infected patients influencing the implementation of the guidelines.

"Some of the nurses show no interest in mental health due to lack of knowledge of psychiatric basic skills to assess mental health, especially if the nurse shows negative attitudes and no interest to help the clients especially if you find that the clients answer irrelevantly."

3.5 CONCLUSION

This chapter presented the themes from data concerning mental health screening in HIV, such as; understanding of HIV management guidelines, knowledge of mental health screening, implementation of the guidelines, strengthening of mental health screening, and nurses' skills required for screening mental ill health. The themes, subthemes and categories that emerged from the quotes of participants were presented to describe nurses' understanding and implementation of guidelines on mental health screening in HIV.

Chapter 4 presents integration of literature with the findings of the study.

CHAPTER 4

FINDINGS AND COMPARISON WITH THE LITERATURE

4.1 INTRODUCTION

Chapter 3 presented data analysis of both focus groups and individual interviews. The themes, subthemes and categories that emerged from both interviews were presented in tables and substantiated by verbatim quotations statements. This chapter discusses the findings of the study in comparison with literature. In qualitative research report presentation, literature is integrated in the findings of the study as literature control rather than prior to data collection. The researcher presents the literature as the basis for contrasting and comparing findings of the study (Brink, Van der Walt & Van Rensburg 2012:99; Creswell 2014:29-30).

4.2 DATA ANALYSIS

In this study, data were analysed following Creswell (2014:194) steps to develop themes, subthemes and categories from collected data.

The following four themes emerged from focus groups and individuals interviews:

- Understanding of HIV management guidelines
- Implementation of the guidelines
- Strengthening of mental health screening
- Competencies required for mental health screening

4.3 DISCUSSIONS OF THE FINDINGS AND COMPARISON WITH THE LITERATURE

4.3.1 Theme 1: Understanding of HIV management guidelines

In theme 1: Understanding of HIV management guidelines, two subthemes emerged from the data.

Participants described their understanding of HIV management guidelines for the management of HIV infected individuals. Two subthemes, the meaning of HIV management guidelines and meaning of mental health screening of HIV positive were discussed and described by participants, data from both focus groups and in-depth individual interviews were merged and analysed.

4.3.1.1 Subtheme 1.1: The meaning of HIV management guidelines

Literature refers to guidelines as directions or principles presenting current or future rules of policy that can be developed by government or by the convening of expert panels (*Blackwell's Nurses Dictionary* 2014b:260). The national consolidated guidelines for the prevention of mother to child transmission and the management of HIV in children, adolescents and adults provides guidelines on how to respond to and to manage HIV infected individuals (NDoH 2015:1). However, the consolidated guidelines of 2015 show no modifications or new provisions regarding mental health screening (NDoH 2015).

The nurses subjectively shared their views and understanding of what the guidelines meant to them as professionals and their work with HIV infected individuals. The impression gained from findings show that nurses interpreted these guidelines as professionals using their nursing background and experience. There were various interpretations of the HIV guidelines. Participants understood the guidelines as strategies to manage HIV infected clients effectively, while others described them as ethical obligations regulating their practice on management of HIV and mental health. Therefore, participants' explanations do concur with the broader definition of the concept from the literature.

The policies relating to HIV and AIDS have risen out of the necessity to develop a more organised, formalised response to the increasing epidemic (Du Toit 2008:6). Countries in sub-Saharan Africa empowered nurses by training them to initiate antiretroviral therapy (ART) and manage HIV at PHC level. In South Africa, the Nurse-Initiated and Managed Antiretroviral Treatment (NIMART) programme was found to be well accepted by nurses than physicians and other health service staff, giving evidence that if nurses are provided with well formulated guidelines, they would provide effective holistic HIV management (Georgeu, Colvin, Lewin, Fairall, Bachmann, Uebel, Zwarestein, Draper &

Bateman 2012). The nurses also described the HIV management guidelines as empowerment of nurses, information on initiation of antiretroviral drugs (ARVs) and as provision for proper assessment. They felt empowered to effectively manage HIV as they had a framework to guide their practice.

In support of the findings, reports from small-scale Task Shifting Demonstration Project confirm that task shifting of ART initiation from doctors to nurses in Namibia is an appropriate, indeed vital, initiative in continuing the scale-up of life-saving HIV clinical services (O'Malley, Asrat, Sharma, Hamunime, Stephanus, Brandt, Ali, Kaindjee-Tjituka, Natanael, Gweshe, Feldacker & Shihepo 2014:9).

It was further revealed that HIV management guidelines provided them with broad questions to respond to in order to complete assessment of HIV clients and others. The assessment of HIV infected individuals includes mental health, physical health and social functioning, these components are interdependent and complex (Uys & Middleton 2014:16). The various forms of understanding of these guidelines provided insights into how they would implement them.

The guidelines play an important role in ensuring uniformity of treatment. They also provide nurses with standards and procedures regarding criteria for initiation of ART and regime, follow-up visits, adherence, patient management and diagnosis and management of side-effects.

The findings give evidence that it is very crucial for the nurses to have similar understandings regarding the guidelines to be able to implement HIV programmes effectively.

4.3.1.2 Subtheme 1.2: Meaning of mental health screening for HIV positive infected individuals

Literature defines mental health screening as a form of mental health assessment which requires nurses to use self-reporting questionnaires to screen for clients suspected of mental disorders (Uys & Middleton 2014:16, 39). Screening for mental health among HIV clients is given reasonable consideration in the SA health policy. This is due to a growing burden of mental, neurological, and substance use (MNS) disorders, which are

often co-morbid with HIV and other chronic diseases, indicating that considerable mental health treatment gap exists, especially in rural areas (Jack, Wagner, Petersen, Thom, Newton, Stein, Kahn, Tollman & Hofman 2014:8).

Nurses understood mental health assessment in HIV infected individuals as necessary steps that must be carried in order to identify clients who show symptoms of common mental health problems associated with HIV. Uys and Middleton (2014:198) describe mental health assessment as the conversational spaces in which the nurse and the client create a version of client's life history through the process of asking and answering. It involves the description of the patient's appearance, speech, actions, and thoughts during the interview. It was evident from findings that mental health screening requires specific skills; hence their interpretation of what was required indicated the need for specific knowledge and skills to be able to assess and record mental status accurately. Nurses also lamented the lack a resourceful screening tool to support their understanding of what they needed to do. Presently, they indicated that they use the HIV form that does not provide them with the necessary or adequate information to know how to identify CMD. They acknowledged the importance of mental health screening among HIV positive individuals, and they were also aware of side-effects of drugs such as hallucinations that needed to be assessed.

South African nurses providing HIV care at clinics attended training and workshops on: Highly Active Antiretroviral Treatment (HAART); Prevention of Mother-To-Child Transmission (PMTCT); HIV Counselling and Testing (HCT); Nurse Initiated and Managed Antiretroviral Treatment (NIMART), Provider-Initiated HIV Counselling and Testing (PICT) and Integrated Management of Childhood Illnesses (IMCI) (own experience). However, there is no specific training on mental health and HIV to guide nurses on how to screen for mental health. Thus, nurses believed that mental health screening is not given prominence in professional development programmes, and this led them to concentrate only on the physical assessments and furthermore rely on their nursing background to screen for mental health, when the need arose. The need for specialised skills in mental health screening is confirmed in (Mall et al 2012:322; Do et al 2014:8). However, Singh, Sunpath, John, Eastham and Gouden (2008:285) recommend the development of screening tests that can be administered by health care providers without specialised skills. The shortage of resources complicates the challenges of mental health screening further.

4.3.2 Theme 2: Implementation of the guidelines

Literature describes implementation as the process of converting the divisional human resources into action, which is accomplished through the practical application of the programmes (Booyens 2008:21).

In theme 2: Implementation of the guidelines, three subthemes emerged from collected data. Participants described their practices and experiences with regard to mental health screening. The three subthemes, namely; mental health screening practices, management of known mental disorders and evaluation of implementation of the guidelines emerged from data.

4.3.2.1 Subtheme 2.1: Mental health screening

As mentioned previously, nurses seemed to have low self-efficacy related to mental health screening. However, they mostly used their nursing background and their knowledge of the nursing process to assess mental health status of patients. Participants indicated that the guidelines on mental health screening do not provide adequate information that would enable them, to perform a comprehensive mental health assessment. They indicated that they assess clients for auditory hallucinations, nutritional status, TB and physical health. Lack of confidence in mental health screening is also reported in Chorwe-Sungani, Shangase and Chilinda (2014:38) that in Malawi, general nurses do not feel confident to care for HIV clients with mental health problems because they feel incompetent and uncomfortable. Bongongo et al (2013:34) agree that screening for mental health in non-mental health care facilities could be a challenging task. Lewis, Dirksen, Heitkemper, Bucher and Camera (2011:91) showed that in situations of uncertainty, nurses tend to draw on knowledge, theories and expertise to become therapeutic partners with people in their care. However, their level of training or preparation will to some extent influence their self-confidence (Ahmed & Elmasri 2011:861).

- **Diagnosis and referral**

To be able to diagnose altered mental states, nurses need to perform a complete and comprehensive assessment. If they do not feel confident in the assessment and they

believe that the HIV form is inadequate, a correct nursing diagnosis would be a challenge. This was confirmed by Chorwe-Sungani et al (2013:36) who revealed that lack of nurses' ability to diagnose CMD in people living with HIV and AIDS (PLWHA) influences the type of care and treatment that is provided to them. Participants explained that they somewhat diagnose altered mental health status on the basis of signs and symptoms displayed by HIV infected individuals. As indicated previously, they are diagnosing metal illness using their nursing background knowledge, especially with hallucinations as that is simple to identify. According to the guidelines (NDoH 2010:32), depression is a common cause of loss of weight, failure to adhere and loss to follow-up on ART treatment. Nevertheless, the guidelines do not specify how to perform mental health screen in HIV infected individuals yet indicate that psychiatric diagnosis should be managed according to national standard treatment guidelines.

In the case of referral of clients, nurses explained that they are aware of their scope of practice and the referral chain. The scope of practice (R2598) regulates activities and actions that nurses can undertake. Therefore, nurses should always practice interdisciplinary care within their scope and make referral whenever a need arises (South African Nursing Council 2001). They indicated that prior to referral, clients are assessed by psychiatric nurses who must make a final diagnosis and decision to refer to appropriate health care provider. As with other complex conditions, HIV combined with common mental disorders would require intervention from a range of interdisciplinary specialists such as social workers, psychiatrists or psychologists (Van Dyk 2013:500).

The specific cases that would require referral are normally clients who present with mood swings, neglected personal hygiene and thought disturbance. Therefore, management of HIV clients presented with CMD needs establishment of explicit referral policies and procedures including training to guide health care providers (Kaaya, Eustache, Lapidos-Salaiz, Musisi, Psaros & Wissow 2013:4). The findings correspond to a large extent with the description in the literature that there is inconsistency and no clear standards guiding nurses to refer clients with mental health problems to other institutions.

- **Monitoring of clients**

According to the guidelines, monitoring of HIV clients need to include ART side-effects and adherence, CD4 and viral load, symptoms of opportunistic infections, type of support the client receives, mental health disorder and tuberculosis (NDoH 2010:26). Nurses explained that they monitor HIV clients who visit clinics for follow-up and review their progress to prevent and reduce opportunistic infections. They monitor patients for ARVs adverse effects such as fatigue, depression and anxiety, progress of mental medications, medication compliance, viral load and CD4 count including TB screening. There were some inconsistencies in implementation of guidelines. Some nurses explained that they included depression and anxiety in their assessments, while others indicated that they monitored only the physical health.

The importance of monitoring and documenting is furthermore acknowledged by Hattingh, Dreyer and Roos (2013:192), who confirmed that in order for the DoH to maintain accurate statistics of health outcomes and results of medical interventions for HIV infected individuals, facilities need to keep accurate health records of clients.

4.3.2.2 Subtheme 2.2: Management of known mental disorder

Nurses explained that they routinely manage patients with known mental disorders such as anxiety and depression, sleep problems and substance abuse. Their actions were largely guided by the policies. These were patients who were under the care of physicians.

- **Counselling and integration of services**

In literature, counselling is defined as a facilitative process in which the counsellor makes use of specific skills to enable clients to develop self-knowledge, self-acceptance, emotional growth and personal resources (Van Dyk 2013:495). The guidelines indicate that all HIV clients should receive counselling as part of psychosocial care and support and report the feedback to the HIV team (NDoH 2015:39). In ensuring holistic care to all clients, participants believed that counselling plays a significant role in managing patients diagnosed with mental illness. Participants indicated that they occasionally provided supportive counselling with regard to social, physical and

emotional problems, ARVs adherence, ARVs side-effects, healthy lifestyle, nutritional status and prevention of spreading of HIV infection. Some clients were referred to social workers and lay counsellors who work together with nurses if a need arose. The nurses' current practices are supported by other researchers who posit that counselling provide patients with information regarding the developmental phases and progression of HIV infection, ARVs, advice on behaviour to prevent HIV re-infection and spread of the disease to save life (Nzimande 2008:58; Jonsson et al 2013:159). However, it is more important if counselling further encourages relationship with the client than just imparting information and giving of advice (Kagee 2012:426). Staff overload at facilities might reduce counselling to information giving sessions.

Participants explained that their services are integrated with other health team members to provide effective care. They described that the clinics are allocated home-based care and re-engineering community workers who provide home visits to HIV positive, TB and mentally ill clients to monitor their progress, identify health problems. There was an outreach psychologist who visited clinics on a monthly basis. However, they indicated that mental health in PHC is not fully integrated with other health services as they did not receive feedback on the progress report of referred clients from other services such as psychologists and social workers. This study found that there are some shortcomings in integration of mental health care in the broader management of HIV.

In South Africa, the national mental health policy framework strategic plan 2013-2020 transformed mental health services to be integrated to other services and to ensure its accessibility and early detection and intervention of CMD in HIV management (NDoH 2013:3, Kaaya et al 2013:5). Mwape, Sikwese, Kapungwe, Mwanza, Fisher, Lund and Cooper (2010) support the findings and posit that integrating of CMD with other services is important in provision of holistic care.

- **Family involvement**

One of the family health responsibilities is to promote mental health of family members by providing opportunities to achieve satisfaction, sense of personal identity and self-worth (Hattingh et al 2013:217). Nurses indicated that management of mental disorders requires involvement of family members as support system for HIV infected individuals, although some of the family members do not participate actively in the care of the

clients. They indicated that they involved the family members to provide history of the client in cases where the clients were unable to do so. They believed that the family could play a significant role in referral of clients to the hospital; supervision of clients on taking of medication; and ensuring that the clients visit the clinic for follow-up care, including observing the behaviour and managing common mental problems. The guidelines confirm that need and indicate that HIV is a family disease which affects the members and need their active participation to support the client (NDoH 2010:32).

Similarly, Forouzan, Shushtari, Sajjadi, Salimi and Dejman (2013:5) found that family members plays important role in social support of the PLWHA than network members. However, Olagunju, Adeyemi, Ogbolu and Campbell (2012:2196) revealed that PLWHA with CMD are at risk of not receiving support from the family.

4.3.2.3 Subtheme 2.3: Evaluation of current practices

Implementation of guidelines requires clear detailed information of the clients to guide the intervention. Participants experienced some challenges in the implementation of the guidelines. They indicated that information provided on mental health screening is limited to guide them on mental health screening. Adequate information on history and background of the clients' mental health is one of the most important tools that assist to diagnose, plan, and implement care for the clients.

The participants acknowledged the challenge of staff shortage and its impact on effective management of HIV and mental health screening. They emphasised that the PHC facilities operate on minimal staff and that increased their workload. They highlighted that mental health screening process required more time for history taking and that it was not easy to perform.

Singh et al (2008:285) acknowledge that low and middle income countries experience lack of skilled mental health specialists to provide effective management of CMD among HIV infected individuals. In addition, Uebel, Guise, Georgeu, Colvin and Lewin (2013) indicate that nurses are expected to manage a high number of HIV patients and the shortage of resources affects mental health care. However, Olagunju et al (2012:2196) found that task-shifting to train nurses to provide treatment for CMD was found to be effective to overcome shortage of highly trained mental professionals.

4.3.3 Theme 3: Strengthening of mental health screening

Analysis and interpretation of data show recommendations forwarded by participants to strengthen mental health screening among HIV infected individuals. The two subthemes, continuous professional development and improving efficiency of HIV and mental health care emerged.

4.3.3.1 Subtheme 3.1: Continuous professional development

Nurses made recommendations on how to improve the service by acquiring more knowledge in specific areas, to be able to strengthen mental health screening. Moreover, they focused on integration of HIV and mental health training.

As mentioned previously, nurses explained that in South Africa, most of PHC programmes are integrated to meet the health needs of the clients. Therefore, mental health training needs to be integrated well with HIV programme to equip nurses with knowledge and skills to assess mental health status. (Kaaya et al 2013:4; Petersen & Lund 2011:756; Do et al 2014:8) confirm that implementing integrated HIV and mental health in PHC is a legitimate part of HIV care which reduces costs. PHC staff in South African HIV/ARV clinics needs to be trained to close the treatment gap and be able to manage clients on psychiatric treatment and to prevent side effects. This integration would enable cross pollination of knowledge and skills.

Nurses recommended continuous updates through the establishment of a nursing referencing centre to support up-to-date knowledge in order to provide quality care. For example, other participants indicated that they only had information about 2010 guidelines and that they were not sure of new updates of 2015 guidelines. Similarly, Viswanathan, Keating, Deans, Hematti, Prockop, Stroncek, Stacey, Weiss, Masson and Rao (2014:1165) support the suggestion of providing referencing material in that it ensures consistency in care practices.

4.3.3.2 Subtheme 3.2: Improving efficiency of HIV and mental health care

Management of complex patients such as HIV and mental health screening requires effective collaboration between professional caregivers such as nurses, doctors, clinical psychologists, occupational therapists, recreational therapists, social workers, pharmacist, dietician and chaplain (Uys & Middleton 2014:39; Townsend 2012:230).

Participants maintained that improvement in the current approach of multidisciplinary team will improve effectiveness of HIV programmes and ensure that all health needs of HIV infected individuals are adequately addressed. In addition, Kaaya et al (2013:4) confirm that multidisciplinary approach to integrated HIV and mental health is a core enabler to the development of joint procedures to manage HIV clients.

Nurses recommended the development of a comprehensive mental health assessment tool that can be used by all nurse practitioners caring for HIV positive infected individuals. This finding is confirmed by Kneisl and Trigoboff (2009:217) who indicate that the health facilities need a mental health assessment tool that determines the present mental status of a client and provides a basis for further management. This tool need to be user friendly to non-specialists in primary health care (Joska & Sorsdahl 2012:422; Aidala, Havens, Mellins, Dodds, Whetten, Martin & Ko 2004:364).

With reference to monitoring and evaluation, nurses recommended that the current monitoring and evaluation practices needed to be strengthened to provide concrete evidence on the outcomes of the health care interventions. They suggested that continuous supervision and evaluation of their practice should be conducted by HIV specialists on a regular basis. This could mean a system that will assist and support nurses to screen for mental health to provide total quality care to HIV positive infected individuals.

4.3.4 Theme 4: Competencies required for mental health screening

In theme 4: Competencies required for mental health screening, nurses' interpersonal skills required subtheme emerged from data. Participants described the competencies required to enable nurses to effectively perform mental health screening.

4.3.4.1 Subtheme 4.1: Nurses' interpersonal skills

Interpersonal skills refer to particular techniques of communication that the nurse uses with the client or patient. The technique may require considerable discipline and practice before being integrated by the nurse to become part of a personal communication style (Uys & Middleton 2014:177). Participants indicated that interpersonal skills play a significant role in mental health screening. Therefore, there must be a concerted effort to introduce or inculcate them early in nurses' training. Assessment skills, observational skills and interview skills were regarded as of utmost importance.

Participants recommended that nurses are to be highly competent in basic assessment, observational and interviewing skills to be able to diagnose mental health problems in HIV infected individuals. They believed that mental health screening is different from ordinary assessments, and that screening for mental health required adequate supportive resources and skills. Nurses recognised the need to inculcate these skills early on in the profession to enable utilisation of ones' senses to note verbal and non-verbal clues and to collect relevant and adequate information during nurse-client interactions.

4.4 EMERGING RELEVANT OUTLIERS

The following outliers were identified in chapter 3, they did not fit in with any of the subthemes and categories. These outliers were about attitudes of both clients and nurses.

One participant indicated that sometimes clients have a non-disclosure attitude where the client does not give full mental history to assist in screening for mental health. The nurse expressed that clients could be a barrier to their own health by not providing adequate information needed to diagnose or refer them for treatment. Maritz (2010:65) found that the attitudes of clients for not taking responsibility of giving full information about their own mental health hamper effective HIV follow-up care. The attitude of the clients plays a major role to express their feelings which enable proper care and treatment. Shisana, Rehle, Simbayi, Zuma, Jooste, Zungu, Labadarios and Onoya (2014:119) state that social stigma and discrimination towards people living with HIV

and AIDS (PLWHA) remains a major barrier to effective disclosure, prevention, treatment and support.

Nurses' attitude was also cited as a barrier to effective communication and interaction with clients. The findings are supported by Chorwe-Sungani et al (2013:111), who revealed that therapeutic interactions when dealing with mental health disorders in PLWHA depends on nurses' willingness and commitment to care. These findings show that it is important for nurses to ensure that clients are treated with respect to maintain trust and confidence.

4.5 CONCLUSION

This chapter discussed and presented relevant literature supporting the themes, subthemes and categories that emerged from data analysis of descriptions expressed by the participants. The chapter further highlighted how nurses interpreted and implemented the guidelines, challenges as well as recommendations to strengthen nursing practice in the management of mental health among HIV infected individuals.

Chapter 5 presents the discussion, conclusions drawn, limitations that occurred during the study and recommendations made.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

This chapter presents conclusions and recommendations emerging from findings. It also presents contributions made by the study and limitations.

5.2 RESEARCH METHOD AND DESIGN

The qualitative, explorative descriptive design was used by the researcher to explore the understanding and implementation of the guidelines by nurses to detect mental disorder in HIV infected individuals.

The study was guided by the following research questions:

- What is nurses' understanding of mental screening guidelines for HIV infected individuals?
- What is the relationship between understanding of guidelines and nurses' implementation practices?

The population of the study included primary health care professional nurses providing HIV care in the Capricorn District trained in HIV management programmes. Twenty four (24) professional nurses were interviewed in both focus and in-depth individual interviews. Data from both focus and individuals interviews were analysed jointly.

5.3 FINDINGS AND CONCLUSIONS

Based on the findings presented in chapter 3 and the literature review in chapter 4, it is concluded that nurses at primary health care who are involved in management of HIV infected individuals believed that guidelines were protocols or frameworks that guided their practice. However, there was also a subtle understanding that these guidelines were given, unchangeable, or rigid frameworks that they needed to follow without

interrogating them. The results showed that nurses' implementation of the guidelines was mainly guided by the information on the HIV form. The findings revealed lack of specialised skills by nurses to perform mental health screening. Thus, mental health assessment was not done routinely to monitor mental health among HIV infected individuals as expected. Lack of standard policy to guide nurses on referral criteria of clients with mental disorders led to inconsistency in diagnosis and management of altered mental health status among HIV infected individuals.

5.3.1 Understanding of HIV management guidelines

Participants created own images and understanding of guidelines. They used reasoning processes and judgments of what mental health screening was all about, as they sought answers to have a clear understanding of HIV management. However, they tended to see guidelines as absolutes, hence they described them as questions to respond which implied a sort of 'prescription'. Some nurses conceptualised/understood guidelines as strategies to manage HIV clients effectively while others described them as ethical obligations regulating their practice on management of HIV and mental health. Others viewed them as just a framework, which indicated acceptance that interpretation was depended on them.

It is evident that nurses had various interpretations. However, they were found to be accurate and seemed to converge with the provisions of the guidelines. This study assumes that effective implementation of guidelines will be influenced by the degree of nurses' understanding/interpretations.

5.3.2 Implementation of the guidelines

Nurses often ground their practices within analysis of their own values to manage any condition they are facing. Some were confident in their skills while others, especially those who were not trained in psychiatric nursing, felt that mental health screening required specialised psychiatric nursing skills. The nurses' response to general HIV management was appropriate, since they were all trained in NIMART. However, the mental health screening was found to be challenging due to lack of knowledge and skills. Nurses demonstrated limited knowledge and skills to diagnose common mental disorders in HIV infected individuals.

In the absence of sufficient information and tools to create accurate definitions of mental health screening, nurses relied mostly on their background knowledge and experiences as professionals to treat HIV infected individuals. Their nursing knowledge provided a framework to enable them to perform general assessment of clients during follow-ups. They assessed clients for vital observations, CD4 count, TB screening, adherence and compliance. These were all routine functions.

The workload, feeling of uncertainty in screening for mental health left them with one option: to do general physical assessments and monitor for side effects of efavirenz such as hallucinations. This meant that the holistic assessment was not done adequately. Nurses with psychiatric nursing background seemed to navigate the territory better by utilising their background knowledge to perform mental health screening to HIV infected individuals. The guidelines are meant to provide adequate information to guide nurses on mental health screening to ensure consistency in care for HIV infected individuals.

The study found a gap in the integration of mental health in Primary health care facilities, especially HIV management. Nurses confirmed that such integration would equip them with knowledge and skills to assess mental health status. They acknowledged the importance of frequent and timeous updates, and seemed to think that a nursing referencing centre would address that need by ensuring consistency with mental screening.

Nurses recognised the need to strengthen existing collaborations with other team members to facilitate identification of mental disorders. They also realised the need for adequate observational and interview skills in nurse-client interaction to enable nurses to diagnose altered mental states and manage existing clients with mental disorders.

5.3.3 Relationship between understanding of guidelines and implementation practices

The study showed various interpretations of the guidelines by nurses. There was some form of associations between understanding of the guidelines and implementation practices. Those who viewed guidelines as a framework that required own interpretation and possessed required competencies offered consistent interpretations that translated

to confidence in the implementation practices. Nurses with basic psychiatric training showed better understanding of the guidelines and utilised their knowledge to perform mental health screening. Conversely, those without basic psychiatric nursing showed low self-efficacy to perform mental health screening, they relied on their basic nursing knowledge to assess for the known side effect of drugs. Their ability to identify common mental health problems relied on the signs and symptoms displayed by the clients. However, they tried to make sense of the guidelines and provided the necessary care. This could signal a need to equip all NIMART trained nurses with basic mental health screening skills.

Much as it was not the focus of this study, the findings revealed some association between experience, age and implementation of the guidelines. Nurses who had more than 15 years' experience as professional nurses, with no basic psychiatric nursing, showed good interpretation and implementation of the guidelines with regard to mental health screening. This finding showed that even in the absence of supportive environment in terms of training and tools necessary to screen for mental health, nursing experience supported the care provided. It is evident that management of clients was consistent with nurses' interpretation and understanding of guidelines.

The study believes that if mental health screening could be integrated with HIV management, the level of confidence and quality of care to HIV patients would be enhanced.

5.4 LIMITATIONS OF THE STUDY

The following limitations were noted: the study was conducted in one district in the Limpopo province, these findings cannot be generalised. However, in qualitative research, researchers do not specifically seek to generalise the findings. In this study, the researcher sought an understanding that might prove useful or differ in other situations.

Participants were only nurses trained in NIMART, inclusion of other nurse practitioners might have yielded richer data.

5.5 RECOMMENDATIONS

Based on the findings of the study, recommendations for further research, training of nurses and policy related issues are made.

5.5.1 Further research

The study recommends further research on the following areas:

- Barriers to integration of HIV and mental health care in PHC.
- Studies that evaluate the functioning of multidisciplinary teams aiming at building frameworks or models for effective and sustainable collaborations to manage common mental health disorders among HIV infected individuals.

5.5.2 Training of nurses

The study revealed that the majority of nurses at the primary health care level lacked critical competencies to perform mental health screening. Holistic HIV management was not done effectively thus the study recommends the following:

- Practical assessment tools on HIV and mental health should be developed to assist nurses to detect mental health problems among HIV infected individuals.
- Continuous professional training and updates of clinic nurses on mental health and HIV.
- Building upon the nurses' experiences to design appropriate professional training programmes on mental health screening.

5.5.3 Policy related issues

The results of the study revealed the need for development of HIV mental health screening tool and algorithm document that will be utilised by all nurses involved in the management of HIV. Multidisciplinary team work between psychiatrists, nurses, HIV specialists and psychologists can play major role to develop an assessment tool specifically for HIV and mental health screening. The tool will provide clear guidance

and save time to overloaded nurses. The tool will also provide nurses with adequate information of what to record regarding mental health.

Therefore, it is recommended that:

- Psychiatric nurses be involved in designing and planning of HIV programmes.
- Protocols and procedures be developed on referral of HIV infected individuals for further management.
- HIV and mental health be integrated in the training of primary health care nurses.
- Training needs analysis need to be undertaken prior to the introduction of policies. The professionals charged with implementation of policies must be adequately trained. Policy makers are to develop a plan to implement and monitor outcomes of guidelines, and identify key stakeholders that would support the implementation processes.

5.6 CONTRIBUTIONS OF THE STUDY

The knowledge generated from nurses' understanding and implementation of mental health screening in the management of HIV infected individuals will provide HIV programme developers with insight into gaps in implementation of the guidelines. It showed the challenges that the nurses experience with regard to mental health screening. The anticipated outcome was the development of measures to strengthen the implementation of guidelines such as development of the screening tool for mental health screening for nurses in primary health care facilities. This will help in early detection, referral, management and reduction of common mental disorders in people living with HIV. The knowledge might translate into improved adherence of patients to antiretroviral drugs thus reducing opportunistic diseases that may exacerbate or predispose them to mental illness.

5.7 CONCLUSION

Interpretation of new knowledge requires adequate intellectual and physical resources to process new information and to arrive at an understanding. The importance of mental health screening among HIV infected individuals is acknowledged. Mental health screening may be a new phenomenon to nurses, especially those without psychiatric

nursing background. However, they had a wealth of experience to create meanings and implement guidelines to the best of their ability, within their scope of practice. Where there was uncertainty, they referred the patients for further management. The study confirmed that the majority of nurses lacked confidence and skills to conduct mental health screening in HIV infected individuals. Subsequently, this would lead to mental health functioning not adequately addressed. However, their experience, reasoning processes and judgment of HIV infected patients provided the opportunity to seek answers and make clinical decisions.

It could be concluded that this study's objectives were achieved and sufficient data generated to answer the research questions.

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ANNEXURES

ANNEXURE A: INFORMED CONSENT TO PARTICIPATE IN THE STUDY

Dear research participant: Consent to participate in a study.

I am an MA (Cur) student with university of South Africa (UNISA). I am conducting a research study on nurses' understanding and implementation of mental health screening among HIV infected individuals. You are invited to participate in the study project.

The purpose of the study is to explore the understanding and implementation of the guidelines by nurses to detect mental disorders in HIV infected individuals in Limpopo Province. The proposed study will help the researcher to learn more about your practice as professional nurses providing primary health care to HIV positive people at the clinics. The information obtained will result in knowledge to propose recommendations to HIV programme developers with evidence on how to strengthen community based mental health services.

You are invited and requested to participate in individual and group interview which will approximately last for one hour in your facility. You will be required to answer questions during the interview session. Interviews will be audio taped for the purpose of later transcriptions by the researcher. The proposal has received written approval from Research Ethics Committee of UNISA, Limpopo health authorities as well as clinics management where the study will be done.

Your participation will be voluntary, there are no risks involved and no compensation or material benefit will be given. All information will be treated as confidential and your anonymity is protected.

Should you wish to contact the researcher for any enquiries, questions or comments do not hesitate to contact researcher at cell no. 082 973 3006.

I……hereby voluntarily give consent to participate in the study.

Participant`s signature…… Date…….

Witness 'signature …….. Date…….

Investigator's signature …….. Date…….

ANNEXURE B: LETTER SEEKING PERMISSION FROM DEPARTMENT OF HEALTH, LIMPOPO

Enquiries: Modula MJ
Cell no.: 082 973 3006
015 267 1114

P O BOX 30
FAUNA PARK
0787
14 may 2015

The Head of Department
Department of Health
Private Bag X9302
Polokwane
0700

Sir/Madam

Request for permission to conduct a research study

I am a student at University of South Africa (UNISA) currently registered for MA CUR. I hereby request to conduct a research study at Capricorn District at the following clinics: Buite, Dikgale, Nobody, Molepo and Mankweng.

My research supervisor is Doctor Ramukumba MM Department of Health Studies UNISA. The title of the study is: **Nurses' understanding and implementation of mental health screening among HIV infected individuals in Limpopo.**

The purpose of the study is to explore the understanding and implementation of the guidelines by nurses to detect mental disorders in HIV infected individuals in Limpopo Province,. The expected outcome of this study is aimed at providing inputs to HIV programme developers with evidence on how to strengthen community based mental

health services by developing programmes that will integrate mental health care services with HIV/AIDS.

The research participants will be primary health professional nurses providing care in Capricorn district trained in HIV programme. Participants will fill in consent form. Data will be collected using one-to-one unstructured interviews which will be conducted until saturation of data is reached. The voice recorder will be used to capture all interview sessions and field notes will be written to capture the verbal and non-verbal data.

Attached are research proposal and the ethical clearance certificate from UNISA.

Hoping the request will be considered.

Kind Regards

Modula Mantji Juliah
Student number 3062 854 7

ANNEXURE C: LETTER SEEKING PERMISSION FROM CAPRICORN DISTRICT CLINICS

Enquiries: Modula MJ
Cell no.: 082 973 3006
015 267 1114

P O BOX 30
FAUNA PARK
0787
01 June 2015

Senior manager Capricorn District
Private Bag X9530
Polokwane
0700

Sir/ Madam

I hereby request permission to conduct research study at the following clinics: Buite, Dikgale, Nobody, Molepo and Mankweng. The title of the study is: **Nurses' understanding and implementation of mental health screening among HIV infected individuals in Limpopo.**

I am a student at University of South Africa (UNISA) currently registered for MA CUR. My supervisor is Doctor Ramukumba M, Department of Health Studies at UNISA.

Attached is the ethical clearance certificate from UNISA, approval letter from Department of Health, Limpopo Province.

The benefit of the study to the clinics is that the summary of the findings will be used to formulate guidelines for screening of mental health in HIV infected populations.

Hoping the request will be considered.

Kind regards

Modula Mantji Juliah

ANNEXURE D: INTERVIEW GUIDE

SECTION A: BIOGRAPHIC DATA

1. Gender: _____
2. Age: _____
3. Marital status: _____
4. HIV or Training Course: _____
5. Which programme did you complete towards registration as a Registered Nurse?

_____

6. Years of experience as a Registered Nurse? _____
7. Professional qualifications _____

_____

8. Any Specialty qualifications? _____

_____

SECTION B: GRAND TOUR QUESTIONS

"Tell me about the management of HIV positive infected individuals in your clinic".

- What is your understanding of HIV management guidelines?
- How do you implement the guidelines?

What does screening for mental health mean to you?

- Tell me about your views regarding detection of mental illness among HIV infected clients.
- How do you screen for mental health among HIV positive individuals?
- What is your role in managing known mental illness among HIV positive infected individuals?
- What are the possibilities for successful detection of altered mental states?
- How can the service be strengthened?

ANNEXURE E: PERMISSION LETTER FROM DEPARTMENT OF HEALTH, LIMPOPO

LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HEALTH

Enquiries: Stols M.L.
Tel: 015 293 6604

Ref:4/2/2

Modula MJ
PO Box 30
Florapark
0787

Greetings,

RE: Nurses understanding and implementation of mental health screening among HIV infected individuals in Limpopo.

The above matter refers.

1. Permission to conduct the above mentioned study is hereby granted.
2. Kindly be informed that:-
   - Research must be loaded on the NHRD site (http://nhrd.hst.org.za) by the researcher.
   - Further arrangement should be made with the targeted institutions.
   - In the course of your study there should be no action that disrupts the services.
   - After completion of the study, a copy should be submitted to the Department to serve as a resource.
   - The researcher should be prepared to assist in the interpretation and implementation of the study recommendation where possible.
   - The above approval is valid for a 3 year period.
   - If the proposal has been amended, a new approval should be sought from the Department of Health.

Your cooperation will be highly appreciated.

Head of Department

Date 26/05/2015

18 College Street, Polokwane, 0700, Private Bag x9302, POLOLKWANE, 0700
Tel: (015) 293 6000, Fax: (015) 293 6211/20 Website: http/www.limpopo.gov.za

ANNEXURE F: PERMISSION LETTER FROM CAPRICORN DISTRICT CLINIC MANAGER

LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HEALTH AND SOCIAL DEVELOPMENT
CAPRICORN DISTRICT

Enq : **Malema D**

Tel : **015 290 9266**

From : **Primary Health Care**

Date : **03 June 2015**

To : **Madula MJ**
P.O Box 30
FLORA PARK
0787

Subject : **nurses understanding and implementation of Mental Health screening among HIV infected individuals in Limpopo**

The above matter bears reference

1. Permission to conduct the above mentioned study is hereby granded.
2. Kindly be informed that :

    - In the course of your research there should be no action that disrupts the services.
    - After completion of the research, a copy should be submitted to the Department to serve as a resource.
    - The researcher should be prepared to assist in the interpretation and implementation of the study recommendation where possible.

Your cooperation will be highly appreciated.

.....
Senior Manager PHC

2015: 06: 03
.....
Date

ANNEXURE G: DEPARTMENT OF HEALTH STUDIES, HIGHER DEGREES COMMITTEE, UNISA: ETHICAL CLEARANCE CERTIFICATE

UNISA university of south africa

UNIVERSITY OF SOUTH AFRICA
Health Studies Higher Degrees Committee
College of Human Sciences
ETHICAL CLEARANCE CERTIFICATE

REC-012714-039

HSHDC/389/2015

Date: 11 February 2015 Student No: 3062-854-7

Project Title: Nurses' understanding and implementation of mental health screening among HIV infected individuals in Limpopo.

Researcher: Modula Mantji Juliah

Degree: MA Nursing Science Code: MPCHS94

Supervisor: Dr M Ramukumba
Qualification: PhD
Joint Supervisor: -

DECISION OF COMMITTEE

Approved [√] **Conditionally Approved** [ ]

Prof L Roets
CHAIRPERSON: HEALTH STUDIES HIGHER DEGREES COMMITTEE

Prof MM Moleki
ACADEMIC CHAIRPERSON: DEPARTMENT OF HEALTH STUDIES

PLEASE QUOTE THE PROJECT NUMBER IN ALL ENQUIRES